

GEOLOGICAL MAPPING SUBCOMMITTEE

of the Mapping and Planetary Spatial Infrastructure Team

2016 Annual Planetary Geologic Mappers' Meeting, Flagstaff, Arizona

FINDINGS

Overview: The planetary mapping community, and its oversight group GEMS, is pleased with the formation of MAPSIT as the NASA advisory/assessment group for Planetary Spatial Data Infrastructure (including cartography and mapping issues). A clear structure has now been presented regarding the communication of issues and concerns from the planetary mapping community to NASA through GEMS and MAPSIT.

Based on discussions at the 2016 Planetary Geologic Mappers Meeting in Flagstaff, Arizona, GEMS offers the following findings to MAPSIT:

- The Planetary Geologic Mapping (PGM) community is pleased with the assignment of Dr. Sarah Noble as our NASA Headquarters Point of Contact.
- The PGM community recognizes that communication regarding the processes and products of standardized geologic mapping is critical to long-term spatial data infrastructure. Our community must make significant strides regarding communicating with the broader scientific community through various avenues, including official press releases upon release of high-profile planetary geologic maps, distribution of documents that describe procedures for proposing and producing geologic maps, and improving utilization and distribution of planetary geologic maps and supporting cartographic products.
- The quality and time-efficient production of USGS planetary geologic maps depends upon map authors, scientific and technical reviewers, and coordination by USGS personnel, each of whom need to fulfill their interwoven responsibilities. Map authors need to provide the requisite map components in the proper formats to enable efficient reviews. Thorough scientific and technical reviews ensure that maps are high-quality, standardized products that merit publication; these peer reviews are a time-consuming, but essential step in the process. The USGS coordinates both author and reviewer guidelines, selects peer reviewers for maps, and manages the review and publication process. The PGM community understands that maintaining the benchmark status of USGS planetary geologic maps relies on demonstration and timely fulfillment of these responsibilities.
- GEMS will review mapping documents in the annual ROSES call to update or specify Data Management issues regarding USGS-published maps.
- NASA PSD officials have acknowledged that USGS publication websites, which host completed USGS SIM (Scientific Investigation Map) series products, are considered long-term archives and are therefore PDS (Planetary Data System)-equivalent. Also, it

has been suggested that all published USGS planetary maps be included in the NASA Astrophysical Data Service. Community members will explore the feasibility of this suggestion.

- The PGM community recognizes the need to expand student involvement in the field of planetary geologic mapping. To that end, we encourage NASA to identify undergraduate and graduate research programs (perhaps a PGGURP successor program or some other equivalent) through which students might be able to propose to participate in active geologic mapping projects.

Next Planetary Geologic Mappers' Meeting: June 2017, in conjunction with Planetary Data User's Workshop and MAPSIT Annual Meeting, in Flagstaff, Arizona.

Potential Future Meeting Locations: UT-Knoxville, UC-Boulder