Planetary Cartography: Challenges for Mapping and Research Data Management

Andrea Nass¹, Stephan van Gasselt², Alessandro Frigeri³, Angelo Pio Rossi⁴, and Valentina Galluzzi³

¹DLR / Institut of Planetary Research, Planetary Geology, Berlin, Germany (andrea.nass@dlr.de)
²National Chengchi University, Taipei, Taiwan
³Instituto di Astrofisica e Planetologia Spaziali (INAF), Rome, Italy
⁴Jacobs University Bremen, Department of Physics and Earth Sciences, 28759 Bremen, Germany

The aim of this contribution is to summarize recent activities in the field of Planetary Cartography by highlighting current issues the community is facing, and by discussing future research and development opportunities.

For this contribution we focus on (1) identifying and prioritizing needs of the planetary cartography community and the possible projected timeline to address these needs, (2) updating on ongoing work and activities in the field of planetary cartography across the globe, and (3) identifying areas of evolving technologies and innovations that could become interesting for the community in the planetary mapping sciences. The topics and discussion presented here also summarize outcome from community discussions and activities over the last years (e.g. [1-10]), and continue the initial discussion we have had during the last successful EGU session on Planetary Cartography and GIS in 2020.

In particular we would like to extend our discussion and put additional emphasis on aspects of map data re-use and research data management as well as on geodetic aspects of irregular bodies that will be target of future mission programs. We would like to invite cartographers, researchers and map-enthusiasts to join this community and to start thinking about how we can jointly solve some of these challenges.