



# International Cartographic Association Commission on Planetary Cartography

Terms of reference  
2015–2019

Commission Chair: Henrik Hargitai  
Co-chair: Irina Karachevtseva



**2015-2019**

**1** Strengthen **Education and Public Outreach** activities through the series of Multilingual Maps of Terrestrial Planets and their Moons and development of derived products

**2** Development of **online resources in professional planetary cartography** (databases, symbology, landform classes), including participation in Specialized Planetary Cartography GIS projects and Planetary Nomenclature / Gazetteer supplements

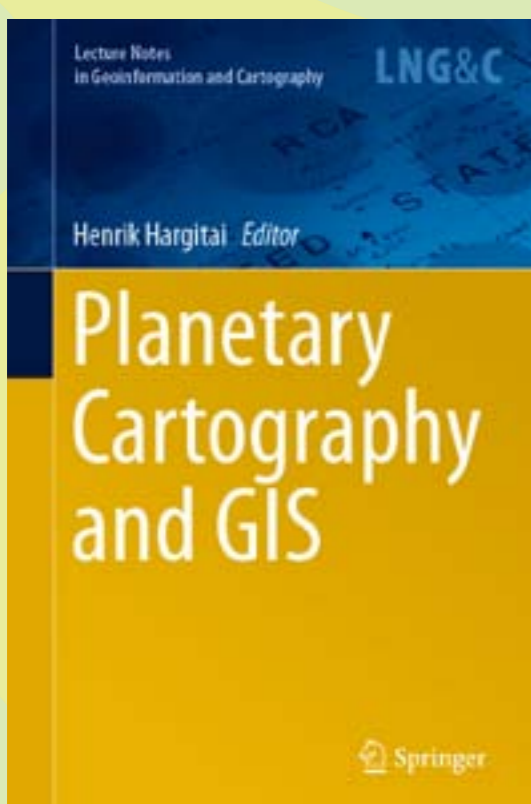
**3** **Book** or book chapter in planetary cartography related topics for use by researchers and university students

**4** Continuous updating of the Commission website, Facebook page and **International Planetary Cartography Database**.

The International Cartographic Association (ICA) Commission on Planetary Cartography was officially established as a continuation of the ICA Planetary Cartography Working Group (1995-1999) at the ICA Congress in Ottawa in August 1999. The working group was established during the 1995 ICA congress in Barcelona, initiated by Kira Shingareva (Russia), Manfred Buchroithner (Germany), and Jim Zimbelman (USA).

Our goals were:

- connect planetary scientists working at different national agencies, universities and research institutes;
- encourage cartographers, researchers, graphic artists, and students to join the planetary cartographic community even in those countries that have no space mission.
- provide access to feature databases and base maps to map publishers and encourage them to publish planetary themed maps in their atlases and portfolio
- help the development of international standards in planetary cartography
- document and promote planetary cartographic products and activities
- focus on interpreted map products, such as geomorphic maps, physical geographic maps, geologic maps, thematic surface feature maps.



Planetary Cartography and GIS – Contents  
**Part I The Basics**  
 Cartography: Its Role and Interdisciplinary Character in Planetary Science  
 Planetary Mapping: A Historical Overview  
 Planetary Nomenclature  
 Fundamental Frameworks in Planetary Mapping: A Review  
**Part II Specialized Planetary Mapping**  
 Planetary Geologic Mapping  
 Methods in Planetary Topographic Mapping: A Review  
 Planetary Mapping for Landing Sites Selection: The Mars Case Study  
 Mapping Irregular Bodies  
**Part III Cartographic Approaches**  
 Multi-mapper Projects: Collaborative Mercury Mapping  
 Planetary Map Design: The Chang'E-1 Topographic Atlas of the Moon  
 Atlas Planetary Mapping: Phobos Case  
 The Role of Maps During Long-Term Analog Planetary Missions and Future Mars Missions  
 Cartography of the Soviet Lunokhods' Routes on the Moon  
**Part IV Mapping Methods**  
 Feature Databases in Planetary Geology  
 Databases and Metadatabases in Planetary Geology—The Mars Crater Database  
 Grid-Mapping: Quantifying the Distribution of Landforms  
 Distribution Pattern Analysis in Planetary Mapping  
 Topographic Roughness as Interquartile Range of the Second Derivatives: Calculation and Mapping  
 Venus Topography and Boundary Conditions in 3D General Circulation Modeling  
 Exoplanet Terra Incognita  
**Part V The Community**  
 Participants and Initiatives in Planetary Cartography

Contributors

- |                     |                    |
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**1** We introduced a new outreach map series for children. We added new titles, including Pluto and Charon and will and Ultima Thule this year. <https://childrensmaps.wordpress.com/>



**2** We published the Encyclopedia of Planetary Landforms in 2015 and started updating this work with maps in the 2019+ edition.

← **3** We published the book Planetary Cartography and GIS (editorial works 2016-2019) for students and professionals

**4** We developed the almost Complete Database of Planetary Maps 1600-2018 at [planetarymapping.org](http://planetarymapping.org)

ID	Category	Type, content	Country	Body	Lat	St	Date	Author, PI, Editor	Na	Pro	ID	Title	Origin
1337	2337	Outreach	USA	Moon			1824	Green, J. (drawn/eng Ameri)				Telescopic appearance of the Moon	
1338	2338	Generic	Germany	Moon			1837	Ultrrey, G. (Austri Astron)				Mondk...	
1339	2339	Outreach	Germany	Moon			1829	Frankenstein, M. L. (Germi)				Karte des Vollmondes nach Mayer Sch	
1340	2340	Outreach		Moon			1849	unknown					
1341	2341	Outreach	Germany	Moon			1847	Roedel, C. F. (Engl; Germi)				Mond-Karte nach dem besten Quelle	
1342	2342	Outreach	England	Moon			1842	Elliot, C. F. (Englis)				The Nomenclature of the Lunar spots	
1343	2343	Sketch map	England	Moon			1864	Webb, T. W. (Englis; Astron)				Index Map of the Moon	
1344	2344	Generic	Germany	Moon			1878	Schmidt, F. J. (Germi)				Charte der Gebirge des Mondes	
1345	2345	Sketch Map	USA	Moon			1890	Young, Charles A. (Ameri)				Index map of the Moon	
1346	2346	Atlas	Germany	Moon			1897	Walther				Photographischer Mond-Atlas	
1347	2347	Atlas	Germany	Moon			1912	Krieger, Johann N. (Germi; Solena)				Mond Atlas Neue Folge with Übersicht	
1348	2348	Generic	Germany	Moon			1906	Franz, J. (Germi; Astron)				Der Mond	
1349	2349	Observer	USA	Moon			1908	Senlis, G. R. (Ameri)				The Moon as seen with the naked eye	

We maintained our commission website at [planetcarto.wordpress.com](http://planetcarto.wordpress.com) (Redesigned by Mateusz Pitura)