

Mapping and Cartography of the icy Saturnian satellites using Cassini-ISS images

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The Saturnian system contains more than 50 satellites of different sizes. This paper deals with the mapping and the cartography of the so-called medium-sized icy satellites Mimas, Enceladus, Tethys, Dione, Rhea, Iapetus, and Phoebe. The Cassini spacecraft arrived at Saturn on July, 1 2004 and finished until now more than 50 orbits around Saturn. The Cassini imaging experiment ISS took thousands of images of the icy satellites both in high resolution during close flyby and medium resolution during more distant observations. These image data are the baseline for local high-resolution mosaics and for global maps of all seven medium-sized satellites. The imaging team suggested on the basis of these global maps new names for prominent features which were approved by the International Astronomical Union (IAU). The global mosaics of Enceladus and Dione are the baseline for high-resolution atlases that consists of 15 tiles each mapped at a scale of 1:500,000 or 1:,000,000, respectively. The atlases are available to the public through the Imaging Team's website [<http://cicllops.org/maps>] and the Planetary Data System [<http://pds.jpl.nasa.gov>].