Controlled Mosaic of Enceladus

Se 500K 43.5/225 CMN, 2010

GENERAL NOTES

This map sheet is the 3rd of a 10 quadrangle series covering the entire surface of Enceladus at a central scale of 1:100 000. The source of raw data was the Cassini imaging experiment (Porco et al., 2006).

Cassini-Huygens is a joint NASA/ESA/ASI mission to explore the Saturnian system. The Cassini spacecraft is the first spacecraft studying the Saturnian system of rings, moons and Titan orbiting the giant gas planet. The Cassini spacecraft was launched on October 15, 1997, and entered the Saturnian orbit on July 1, 2004. The Cassini Imaging Science Subsystem (Cassini ISS) comprising of the imaging science instrument, Visible and Infrared Mapping Spectrometer (VIMS) and Wide Angle Camera (WAC) consists of a large number of spectral filters which, taken together, span the electromagnetic spectrum from 0.24 to 5.6 microns. All of these raw images in a high-resolution format (500K) database consisting of a 1000 square array of pixels, each 12 microns on a side.

SCALE

- 1:500 000 Map projection
- Photogrammetric adjustment using the Nominal Orbital Element database
- Processing of the mosaic

CONTROL

For the Cassini mission, spacecraft position and camera pointing data are available to the level of 0.5 arcsecond. ISS 500K is a side system providing narrow-angle data such as spacecraft and target position, target boresight, solid angle, spacecraft orientation, instantaneous pointing, and raw image intensity. These data were used for calibration, target identification, and map making. The camera raw images were used for navigation, target selection, spacecraft attitude determination, and map making. The ISS 500K data consist of a 1024 square array of pixels, each 12 microns on a side. A large number of spectral filters which, taken together, span the electromagnetic spectrum from 0.24 to 5.6 microns. All of these raw images in a high-resolution format (500K) database consisting of a 1000 square array of pixels, each 12 microns on a side.

REFERENCES