



High resolution Vesta HAMO atlas derived from Dawn FC images.

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NASA's Dawn spacecraft entered orbit of the inner main belt asteroid 4 Vesta on July 16, 2011, and is spending one year in orbit to characterize the geology, elemental and mineralogical composition, topography, shape, and internal structure of Vesta before departing to asteroid 1 Ceres in late 2012. The Dawn mission is mapping Vesta from three different orbit heights during Survey orbit (2700 km altitude), HAMO (High Altitude Mapping Orbit, 700 km altitude), and LAMO (Low Altitude Mapping Orbit, 210 km altitude). Dawn orbited Vesta during HAMO in 6 cycles between end of September end early November 2011. The framing camera took about 2,500 clear filter images with a resolution of about 70 m/pixel during these cycles. The images were taken with different viewing angles and different illumination conditions. We selected images from one cycle (cycle #3) for the mosaicking process to have similar viewing and illumination conditions. Cycle 3 with 518 images was selected since it was the first cycle with almost complete global coverage. The Vesta atlas was produced in a scale of 1:500,000 and consists of 15 tiles that conform to the quadrangle scheme which is widely used for small planetary bodies.