This image of the asteroid’s surface, like many others, appears vaguely “sculptured” due to its low, elongated ridges and depressions with seemingly consistent orientations.
A NASA Discovery Program Mission
Managed by The Johns Hopkins University Applied Physics Laboratory, Laurel, Maryland

Mysterious Surface Details
NEAR Shoemaker photographed this area of Eros on December 18, 2000, from an orbital altitude of 21 miles (33 kilometers). This part of the asteroid’s surface, like many others, appears vaguely “sculptured” due to its low, elongated ridges and depressions with seemingly consistent orientations. Some of the low spots also contain accumulations of smooth, pond-like materials. Neither the surface sculpturing nor the pond-like materials are well understood, and both will be investigated in detail using even higher-resolution images from NEAR Shoemaker’s low passes over Eros in early 2001. The whole scene is about 0.6 mile (1 kilometer) across.

(Image 0152508135)

NEAR Mission
As the first launch in the National Aeronautics and Space Administration’s (NASA) Discovery Program, the Near Earth Asteroid Rendezvous (NEAR) mission is setting the stage for asteroidal exploration and forming a base of knowledge that will be the framework for future asteroid missions. The Johns Hopkins University Applied Physics Laboratory (JHU/APL) designed and built the NEAR Shoemaker spacecraft and manages the mission for NASA. The Mission Team is drawn internationally from universities, government agencies and private industry.

Launched February 17, 1996, NEAR Shoemaker began its orbital mission at asteroid 433 Eros on February 14, 2000. From May through August 2000, the spacecraft traveled in a circular orbit at a radius of 31 miles (50 kilometers) from the center of Eros. It was then boosted to a higher orbit to view Eros from the direction of the sun. In late December 2000, NEAR Shoemaker will descend to a 22-mile (35-kilometer) orbit and operate at that altitude or lower for the remainder of the mission. By February 2001, the NEAR mission will provide the first comprehensive data on the physical geology, composition and geophysics of an asteroid.

For more information visit the NEAR Web site: http://near.jhuapl.edu.

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