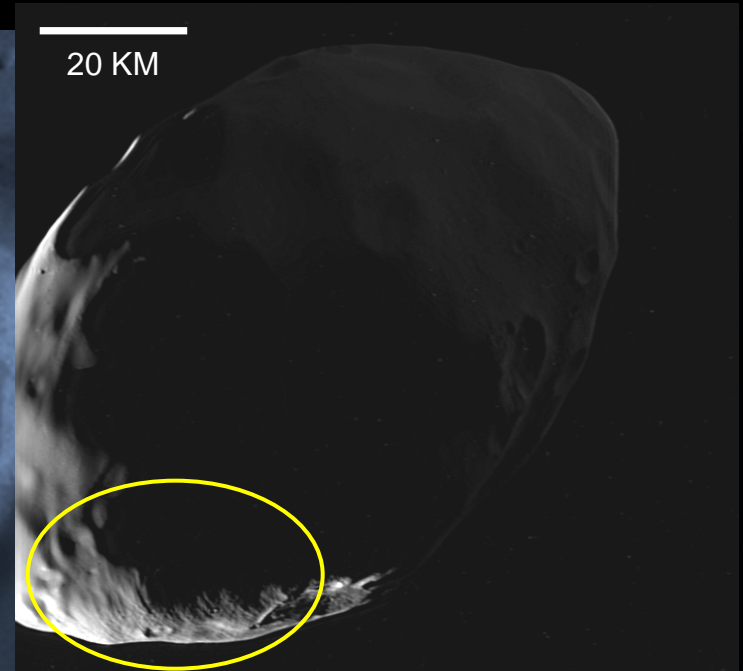
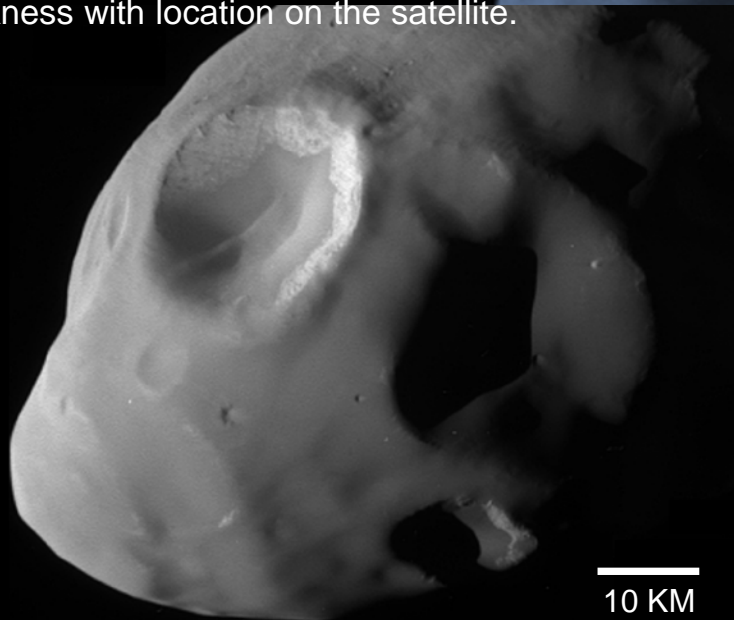


Far-Out: Pandora has Smooth and Groovy Terrains

NASA's Cassini spacecraft made its closest-ever approach to Pandora, one of the original 'ring-grazing' satellites, on December 18, 2016. This moon orbits just beyond Saturn's F ring. Pandora's oblong body is $104 \times 82 \times 63$ km ($65 \times 51 \times 39$ miles), slightly larger than Delaware.

The image below was taken by Cassini from a distance of 34,136 km (21,211 miles) and shows surface details that offer clues about Pandora's internal structure. For example, Pandora appears to be covered by fine particles captured from the F ring, and these deposits vary in thickness with location on the satellite.



The crescent image above was captured from a distance of 23,342 km (14,504 miles). A network of thin, parallel grooves (yellow circle) are conspicuous far away from Pandora's broad equator, but they appear to vanish under a thick layer of smooth material that blankets the terrain.

The grooves may follow a pattern of buried fractures that most likely formed in response to tidal stresses exerted by Saturn's strong gravitational pull as the satellite cyclically moves closer and further away in its slightly elliptical orbit.