

Upper Darby High School Moon

101

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Image 1



Formation



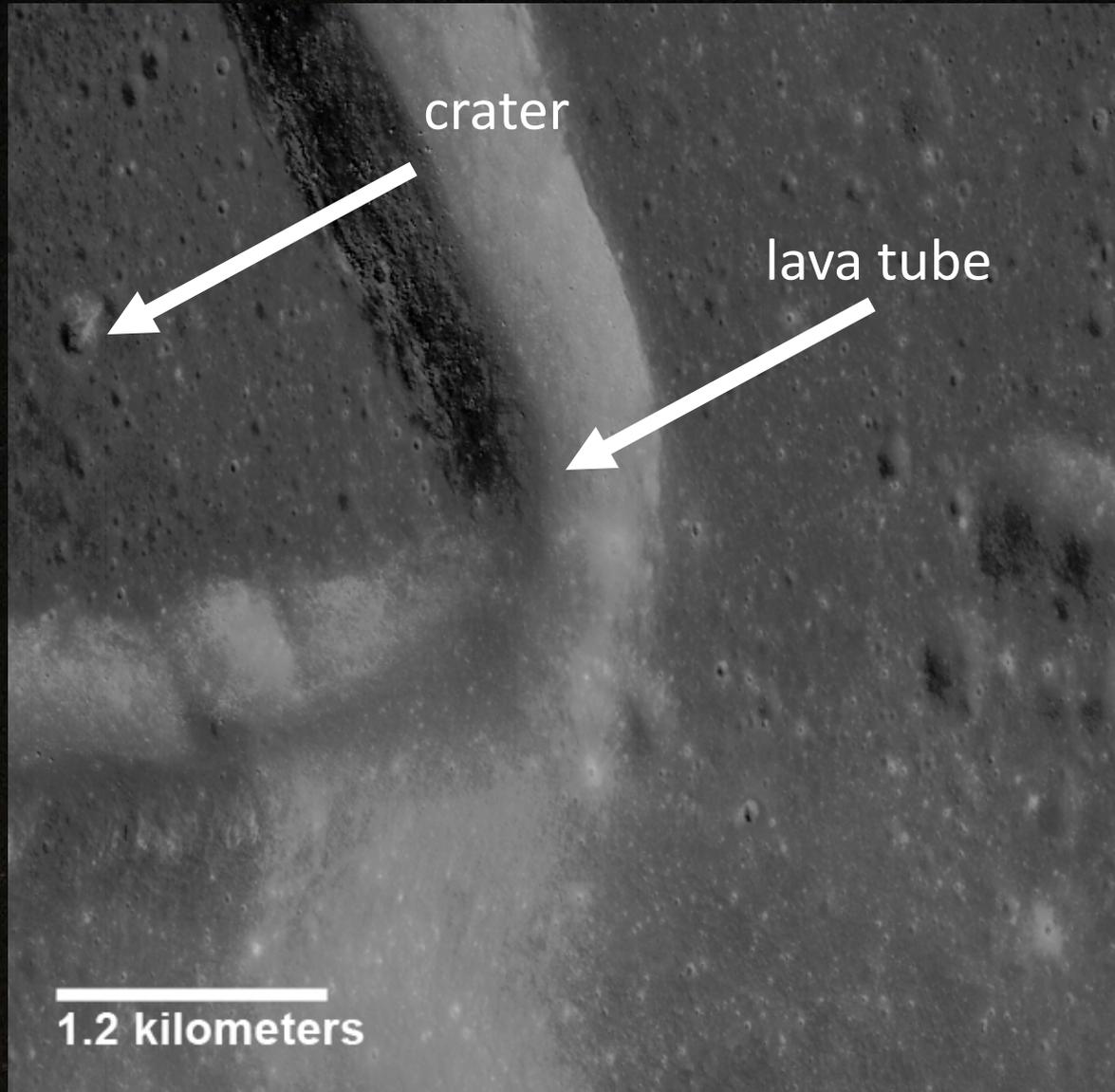
- ✦ Circular Craters
- ✦ Lack of cast shadows suggest that they are not raised.
- ✦ The craters most likely were caused by meteor impacts.

Age

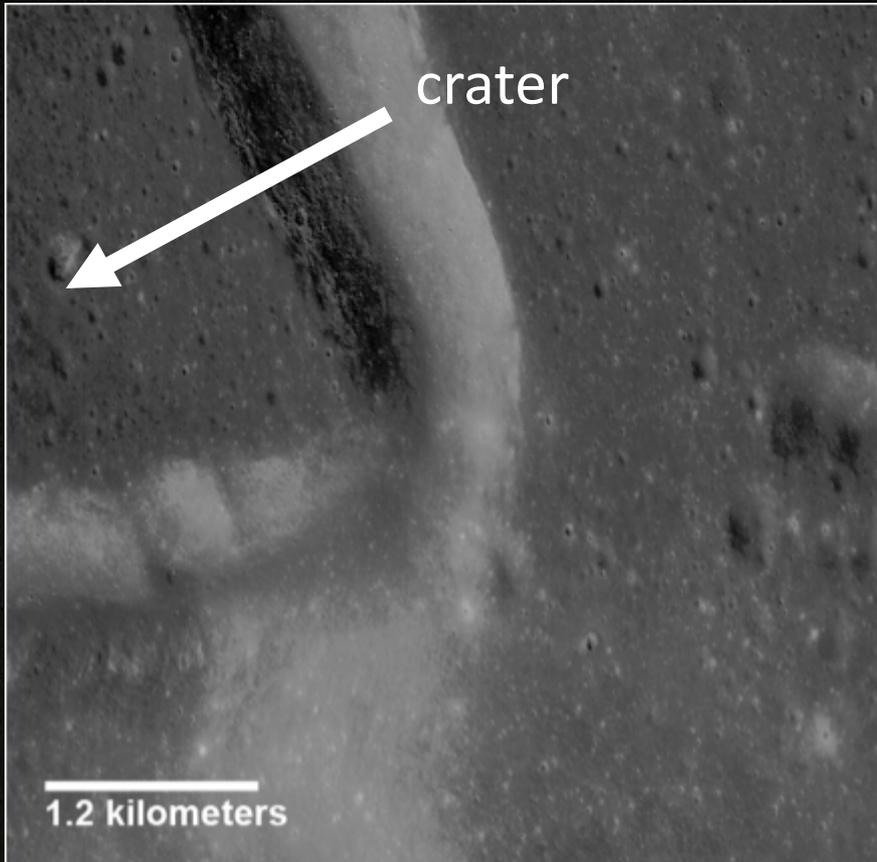


- ✦ Difficult to determine absolute age.
- ✦ Relative age can be determined by overlapping of craters.
- ✦ Smaller craters found inside larger craters are younger relative to the larger craters.

Image 2

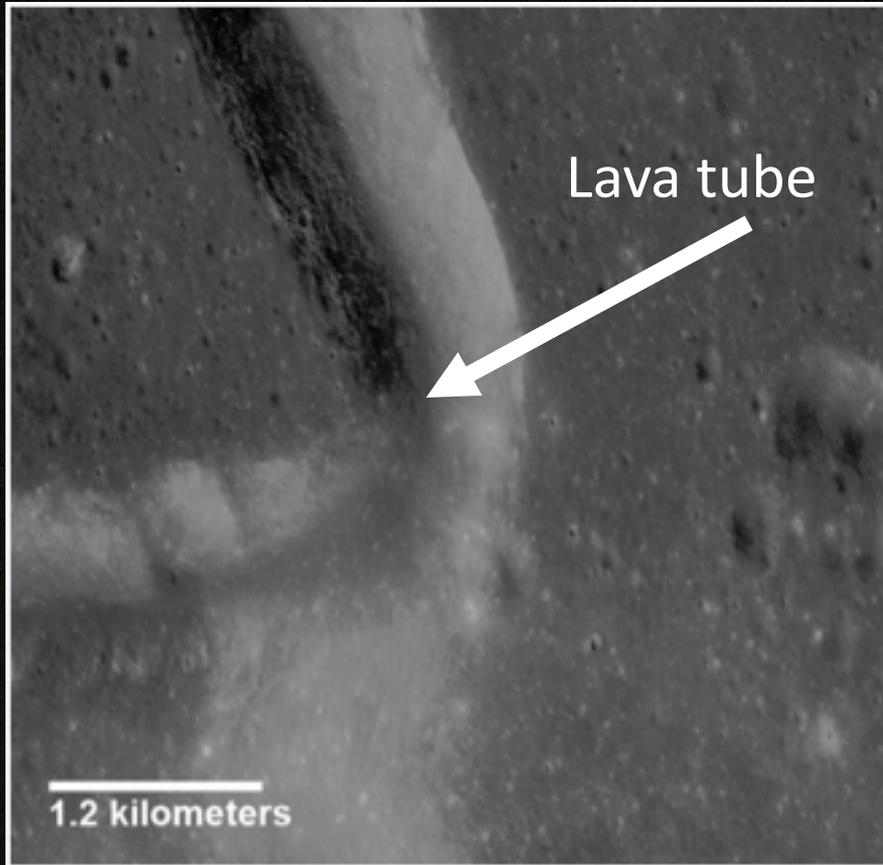


Craters



- ✦ Features Present: craters, and a large lava tube running vertically
- ✦ Craters have formed from meteor impacts over time.

Lava Tube



- ✦ Presence of darker rock suggests a different type of rock or lava.
- ✦ Lava tube is where lava had flowed
- ✦ Right of lava tube are craters because of circular shape and similar rock type.

Relative Age of Image 2 features

- ✦ Some of the craters around the lava tube are older than the lava tube itself because there is a greater crater density in the area outside the lava tube.
- ✦ The craters on the lava tube are younger than the lava tube.

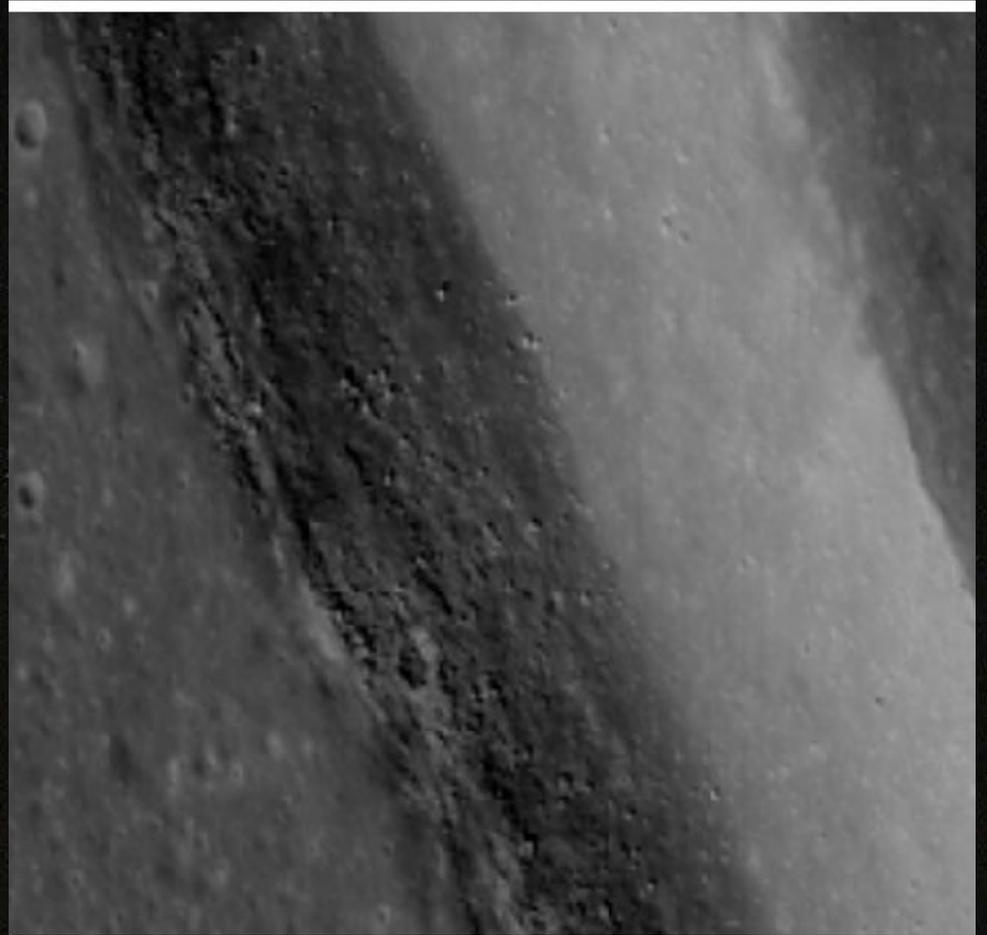
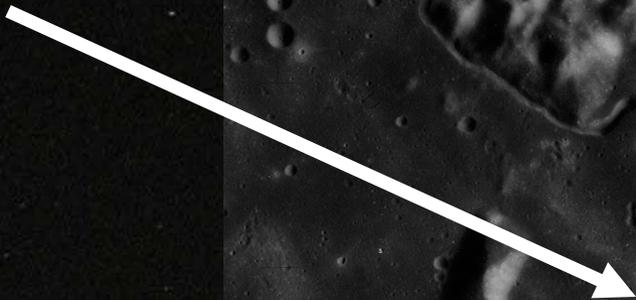


Image 3

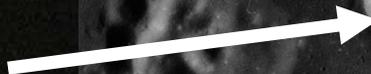


22.8 kilometers
14.2 miles

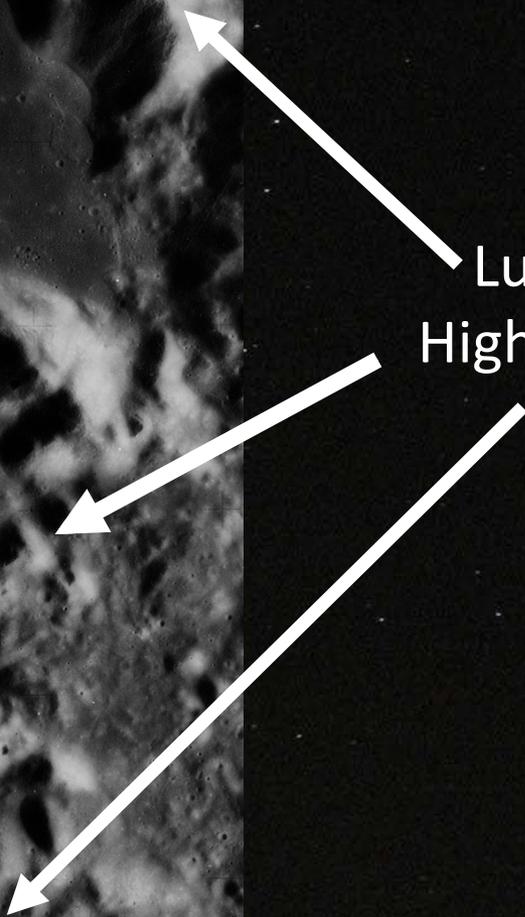
Rille



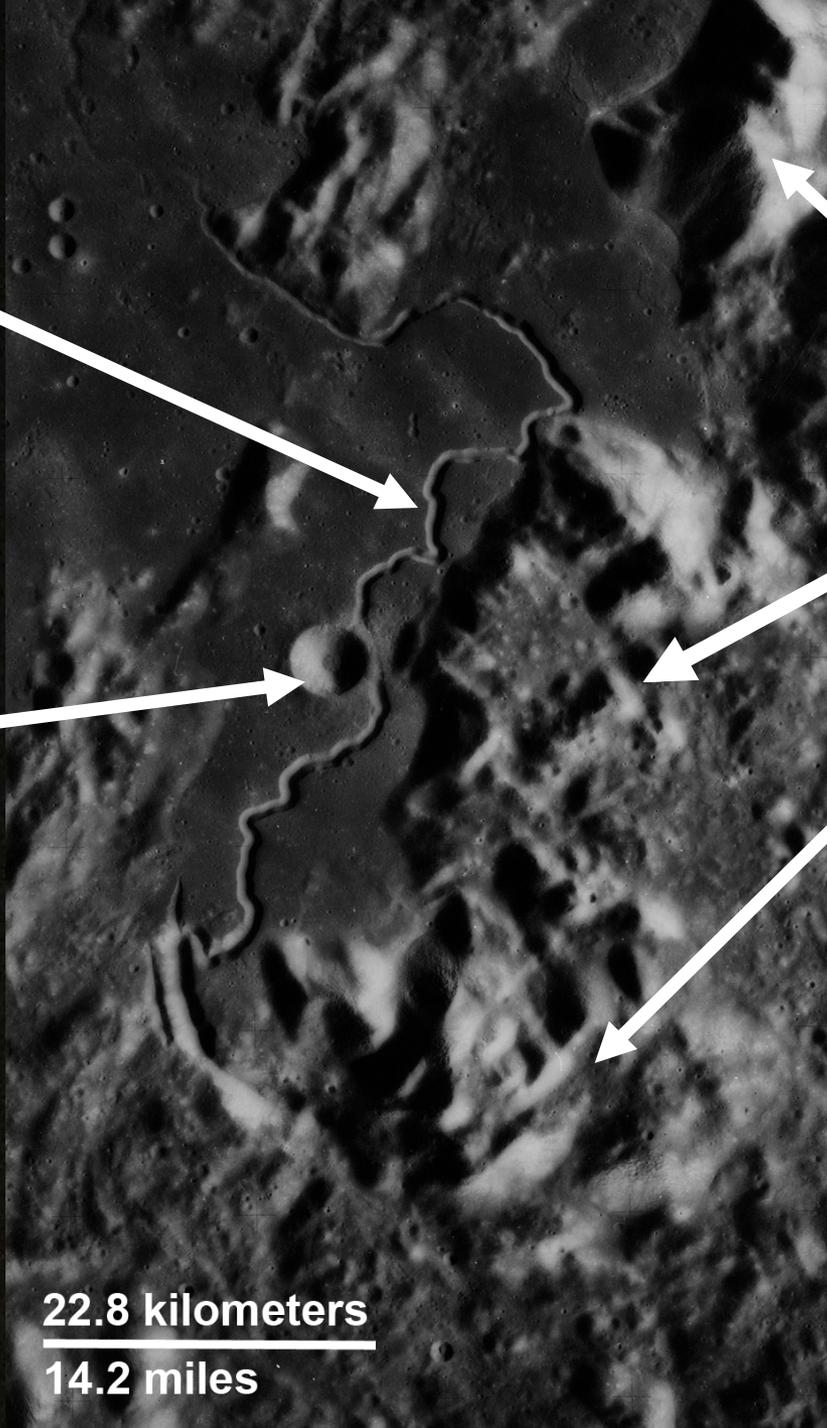
Crater



Lunar
Highlands



22.8 kilometers
14.2 miles



Geological Features

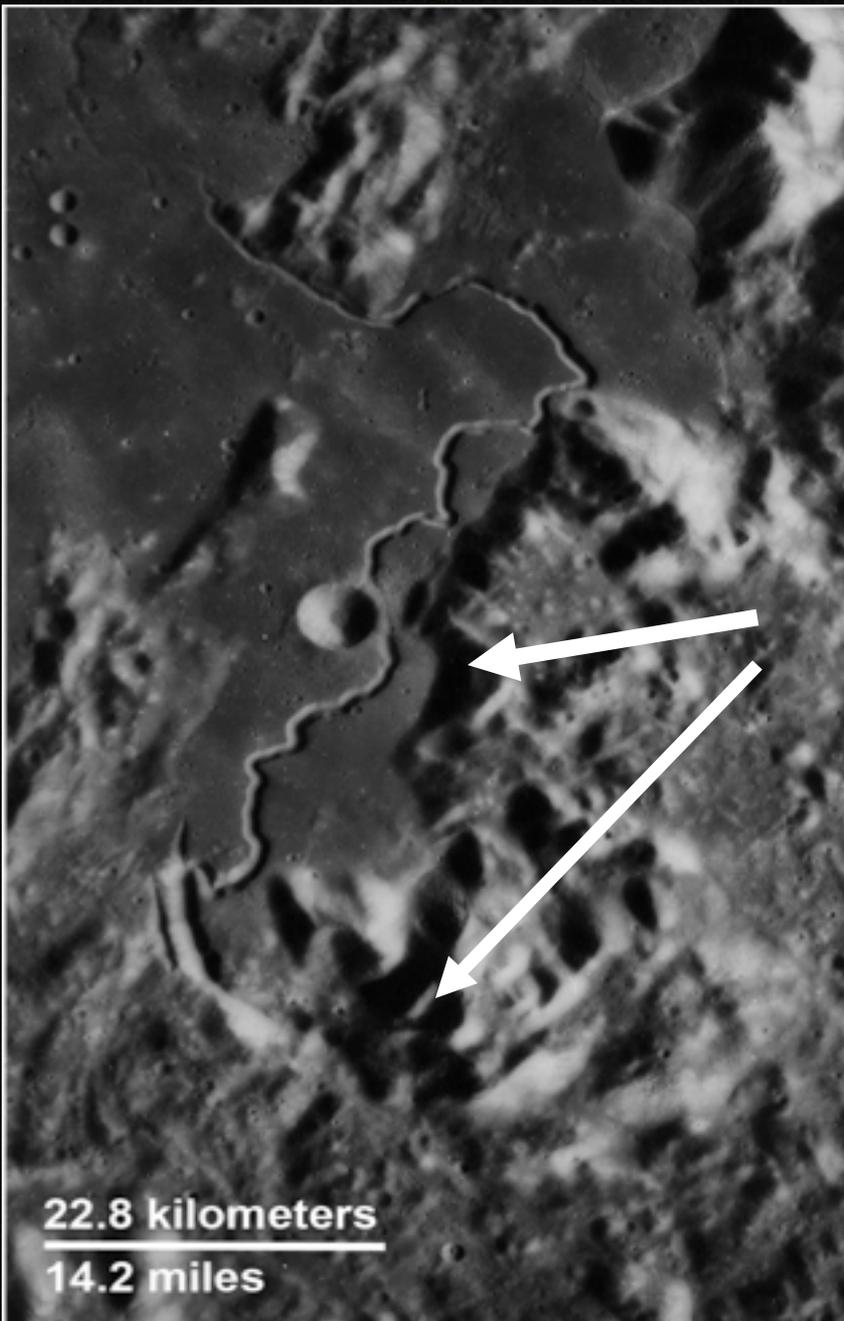
✦ Lunar Highlands

✦ Rille

✦ Craters

Lunar Highlands

- ✦ The lighter, more elevated portions of the picture are lunar highlands.
- ✦ It is unclear how the highlands formed, but we believe they are a result of magma activity under the surface.

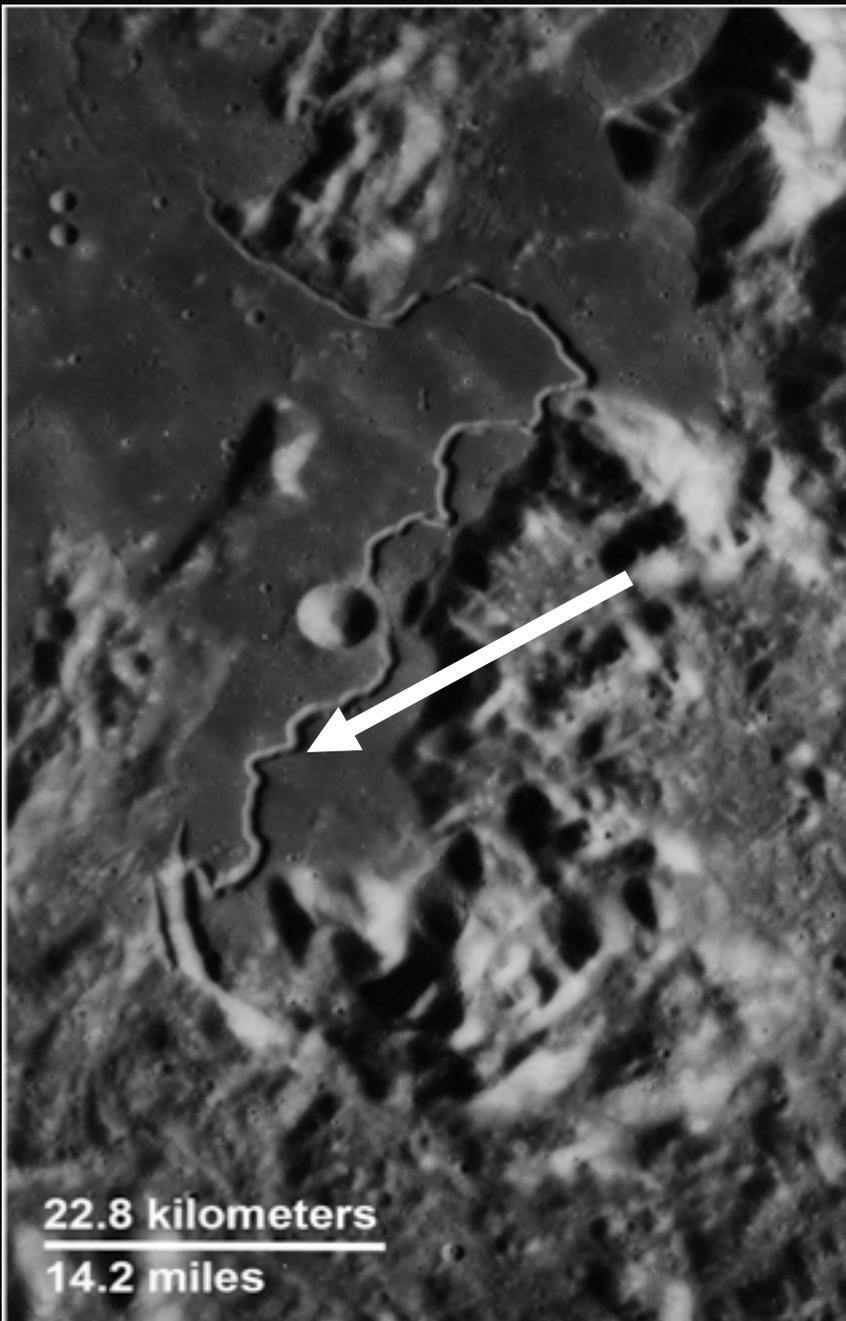


Lunar Highlands

- ✦ Relative to the age of the other features in the picture, the highlands are the oldest.
- ✦ Lunar highlands are extremely old because they could only have formed when the molten moon was cooling.

Rille

- ✦ A sinuous rille is a large winding channel on the surface of the moon.
- ✦ Our hypothesis for the formation of rilles is the previously flowing lava cut a path through the surface of the moon, similar to a river.

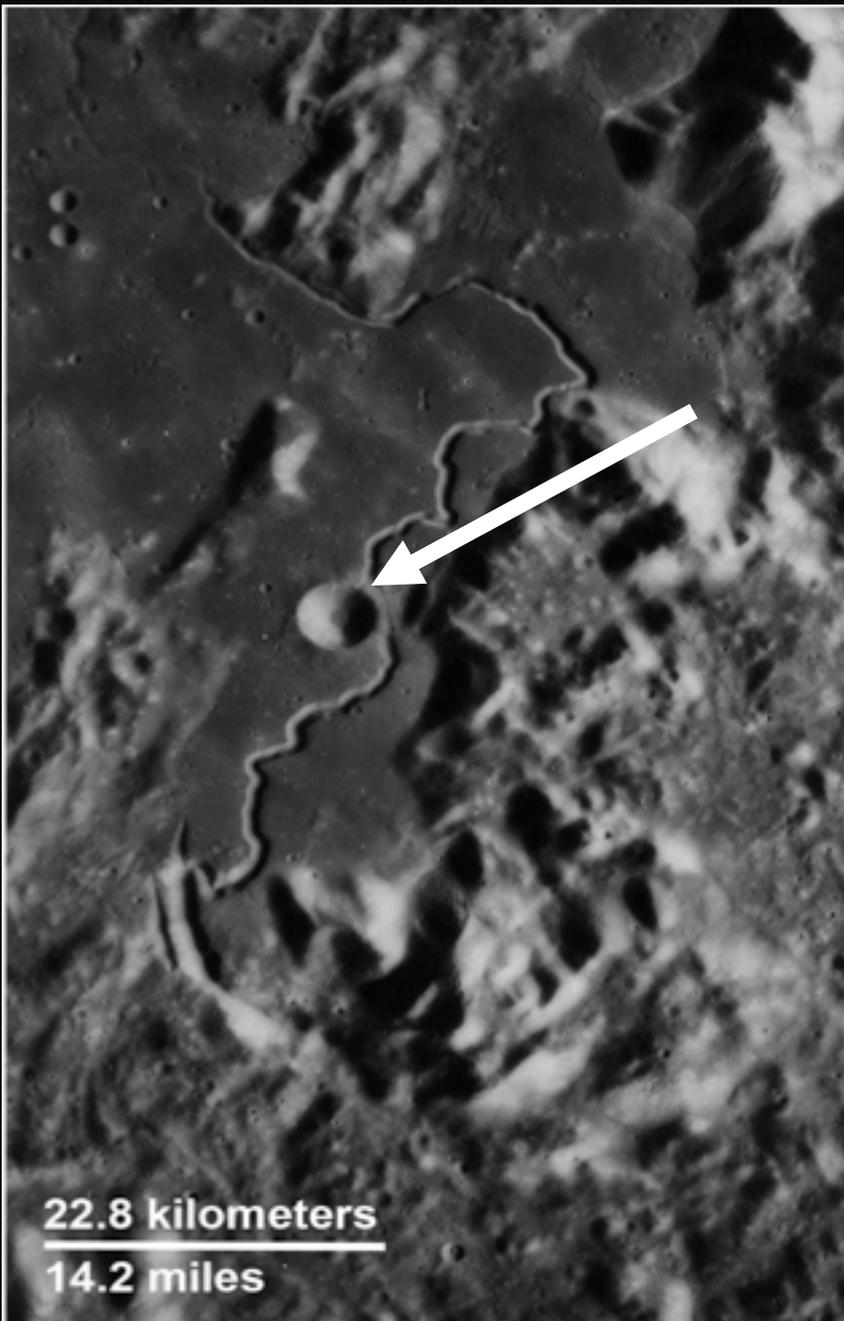


Rille

- ★ Relative to the other features in this picture, the rille is younger than the lunar highlands but older than the craters.
- ★ The rille wraps around the highlands at some points, indicating that it formed after the highland. Also the largest crater overlaps the rille slightly, suggesting that the rille formed earlier than the craters.

Craters

- ✦ This picture shows many craters, and one very large crater in the center of the picture.
- ✦ Craters are depressions formed from the impact of crashing meteors.
- ✦ Relative to the other features in the picture, the craters are the youngest.



Craters (Continued)

- ★ The surface of the largest crater is smooth and clearly hasn't been bombarded with other meteors. Also the crater somewhat overlaps the rille indicating that it formed after the rille.