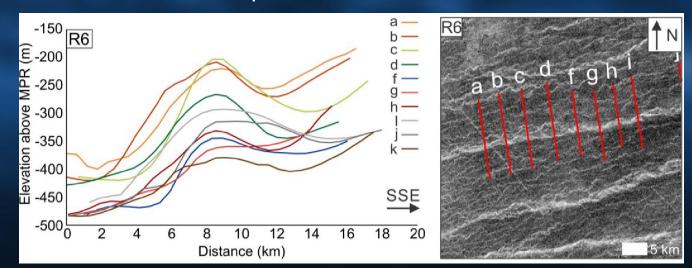


Examples of wrinkle ridges on Venus, Mars, the Moon, and Mercury

Revealing the Shape of Venus' Wrinkles!

A study of wrinkle ridge shape (morphometry) in the plains south of Eistla Regio, Venus, showed that the ridges are similar in size to their counterparts on other planets and likely formed above shallow thrust faults in response to mantle downwelling.

- Unlike wrinkle ridges on Mars and the Moon, the shape of wrinkle ridges on Venus have not been well studied due to the low resolution of the available data.
- Researchers used a new high resolution topography dataset to study wrinkle ridges south of Eistla Regio and showed that the ridges are ~100 m tall and ~10 km wide, similar in size to those on other planets.
- The ridges are thought to form in response to compression created by mantle downwelling around Eistla Regio.
- The models presented in this study provide the foundation for further modeling of more complex faulting mechanisms and geometries.



Example of topographic profiles across a wrinkle ridge.