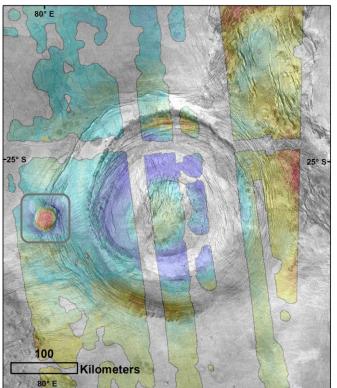


EVIDENCE FOR A LOCALLY THINNED LITHOSPHERE ASSOCIATED WITH RECENT VOLCANISM

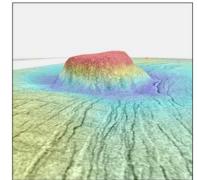
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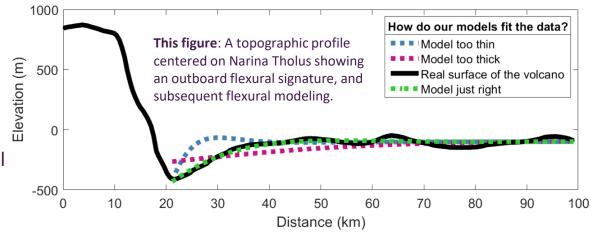
- AT ARAMAITI CORONA, VENUS M. B. Russell and C. L. Johnson Journal of Geophysical Research: Planets
- We investigate lithospheric flexure at Narina Tholus, a small volcanic dome on the annulus of Aramaiti Corona, Venus.
- Locally thin lithosphere and high heat flow reflect late stage, possibly recent, magmatism, facilitated by the corona annulus fractures.
- We find that the local heat flow enhancement at Narina is unusual but could be detected elsewhere with global high-resolution topography.

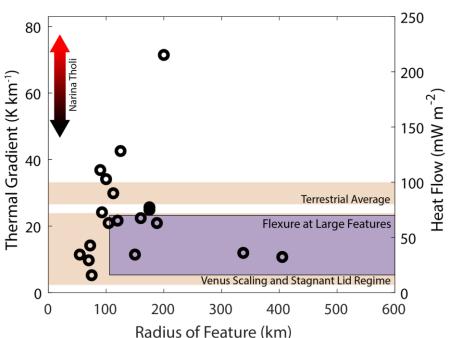


Left: Aramaiti Corona and Narina Tholus (image center left). Data is Magellan SAR image (grayscale) overlain on stereo SAR-derived topography. Elevations are color-coded high (red) to low (blue).

Below: Perspective zoom of Narina Tholus.







The resulting heat flow (149–218 mW m⁻²) at Narina Tholus is two to four times that of the regional background and is larger than heat flows obtained for all but one feature in previous studies of topographic flexure.

Citation: Russell, M. B., & Johnson, C. L. (2021). Evidence for a locally thinned lithosphere associated with recent volcanism at Aramaiti Corona, Venus. *Journal of Geophysical Research: Planets*, 126. https://doi.org/10.1029/2020JE006783