VENUS: A RIDDLE WRAPPED IN A MYSTERY INSIDE AN ENIGMA
2:30 p.m. Waterway Ballroom 6

Chairs: Bradley Thomson
Debra Hurwitz

2:30 p.m. Weller M. B. * Lenardic A.
The Evolution of Terrestrial Planets: Multiple Tectonic Regimes and Diverging Geologic Histories [#1576]
As planets evolve / Stagnant may become active / Active may idle.

2:45 p.m. Smrekar S. E. * Davaille A.
Subduction of a Sluggish Lid: Examples from Laboratory Experiments and Venus [#2713]
Laboratory experiments with realistic rheology produce subduction at mantle plumes. Geophysical data analysis shows that Venus may exhibit such subduction.

3:00 p.m. Ivanov M. A. * Head J. W.
The History of Topography on Venus [#1079]
The vast majority (80–85%) of the currently observed long-wavelength topography formed during the earlier global tectonic regime.

3:15 p.m. Karimi M. * Dombard A. J.
Studying the Viscoelastic Deformation of Mead Basin: Implications for the Thermal History and Rheology of Venus [#2625]
We constrain heat flux and rheology in the vicinity of Mead by simulating lower crustal flow, finding heat fluxes higher than predicted and dry conditions.

3:30 p.m. Bondarenko N. V. * Kreslavsky M. A.
Venus: New Maps of Multiple Parameters of Meter-Scale Roughness [#2266]
We derived three parameters of meter-scale roughness from Magellan radar altimeter echo profiles. The maps show variability of roughness signatures over plains.

3:45 p.m. Le Corvec N. * McGovern P. J. Grosfils E. B.
Effects of Crustal-Scale Mechanical Layering on Magmatic Reservoir Failure and Magma Propagation Within the Venusian Lithosphere [#2330]
Finite-element modeling on the influence of mechanical layering on magma chamber stability and radial dike formation within the venusian lithosphere.

4:00 p.m. Quick L. C. * Glaze L. S. Baloga S. M.
Emplacement of Volcanic Domes on Venus and Europa [#1581]
We present a model for the emplacement of volcanic domes on Venus and consider how this model may apply to the formation of putative cryolava domes on Europa.

4:15 p.m. Shalygin E. V. * Markiewicz W. J. Basilevsky A. T. Titov D. V. Ignatiev N. I. et al.
Bright Transient Spots in Ganiki Chasma, Venus [#2556]
In data obtained by VMC onboard the ESA VEx we found a few transient phenomena in Ganiki Chasma that we interpreted as evidence of present volcanic activity.

4:30 p.m. Kohler E. * Chevrier V. Johnson N. Craig P. Lacy C.
Proposed Radar-Reflective Minerals Tested Under Venus Surface and Atmospheric Conditions [#2321]
Results from experiments constraining the origins of the radar anomalies in the venusian highlands are presented.