

Wednesday, March 25, 2009
VENUS GEOLOGY, VOLCANISM, TECTONICS, AND RESURFACING
3:00 p.m. Waterway Ballroom 4

Chairs: David Senske
 Martha Gilmore

- 3:00 p.m. Kreslavsky M. A. * Ivanov M. A. Head J. W.
[*The Geological History of Venus: Constraints from Buffered Crater Densities*](#) [#1096]
 We apply buffered crater density technique to a new global geological map of Venus (Ivanov, 2008) and obtain robust constraints on relative timing of resurfacing history. We show that the atmospheric mass in the past was not significantly different.
- 3:15 p.m. Hansen V. L. * López I.
[*Venus Preserves a Rare Record of Early Terrestrial Planet Processes*](#) [#2064]
 Geologic relations and thermal modeling indicate that ribbon tessera terrain (rtt) records a unique and ancient era of Venus evolution. A new global geologic map of rtt preserves a rare record of early terrestrial planet evolution processes.
- 3:30 p.m. Basilevsky A. T. * Raitala J. Head J. W.
[*Venus: Estimates of Absolute Time Duration of Corona Activity*](#) [#1827]
 In the representative sample of coronae of Venus (55 coronae) we have found six coronae whose activity lasted for several hundred million years. Four of them which, represent the evolution of individual mantle plumes have astrum-like components.
- 3:45 p.m. Senske D. A. * Plaut J. J.
[*Geologic Evidence for a Thick Volcanic Crust in Part of Tellus Tessera, Venus*](#) [#1707]
 Geologic mapping is performed to provide insight into the make-up of part of Tellus Tessera and suggests that some of this terrain may be a thick sequence of volcanic deposits.
- 4:00 p.m. Gilmore M. S. *
[*Tellus Regio, Venus: Evidence of Tectonic Assembly of Tessera Terrain and Implications for Exploration*](#) [#2015]
 SW Tellus Regio is formed from the collision of distinct tessera units and plains materials.
- 4:15 p.m. White O. L. * Stofan E. R. Guest J. E.
[*A New Survey of Intermediate Volcanoes on Venus*](#) [#1148]
 A new catalogue of intermediate volcanoes on Venus broadly incorporates four volcano types: cones, domes, shields and calderas. Frequency, size, altitude, latitudinal distribution and total areal cover statistics are presented for each type.
- 4:30 p.m. Aubele J. C. *
[*Shield Fields and Shield Plains on Venus: Contrasting Volcanic Units Exemplified in Shimti Tessera \(V-11\) and Vellamo Planitia \(V-12\) Quadrangles*](#) [#2396]
 Shield fields and shield plains appear to represent different volcanic styles and may represent different temporal associations in Venus geologic history.