

Monday, March 13, 2006
VENUS
2:15 p.m. Marina Plaza Ballroom

Chairs: D. Nunes
M. R. Warner

- 2:15 p.m. Bondarenko N. V. * Head J. W.
Roughness Asymmetry as a Clue to the Evolution of Crater-associated Dark Diffuse Features on Venus [#1494]
 We analyze anisotropy of radar backscattering from Venus surface using both Magellan radar altimeter and SAR data. Reworking of surficial deposits of loose material by wind is responsible for degradation of crater-related parabolas.
- 2:30 p.m. Herrick R. R. *
Updates Regarding the Resurfacing of Venusian Impact Craters [#1588]
 Results are summarized from an expanded data set of stereo-derived DEMs of Venusian craters, and geologic histories have been studied for several large craters. Most craters are not at the top of the stratigraphic column and many have complex histories.
- 2:45 p.m. Bond T. M. Warner M. R. *
Dating Venus: Statistical Models of Magmatic Activity and Impact Cratering [#1957]
 Statistical modelling of the magmatic and impact history of Venus demonstrates that no rapid resurfacing event is required to match the impact crater record.
- 3:00 p.m. Ivanov M. A. * Head J. W.
Testing Directional (Evolutionary) and Non-Directional Models of the Geologic History of Venus: Results of Mapping in a Geotraverse Along the Equator of Venus [#1366]
 A global equatorial geotraverse representing ~39% of the surface of Venus was mapped to test directional and non-directional geological evolution models. Major units showed global and generally continuous lateral geological correlation.
- 3:15 p.m. Ivers C. B. * McGill G. E.
Kinematics of a Tessera Inlier, Southwest Vellamo Planitia (V-12) Quadrangle, Venus [#1248]
 Kinematic analysis indicates significant age overlap of tessera structures with formation of surrounding regional plains. Abrupt changes in fabric orientation across domain boundaries suggests significant lateral displacement of these domains.
- 3:30 p.m. Ghail R. C. *
Catastrophe Not Required: A New Steady-State Model of Venus [#1269]
 New cosmochemical models of Venus indicate that it has a smaller core than Earth but bigger mantle. High temperatures decouple the crust and mantle allowing steady-state cooling by subcrustal plate tectonics. >2 Ga ago crustal recycling occurred.
- 3:45 p.m. Basilevsky A. T. * Abdrakhimov A. M.
Geochemistry of Venus Crust as Revealed by the Venera-Vega Analyses [#1079]
 The Venera-Vega analyses are compared with the appropriate compositional data for the Earth, the Moon, Mars and meteorites. Most of the Venus' materials show similarities with geochemically evolved terrestrial rocks of island arcs and hot spots and one (Venera 14) shows similarity with MORBs.
- 4:00 p.m. Solomon S. C. * Anderson B. J. Domingue D. L. Gold R. E. Izenberg N. R. Leary J. C.
 McAdams J. V. McClintock W. E. McNutt R. L. Jr. Neumann G. A. Prockter L. M. Robinson M. S.
 Starr R. D. Taylor T. H. Williams B. G.
The MESSENGER Venus Flybys: Opportunities for New Venus Observations [#1413]
 NASA's MESSENGER spacecraft, launched in August 2004, will pass as close as 300 km to Venus in June 2007. This flyby will provide a range of opportunities for new scientific observations of the Venus environment, atmosphere, and surface.