

Thursday, March 15, 2007
POSTER SESSION II: VENUS
6:30 p.m. Fitness Center

Törmänen T. Aittola M. Kostama V.-P. Raitala J.

Possible Formation Models of Venusian Multiple Coronae and Age Relationships Between Their Component Structures [#2125]

There are several formation models for the multiple coronae of Venus in the framework of the mantle diapir model. We attempt to constrain these models for multiple coronae and also to establish age relationships between their component structures.

Bleamaster L. F. III

Volcano-Tectonism of Helen Planitia, Venus [#2434]

Geologic mapping at 1:10M scale is used to evaluate relatively young volcanic-tectonic processes in the Helen Planitia region.

Ivanov M. A. Head J. W.

Geologic History of the Lavinia Planitia/Lada Terra Region, Venus: Results of Mapping in the V-55, V-61, and V-56 Quadrangles [#1032]

The geological history of three quadrangles in Lada Terra, Venus involved downwelling to create Lavinia Planitia, and coincident upwelling to create parts of Lada Terra; upwelling was accompanied by late stage rifting and associated extensive lobate plains volcanism.

Gilmore M. S. Saunders R. S.

Geologic Mapping of the Hestia Rupes Quadrangle (V-22), Northern Ovda Regio, Venus [#1936]

Latest mapping results for the V22 quadrangle, Venus.

Straley B. L. Gilmore M. S.

Mapping and Structural Analysis of SW Tellus Regio, Venus [#1657]

Detailed mapping of SW Tellus Regio, Venus shows that the region was assembled from at least three tessera units with distinct tectonic histories brought together by lateral crustal movement and preserved in the present-day plateau.

Basilevsky A. T. Head J. W.

Geology of the NW Part of the V-36 Thetis Regio Quadrangle [#1352]

In the NW of the Thetis Regio quad, nine material and three structural units are mapped. They are similar to those observed in other regions of the planet, but some have unusual areal abundance implying specifics of geologic history of this region.

Gupta V. Ernst R. E. Samson C. Desnoyers D. W.

Determining Flow History and Direction for a Possible 6000 km Long East-West Canali System Southeast of Aphrodite Terra [#1905]

Canali are narrow sinuous lava channels on Venus. We propose that, in our study area (144° to 216° E; 24° to 48° S), several east-west oriented canali segments actually represent a canali system extending for more than 6000 km.

Hurwitz D. M. Long S. M. Grosfils E. B. McGovern P. J.

A Revised Simple Elastic Model of Magma Reservoir Failure Beneath a Volcanic Edifice [#1220]

Axisymmetric finite element models of ellipsoidal magma reservoir failure within crust loaded by an edifice are used to challenge previously published characterizations of this fundamental volcanic situation.

Long S. M. Hurwitz D. M. Grosfils E. B. McGovern P. J.

Reproducing Volcanic Events on Venus Using Magma Reservoir Failure Models [#1502]

Axisymmetric finite element models of ellipsoidal magma reservoir failure beneath a volcanic edifice are employed to investigate whether elastic models are able to reproduce the observed stratigraphy of two volcanoes on Venus.

Rumpf M. E. McGovern P. J.

The Influence of Lithospheric Flexure and Volcano Shape on Magma Ascent at Large Volcanoes on Venus [#1374]

Flexural stresses induced by volcano loading can exert a strong influence on the ascent of magma through the lithosphere. Here we study these stresses to determine where magma would preferentially ascend beneath large edifices on Venus using analytic flexure modeling.