

Thursday, March 20, 2003
POSTER SESSION II
7:00 p.m. Fitness Center

Venus: The Forgotten Planet

Campbell M. M. Campbell T. J.

Layered Mafic Intrusive Complexes, Possible Terrestrial Analogues of Venusian Coronae [#1852]

Studies of characteristics associated with terrestrial layered mafic intrusives and Venusian coronae indicate some similarities in morphology and origin. Coronae and processes related to their formation may not be unique to Venus.

Stoddard P. R. Jurdy D. M.

Uplift of Venus Geoid Highs: Tuning from Coronae and Craters [#2129]

We look at coronae styles and crater modification to assess the relative timing of the uplift of Beta and Atla regios, Venus.

Lang N. P. Hansen V. L.

Geologic Mapping of the Greenaway Quadrangle (V24), Venus [#1990]

V24 consists of corona and small shield-sourced flows interacting with ribbon-bearing tessera terrain, pervasively fractured terrain, wrinkle ridges, and spaced lineaments resulting in a geologically complex region. A draft of V24 will be presented.

Aspler L. B. Ernst R. E.

Dyke-induced Graben on Venus and Mars: Analogues for Earth's Rock Record? [#1711]

Extensive graben on Venus and Mars are thought to have formed due to near-horizontal injection of magma in dykes. Dyke-induced graben analogous to those on Venus and Mars may be more common in Earth's rock record than hitherto appreciated.

Grosfils E. B. Ernst R. E.

Magma Reservoirs Feeding Giant Radiating Dike Swarms: Insights from Venus [#1808]

Using giant radiating dike swarms from the Nemesis Tessera (V14) and Carson (V43) quadrangles as examples, we explore some source region magma reservoir complexities commonly observed and the implications for how such dike swarms form and evolve.

Krassilnikov A. S. Head J. W.

Novae on Venus: Geology, Classification and Scenarios of Evolution [#1218]

We studied topography and geology of 64 novae, suggested classification of them and scenarios of their evolution using models of novae formation, including radial dike swarm emplacement, volcanic construction spreading and mantle diapirism.

Kostama V.-P. Aittola M.

The Arched Graben of Venusian Corona-Novae [#1144]

There are some Venusian corona-nova structures where arcuate graben cut the other features of the structures. These arch-like systems are located on the flanks of the structures and are probably of different origin than the fractures of the annulus.

Stofan E. R. Glaze L. S. Smrekar S. E. Baloga S. M.

A Statistical Analysis of Corona Topography: New Insights into Corona Formation and Evolution [#1594]

We anticipate that applying statistical analysis tools to specific types of coronae will help constrain the particular causes for the great variations observed in corona morphology. We are currently analyzing corona topography, volcanism and location.

Senft L. E. Kiefer W. S.

Crust and Mantle Structure of Large Coronae on Venus [#1468]

Gravity data reveals the presence of hot mantle diapirs and active dynamic uplift at large coronae on Venus, including Artemis, Eistla Regio, Dali Chasma, and Heng-O.

Tewksbury C. M.

Crustal Plateau Collapse on Venus: Evidence from the Pasom-Mana Region [#1291]

The Pasom-Mana region consists of a ring 1000 km across that rises 1–3 km above a low center and the surrounding plains and that exhibits structures and history consistent with collapse and partial burial of a small uncompensated crustal plateau.

Romeo I. Capote R. Anguita F.

Dextral Shear Deformation Belt on Southern Margin of Central Ovda Regio, Venus:

Preliminary Results [#1078]

A complex shear belt with two domains appears, an inner northern belt with en échelon folds and perpendicular ribbons, and an outer southern belt with sigmoidal ridges between brittle strike-slip faults that show secondary Riedel RP fracture pattern.

Waldron A. C. Blondes M. S. Katzenstein W. P. Grosfils E. B.

Geologic Map Interpretations of the Surface of the Nemesis Tessera (V14) Quadrangle, Venus [#1060]

Four mappers examine and assess the differences in mapping results for common areas.

Cochrane C. G.

Crater Morphometry on Venus [#1173]

Progress is reported on the application of the Magellan Stereo Toolkit to craters in a representative area astride Aphrodite Terra.

Hashimoto G. L. Sugita S. Imamura T.

A Search for Active Volcanoes and Compositional Variation in Crust on Venus Using Nightside Near-Infrared Thermal Radiation [#1297]

The 1.0-micrometer window will allow us to measure the venusian surface based on spacecraft observation and ground-based telescopic observation. Using this window, we will be able to detect active volcanoes and compositional variation on Venus.

Comstock R. L. Bills B. G.

A Solar System Survey of Forced Librations in Longitude [#1462]

We present an analytical method for calculating amplitudes of physical librations in longitude for resonant, and non-resonant states, and comment on observational challenges, and structural implications for a subset of solar system bodies.