

Tuesday, March 20, 2018
**POSTER SESSION I: 21ST CENTURY VENUS II:
 ATMOSPHERE TO INTERIOR**
 6:00 p.m. Town Center Exhibit Area

[T313]

Jessup K.-L. Carlson R. W. Perez-Hoyos S. Lee Y. J. Mills F. P. et al. **POSTER LOCATION #149**
[Current Problems and Future Solutions for Identifying Venus' Unknown Absorber](#) [#2401]

We present the current problems and possible solutions for identifying the source of Venus' cloud top UV to visible absorbing species.

Akins A. B. Steffes P. G. **POSTER LOCATION #150**
[Millimeter Wavelength Opacity of H₂SO₄ Vapor at Venus: Initial Results](#) [#2306]

Initial results from an ongoing laboratory investigation of sulfuric acid opacity at millimeter wavelengths in the context of Venus will be presented.

Helbert J. Maturilli A. Dyar M. D. Ferrari S. Mueller N. et al. **POSTER LOCATION #151**
[Orbital Spectroscopy of the Surface of Venus](#) [#1219]

Mapping the surface composition of Venus does not have to be hard — you can do it globally from orbit using the NIR windows using the the PSL high temperature data.

Helbert J. Maturilli A. D'Amore M. Garcia-Munoz A. Arnold G. et al. **POSTER LOCATION #152**
[Observing Venus with the MErcury Radiometer and Thermal infrared Imaging Spectrometer \(MERTIS\) During the Flybys of the ESA-JAXA BepiColombo Spacecraft](#) [#1338]

MERTIS on the ESA-JAXA BepiColombo mission will provide spectrally resolved mid-IR observations of Venus — the first since Venera 15 more than 35 years ago.

Garvn J. B. Glaze L. S. Ravine M. A. Dotson R. **POSTER LOCATION #153**
[Venus Descent Imaging for Surface Topography and Geomorphology](#) [#2287]

Descent imaging of the surface of Venus offers promise for advancing quantitative geomorphology at new scales including topography.

Egan M. J. Barnett P. D. Misra A. K. Acosta T. E. Sharma S. K. et al. **POSTER LOCATION #154**
[Time-Resolved Raman and Luminescence Spectroscopy of Feldspars at High Temperatures Relevant to Venus Exploration](#) [#2771]

Discusses time-resolved Raman and thermal-luminescence measurements on feldspar minerals at high temperatures up to 773 K relevant to Venus exploration.

Kenda B. Lognonné P. Komjathy A. Banerdt B. Cutts J. et al. **POSTER LOCATION #155**
[Modeling Airglow Disturbances Induced by Quakes on Venus: Perspectives for Future Observations](#) [#2393]

We modeled the airglow signature of quakes and discussed the scientific impact of possible future observations.

Kelly J. A. Izenberg N. R. Campbell B. A. **POSTER LOCATION #156**
[Investigating Airblast Features on the Venusian Surface Using Magellan and Arecibo Radar Data](#) [#1487]

In this research we analyzed the differences in radar return signal for select splotches on Venus between Magellan (HH) and Arecibo (SC and OC).

Martinez S. N. Treiman A. H. Kiefer W. S. **POSTER LOCATION #157**
[The Bakisat Radar Dark Streak: Assessing the Origin of a Non-Parabolic Radar Dark Deposit on Venus](#) [#1721]

The discovery of the Bakisat radar dark streak on Venus prompted closer examination due to its interesting morphology.

Perkins R. P. Gilmore M. S. **POSTER LOCATION #158**
[Where are the Missing Tessera Craters on Venus?](#) [#1513]

Lost: small (deep?) craters / Last seen: in basaltic plains / If found: measure depths.

Santos A. R. Kremic T. Nakley L. M. Vento D. M. Phillips K. et al. **POSTER LOCATION #159**
[Experimental Investigation of Apatite Volatile Exchange on Venus](#) [#1584]

We propose a set of experiments to examine the reactions between apatite and the Venusian atmosphere.

Port S. T. Hashimoto G. **POSTER LOCATION #160**
[Preliminary Venusian Frost Line Calculations Regarding Surface-Atmosphere Interactions](#) [#2019]

Preliminary results on the effects of varying surface temperatures on the altitude of the frost line and the SO₂ concentration in the atmosphere.

Nunes D. C. Mitchell K. L. Cotton K. J. Toole N. Hensley S. et al. **POSTER LOCATION #161**
[Robust, Automated Stereogrammetry of Venus Magellan SAR Imagery and Preliminary Tessera Results](#) [#2607]

We report on progress to our fully-automated stereo-to-DEM pipeline and stereo viewer, and discuss results of measuring relief of tessera ribbon grabens from our test DEM.

Balcerski J. A. Byrne P. K. **POSTER LOCATION #162**
[High-Resolution Ridge Belt Morphology at Dylacha Dorsa](#) [#2735]

Stereo-derived topography significantly improves resolution of Venus' ridge belt features, allowing for new morphological analysis.

McGovern P. J. **POSTER LOCATION #163**
[Coronae on Venus: Some are Formed by Volcanic Edifice Construction, Others are Not \(and That is Fine\)](#) [#2986]

Features termed "coronae" on Venus are likely formed by a grab-bag of volcano-tectonic processes. Some are likely formed by volcanic edifice construction.

O'Rourke J. G. Gillmann C. Tackley P. **POSTER LOCATION #164**
[Prospects for an Ancient Dynamo and Modern Crustal Remanent Magnetism on Venus](#) [#2284]

Numerical simulations of coupled atmosphere-surface-mantle-core dynamics suggesting that crustal remanent magnetism might await discovery on Venus.