

Tuesday, April 7, 2015
POSTER SESSION: ORBIT
10:30 a.m. Room 101

Hensley S. Smrekar S. Shaffer S. Paller M. Figueroa H. Freeman A. Hodges R. Walkemayer P.
[*VISAR: A Next Generation Interferometric Radar for Venus Exploration*](#) [#4010]

The VERITAS Mission is a proposed mission to Venus designed to obtain high resolution imagery and topography of the surface using an X-band radar configured as a single pass radar interferometer coupled with a multispectral NIR mapping capability.

Jessup K. L. Woodruff R. A. Davis M. Beebe C. Finley T. Marcq E. Mills F. Bertaux J. L.
[*High-Spectral Resolution Mid-UV Spectrograph for Venus Observing*](#) [#4024]

We are developing a high-spectral resolution (1.5 Å) mid-UV spectrograph that can map the spatial distribution of Venus' SO₂ and SO gases when observing from orbit around Venus as well as from a highly elliptical (perigee ~ 75000 km) Earth orbit.

Gilmore M. S.
[*Elevating Venus Observations \(of the Solid Planet\) from Orbit*](#) [#4025]

Future orbital missions require enhanced communication rates, and extensive laboratory work on the spectroscopy of minerals and high temperature and the rates and composition of Venus weathering reactions.

Singh U. N. Limaye S. Emmitt G. Refaat T. F. Kavaya M. J. Yu J. Petros M.
[*Lidar Measurements of Wind and Cloud Around Venus from an Orbiting or Floating/Flying Platform*](#) [#4036]

Given the presence of clouds and haze in the upper portion of the Venus atmosphere, it is reasonable to consider a Doppler Wind Lidar (DWL) for making remote measurements of the 3D winds within the tops of clouds and the overlying haze layer.

Gronoff G. P. Gray C. Mertens C. J. Slanger T.
[*A UV-Visible Instrument for Limb Based Venus Observations*](#) [#4037]

The objective of this presentation is to show the need of a UV-visible instrument for limb observation of the upper atmosphere.

Imamura T. Ando H. Iwata T. Yamazaki A. Kasai Y. Sagawa H.
[*Venus Orbiter Concept with Satellite-to-Satellite Radio Occultation and Submillimeter Sounder*](#) [#4038]

JAXA's Venus orbiter Akatsuki aims to explore the atmospheric dynamics of Venus by multi-wavelength imaging observations.