

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



U003-P09

Room:Convention Hall

Time:May 26 16:15-18:45

Vertical distribution of UV absorber in the Venusian cloud layer inferred from cloud images

Yuma Iizuka^{1*}, Takeshi Imamura², Takehiko Satoh², Masato Nakamura²

¹EPS, Univ. Tokyo, ²ISAS/JAXA

Various UV features are observed on the Venus. The features are attributed to at least two UV absorbers; one is SO₂ and the other is unidentified. For studying the characteristics of the second absorber and its role in the atmospheric energy balance, the vertical distribution of the absorber needs to be determined.

The vertical distribution will be reflected in the brightness distribution on the sunlit disk. For example, limb darkening feature depends on the location of the absorbing layer relative to the cloud top. We will constrain the vertical distribution of the absorber by comparing Venus images taken by Venus Express VMC and radiative transfer calculations.