

Venus upper haze from Venus Monitoring Camera Limb Photometry

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Venus is completely covered by clouds that have complex layered structure. The aerosol haze extends up to about 80 km altitude. High-resolution limb photometry by Venus Monitoring Camera onboard Venus Express is used to investigate its vertical structure. VMC takes images of the Venus limb with spatial resolution of 1-5 km/pixel and almost complete latitude coverage. The first observations indicate a haze vertical scale height of 2-4 km and rare detached haze layers of ~ 20 km thick. Specific limb observations at sunset and sunrise, performed in four filters and in forward scattering geometry, are used to study the optical and microphysical properties of the mesospheric haze and its dynamical properties. The paper will present some results of the Venus limb photometry by VMC.