

あかつきによる金星紫外測光観測 —SO₂ と非同定吸収物質の位相差についての考察—

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Study of phase difference between SO₂ and unknown absorber on the Venus clouds top

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The ultraviolet imager (UVI) on board Akatsuki measures the scattered ultraviolet (UV) lights of the solar radiation at the Venus cloud top with 283nm and 365nm wavelengths. There are absorption bands of SO₂ and unknown absorber in these wavelength regions. The UV images result into measurements of the SO₂ and the unknown absorber distributions, and the sequential images lead to understand the velocity vector of the wind at the cloud top altitude.

We present periodic change of UV brightness in 365 nm and 283 nm, acquired with UVI during cruising to Venus (February – May 2011). Although brightness of 283nm (SO₂) had 4-day periodic change, the phase of 283nm was shifted to 1-day compared with the phase of 365nm. We will discuss about reason of the phase difference.