

## Development of Fiber IFU for Venus Cloud Tops

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Venus cloud absorbs solar radiation at wavelength between 200nm and 500nm. The absorption of wavelength between 200nm and 320nm is well explained by SO<sub>2</sub> at the cloud tops, but the absorption at longer wavelength has not been identified yet. The comparison between the spatial features of different wavelength may clarify number of unknown-absorbers, but only one bandpass filter or one wideband filter with transmittance around 365nm has been used by telescopes and instruments of previous observation.

We are developing a spectrum imaging instrument using fiber array. Spectrum imaging can take several images of different wavelength at same time, and it is suitable for studying the UV-blue absorber of Venus. We thought a new manufacturing method of a fiber array with several hundred of fiber with diameter of ~100μm, and improvement has been added to the method for practical use. Optics using the fiber array are designed for Haleakala 60-cm. We will report performance of our instrument and plan to observation of Venus.

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