

1 micro-m camera IR1 onboard AKATSUKI: Current status and results of observations

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"Akatsuki" spacecraft which has launched by the Japan Aerospace Exploration Agency in 2010 is keep cruising to Venus for 2015. The results of the imaging carried out by IR1 camera onboard "Akatsuki" during the cursing phase after the Venus fly-by in December 2010 are described.

The images taken by IR1 in 2011 are followings.

- (1) Photometry of the dayside of Venus from a distance of over 10 million kilometers in March 2011
- (2) Star imaging to check the change of the absolute sensitivity.
- (3) Deep space imaging to check the normal operation of the camera after perihelion.

The phase curve of Venus at 0.90 micrometer covering phase angle from 1 deg to 56 deg has been obtained by the photometry observations of Venus. Simultaneous analysis with the phase curve at 2.02 micrometer by 2 micron camera IR2 onboard "Akatsuki" constrains cloud model of Venus.

Current status and problems of detector are also discussed based on images of star and operation tests.

Keywords: AKATSUKI, near infrared, Venus atmosphere, phase curve, cloud particle