

## On the current status of the AKATSUKI data archive

\*Shin-ya Murakami<sup>1</sup>, Yukio Yamamoto<sup>1</sup>, George L. HASHIMOTO<sup>2</sup>, Manabu Yamada<sup>3</sup>, Atsushi Yamazaki<sup>1</sup>, Takao M. Sato<sup>1</sup>, Kevin McGouldrick<sup>4</sup>, Naru Hirata<sup>5</sup>, Kazunori Ogohara<sup>6</sup>, Masahiro Takagi<sup>7</sup>, Takeshi Horinouchi<sup>8</sup>, Takehiko Satoh<sup>1,9</sup>, Masato Nakamura<sup>1</sup>

1. ISAS/JAXA, 2. Okayama University, 3. Chiba Institute of Technology, 4. University of Colorado Boulder, 5. The University of Aizu, 6. The University of Shiga Prefecture, 7. Kyoto Sangyo University, 8. Hokkaido University, 9. SOKENDAI

We have released data archive acquired by the AKATSUKI (also known as Venus Climate Orbiter and PLANET-C) mission. The 1st data sets were released July 2017, and the 2nd data sets were released December 2017. These releases include data from UVI, IR1, IR2, LIR, and RS.

We are continuing preparations for the future releases of the AKATSUKI data, including higher level data sets, e.g., longitude-latitude gridded data sets and/or cloud motion vector data sets. We will report the current status of the AKATSUKI data archive and future release schedule.

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# AKATSUKI Science Data Archive

This website provides the science data obtained by the AKATSUKI (also known as Venus Climate Orbiter and PLANET-C) mission.

## News

- 2017-07-11
  - 1st release of L1b and L2b products for UVI, IR1, IR2 and LIR are available. The current status of these products is "pre peer review", so please use at your own risk.
  - 1st release of VCO SPICE data set is available.

### UVI [Ultraviolet Imager]

UVI is an ultraviolet imager that is able to capture images with 365-nm wavelength and 283-nm wavelength to map SO<sub>2</sub> and unknown absorber, respectively.

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### IR1 [1-μm Camera]

IR1 measures the thermal radiation mostly from the surface and a little from the atmosphere using four filters, 0.90 μm (dayside), 0.90 μm (nightside), 0.97 μm, and 1.01 μm.

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### IR2 [2-μm Camera]

IR2 utilizes the atmospheric windows at wavelengths of 1.74, 2.26, and 2.32 μm; the first two suffer only CO<sub>2</sub> absorption, while the last one contains a CO absorption band. At these wavelengths the outgoing infrared radiation originates from the altitudes 35 – 50 km.

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### LIR [Longwave Infrared Camera]

LIR detects thermal emission from the cloud top in a wavelength region 8 – 12 μm to map the cloud-top temperature.

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### LAC [Lightning and Airglow Camera]

LAC searches for lightning flashes and maps airglow emissions on the nightside disk of Venus.

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### RS [Radio Science]

RS aims to determine the vertical structure of the Venusian atmosphere using radio occultation technique, which is achieved by using Ultra-Stable Oscillator (USO).

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