

Observations of Venus Using Optical Reflecting Telescope of Hokkaido University and Japanese Venus Climate Orbiter

Tetsuya FUKUHARA¹, Yukihiro TAKAHASHI¹, Makoto WATANABE¹, Mitsuteru SATO¹,
Shigeto WATANABE¹, and Soga SATO¹

¹ *Hokkaido University, North-13, West-8, Kita-ku, Sapporo, Japan*

1.6 m optical reflecting telescope is developed for an astronomical observatory in Nayoro city located at 250 km northeast of Sapporo Hokkaido, Japan. We are planning synchronous observation of Venus with AKATSUKI using the telescope. AKATSUKI, which is one of the Japanese Venus Climate Orbiter with an arrival schedule at the end of 2010, aims at understanding the atmospheric circulation of Venus. The spacecraft has four cameras at ultraviolet and infrared wavelengths for cloud mapping, and a visible camera for lightning and airglow. We prepare science instruments for the optical ground telescope to examine the same wavelength as the spacecraft. Meteorological information will be obtained by globally mapping clouds and minor constituents successively with both the spacecraft and the ground telescope. These systematic, continuous remote observations will provide us with an unprecedented large data set of the Venusian atmospheric dynamics. This document serves as a sample for an abstract submission using Microsoft Word/Latex2e to help you format your text. It will be accepted as camera-ready, i.e. no editing will be done before publishing.