

U002-10

Room: IC

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Synchronous observations of Venus with AKATSUKI / Venus Climate Orbiter using optical reflecting telescope of Hokkaido U

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The astronomical observatory which has a 1.6 m optical reflecting telescope is under construction in Nayoro city located at 250 km northeast of Sapporo Hokkaido. Hokkaido University is planning synchronous observation of Venus with AKATSUKI / Venus Climate Orbiter using the telescope. AKATSUKI, which is one of the Japanese planetary exploration spacecraft 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. Science instruments for the optical telescope are going to be prepared to observe 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.

Keywords: Ground observation, Venus, Akatsuki, PLANET-C, Planetary Sci, Hokkaido Univ