



GOSAT TANSO operation results

MASAKATSU NAKAJIMA, AKIHIKO KUZE, HIROSHI SUTO, and KEI SHIOMI

Japan Aerospace Exploration Agency, GoSat Project Team, Ibaraki, Japan (kuze.akihiko@jaxa.jp, +81 29 868-5972)

The Greenhouse gases Observing SATellite (GOSAT) observes carbon dioxide (CO₂) and methane (CH₄) globally from space. It was launched on January 23, 2009 from Tanegashima Space Center. Since February 7, 2009, the Thermal And Near infrared Sensor for carbon Observation Fourier-Transform Spectrometer (TANSO-FTS) and Cloud and Aerosol Imager (TANSO-CAI) have been continuously operated. They acquire global data every three days. For the first six months after the launch, on-orbit function, performance, calibration, and validation have been checked-out. The brief summary of instrument design, pre-launch test results, observation plan (grid and sun glint observation and special target mode), onboard calibration schemes, and the initial on-orbit results of radiometric, geometric and spectroscopic performances are presented. TANSO-FTS Level 1A and 1B data processing algorithm and its updates on the ground are also presented. In addition we will show recent on orbit instrument status such as pointing accuracy, interferogram quality, and radiometric accuracy.