



Early phase achievement and scientific plan of TanSat Mission

Daren Lu, Yi Liu, and TanSat Science Team

Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing 100029, China

First, the pre-launch achievements of the Chinese Carbon Dioxide Observation Satellite (TanSat) will be summarized, which include main achievements during pre-flight tests of the Carbon Dioxide Spectrometer (CDS) and Cloud and Aerosol Polarization Imager (CAPI). After successfully launched on December 22 in Jiuquan Satellite Launch Center, TanSat is going into initial experimental phase from January to April, during which it will conduct the on-orbit calibrations and retrieval testing, until the middle of April, the early phase results will be presented.

According to the scientific application plan of TanSat observation, after the calibration operations and test retrieval validated with TCCON data, the TanSat products (L1B and L2) will be released to the domestic and international scientific researchers and the TanSat observations will promote the CO₂ monitoring and CO₂ emission reduction over regional and global scales.