

Description of Research Project

The overall goal of the MiTEE mission, is to test miniature electrodynamic tethers as a propulsion concept for small satellites.

MiTEE-1 will measure properties of ionospheric plasma and spacecraft charging in Low Earth Orbit with a flight-ready Langmuir Probe instrument designed for the ProSEDS mission. The spacecraft will also concurrently sweep the voltage of its picosat end-body and the electron emission current of its thermionic emitters in order to characterize the picosat's ability to collect electron current from the ionospheric plasma.

The Experimental License requested, is necessary to authorize radio transmission of data from the MiTEE satellite to the ground station at the University of Michigan.