

22nd IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS (B4)  
Small Satellite Operations (3)

Author: Mr. Marcelo Henrique Essado de Morais  
Brazil, marcelo.essado@emsisti.com.br

Mr. Cristiano Strieder  
EMSISTI, Brazil, cristiano.strieder@emsisti.com.br

NANOSATCS: A GROUND CONTROL AND MONITORING SYSTEM FOR BRAZILIAN  
SCIENTIFIC CUBESAT – NANOSATC-BR1

**Abstract**

This paper presents the ground control and monitoring software system of the Brazilian scientific cubesat – NanosatC-BR1. The Nanosatellite Control System (NanosatCS) include new aspects of architecture and development life-cycle in order to reduce costs and time development. Taking advantages of the experience gained in earlier ground control systems at Brazilian National Institute of Space Research (INPE), this modelling approach increase the system reusability, reducing the efforts required to make changes. Furthermore, ECSS standards was tailored for the ground software development in order to adjust the best practices of a space system. This paper also shows the future perspective for a multi-mission control system.