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NANOSATC-BR2 PROGRESS AND LAUNCH - THE BRAZILIAN INPE-UFSM JOINT CUBESAT
DEVELOPMENT PROGRAM

Abstract

This paper aims to present the NANOSATC-BR2, or NCBR2, recent Progress and its launch, from the Brazilian INPE-UFSM Joint CubeSats Development Program. This paper is a follow up paper from previous ones that have already been presented at IACs - UN/IAA workshops. Currently, the Program counts with two CubeSats: the NANOSATC-BR1, (1U) launched in 2014 and still in operation and the NANOSATC-BR2, (2U), under development and expected to be launched in 2018. The major target of the Program is the development of a Capacity Building Integrated Program (CBP) on space science, engineering and computer sciences for the development of space technologies using CubeSat satellites, starting with a first Brazilian Scientific Nanosatellite, the NANOSATC-BR1. This paper emphasizes the involvement of UFSM's undergraduate and graduate students in the conception, development and operation of NANOSATC-BR1, reporting the results of the Capacity Building and the technological and scientific results of its mission and the participation of INPE's graduate students in onboard data handling (OBDH) subsystem development and verification and validation of the NANOSATC-BR2. This paper discuss the cooperation and collaborations of other Space Science, Engineering and Computer Science institutions involved in Brazil and International. The Program have financial support from the Brazilian Space Agency (AEB) and from the Ministry of Science, Technology, Innovation and Communications - MCTIC.