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Author: Mr. Guilherme Venticinque
Instituto Nacional de Pesquisas Espaciais (INPE), Brazil, gui25@lit.inpe.br

Dr. Geilson Loureiro
Instituto Nacional de Pesquisas Espaciais (INPE), Brazil, geilson@lit.inpe.br
Mr. Gabriel Gustavo Coronel Mariño
Brazilian National Institute for Space Research - INPE, Brazil, gabrielg.coronelm@gmail.com
Mr. Felipe Lopes Marques
INPE - Natiional Institute for Space Research, Brazil, felipe.marques@lit.inpe.br

EARTH OBSERVATION SATELLITE - CBERS4A – PRELIMINARY LESSONS AFTER AIT CAMPAIGN AND ITS SUCCESSFUL LAUNCHING

Abstract

This paper presents and analyses the AIT process of China-Brazil Earth Resource Satellite – CBERS 4A, using the AIT discrepancies as a guide for lessons learned that could inspire and contribute to improve system design, the verification process and AIT process. The CBERS-4A is the 6th satellite jointly developed by the two countries. The CBERS-4A satellite has being launched successfully in December 2019, after huge AIT campaign. The satellite AIT campaign started in June, 2017 at Integration and Test Laboratory - LIT of Brazil's National Institute of Space Resource - INPE and ended later October 2019 at Chinese Academy of Space Resource – CAST in Beijing, after totalizing 1860 hours of functional tests. Considering that total satellite lifespan is expected to be 5 to 6 years in orbit, it is very imperative that the whole project life cycle and therefore AIT campaign must be efficient to fulfill the user's need and expectation.