

Commissioning the UPM satellite simulator facility platform

ABSTRACT

The purpose of this paper is to test and validate the UPM Satellite Simulator Facility (SSF) platform. The work relates to satellite testing and qualification experiments. The satellite Attitude Determination and Control System (ADCS) consist of flight-proven equipment from Canada, Germany and America. The flight hardware check has to be performed for the SSF qualification. Therefore, dedicated test procedures in order to test and verify the satellite control mode (i.e., Idle mode, Detumble mode, Coarse Pointing mode and Fine Pointing mode) has to be implemented. The results of these experiments are discussed to qualify the health of the satellite itself and the ADCS equipment. The UPM SSF responded very well to all the conducted tests and therefore, its performances are validated.