

IAF EARTH OBSERVATION SYMPOSIUM (B1)
Interactive Presentations - IAF EARTH OBSERVATION SYMPOSIUM (IP)

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DESIGN AND DEVELOPMENT OF A SUBSYSTEM FOR EARTH OBSERVATION, COMPATIBLE
WITH THE CUBESAT STANDARD.

Abstract

Currently, it is possible in the market of nanosatellite and CubeSat components, to find a series of payloads with different purposes, including Earth observation, thus it is feasible to find different models of cameras that allow the acquisition of images, in different sizes and formats, allowing to fulfill this objective. Every country, including those who have not established a space agency look for earning the benefits of these technologies; nevertheless, this has been available for few countries and private companies, thus these last countries must pay vast amounts of money, in order to get these technologies and their results, also generating dependence of these technologies, but not motivating its transference. This work has the main purpose of generating a payload for Earth observation and image capturing, that is compatible with the CubeSat standard, which can be developed in under six months, so it can be implemented and used in different spacecraft, and small satellites, in order to motivate the design and development of new small satellite missions and to prove that it is possible for Mexican institutions to develop their own satellite subsystems.