

**IAF EARTH OBSERVATION SYMPOSIUM (B1)**  
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**HYPERSPECTRAL REMOTE SENSING SATELLITES IMPLEMENTATION AS PAYLOAD FOCUS  
ON THE SUSTAINABLE DEVELOPMENT GOALS**

**Abstract**

The hyperspectral technology applied in remote sensing satellites captures images of scenarios that provide information about the different spectral signatures from materials or substances in an area. These data have helped the analysis of several investigations both in geology as in other disciplines, in the same way can help to achieve the sustainable development goals (SDGs), specially the 6th objective: "Clean water and sanitation". This research is focused on the development of a nanosatellite with a hyperspectral camera as payload which could capture images of areas with more possibilities to store rainwater that turn into inundations, which could help to create a system of water catchment and water recycling to avoid inundations, as well as, direct the water to areas with drought problems.