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THE EO-SAT1 MISSION – SOUTH AFRICA’S CONTRIBUTION TO ARMC

Abstract

The birth of the African Resource Management Constellation (ARMC) can be traced back more than ten years to 2003. Since then various mission concepts have been explored and user requirements distilled. The South African Space Agency (SANSA) has now contracted Denel Spaceteq for the development and supply of the South African contribution to ARMC - called EO-SAT1 – with an expected launch date of 2018. It is expected that other member countries from Northern Africa will join the constellation within this timeframe. The past successes of the South African space program will be expanded upon and carried forward by the EO-SAT1 mission, which was defined through a consultative process with the South-African Earth Observation (EO) community, driven by SANSA. This paper presents the EO-SAT1 mission, the satellite architecture, and the rationale behind the key end-user applications served by the payload data. The paper also illustrates the applicability of the ARMC data products beyond Africa’s borders given the compatibility of the EO-SAT1 payload specification with other major EO missions.