EARTH OBSERVATION SYMPOSIUM (B1)

Future Earth Observation Systems (2)

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PROPOSED GEOSTATIONARY EARTH OBSERVATION SYSTEM VS EXISTING AND PROPOSED LEO EARTH OBSERVATION SATELLITE CONSTELLATIONS: A COMPARATIVE OVERVIEW

Abstract

Low Earth Orbit earth observation satellite constellations have proven their worth in many fields requiring space image data. This paper endeavours to compare the features, cost, benefits and non-benefits of LEO satellite constellations, both existing and proposed, with a proposed geostationary earth observation satellite system in an overview formation. Deeper analysis of the advantages and disadvantages of the two types of systems can only be realistically completed when both are operational but should give an indication of which aspects require greater attention with specific reference to known requirements in the developing world.