SPACE DEBRIS SYMPOSIUM (A6) Modelling and Risk Analysis (2)

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RISK MITIGATION ACTIVITIES FOR POTENTIAL COLLISION AVOIDANCE EVENTS FOR COSMO-SKYMED CONSTELLATION IN FLIGHT OPERATIONS

Abstract

COSMO-SkyMed (COnstellation of Satellites for Mediterranean basin Observation) is an Earth Observation space program funded by the Italian Ministry of Research and Ministry of Defense and managed by the ASI in conjunction with Italian MoD.

As of the beginning of 2011, four COSMO-SkyMed SAR spacecrafts orbiting in LEO sun-synchronous orbit are regularly in operation phase.

This paper describes the operational activities performed at ground segment level in order to mitigate the risk arising from potential collision avoidance events. It also addresses some real cases of management of collision avoidance events, occurred during several years of satellites in flight operations.