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ARIANEGROUP GEOTRACKER NETWORK ENHANCEMENT OPERATIONAL EXAMPLES

Abstract

GEOTracker is a worldwide network of optical sensor stations operated by ArianeGroup. The worldwide distribution of the sensor stations enables an almost permanent and full coverage of the entire geostationary arc. In the GEOTracker Command Control Centers the gained observation data is automatically processed and stored in the company-owned catalog. The regularly updated catalog enables space operators a reliable assessment of the current situation and the early detection and evaluation of threatening situations. Thus, the existing infrastructures can be safely protected and operated. In particular the high agility and versatility of the network allows to provide individually tailored solutions to customers. Besides a short recap of the current sensor network, services, and capabilities this paper will present the need for operators to observe and assess its space operations. A number of observations examples will be used to illustrate the need for situational awareness. In particular aspects of the optimal observation strategy concerning the early detection of anomalous situations are addressed. Especially in critical situations, a high number of valid observations is necessary. Furthermore, the paper will give a brief outlook on further developments also with regard to the recently started European Defence Industrial Development Programme (EDIDP) project Sensors for Advanced Usage Reconnaissance of Outerspace situation (SAURON).