SPACE OPERATIONS SYMPOSIUM (B6)
New Operations Concepts and Commercial Space Operations (2)

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PLEIADES PROGRAMMING ACTIVITIES: SINCE SPOT1, A CONTINUOUS IMPROVEMENT OF THE ANSWER TO USERS NEEDS

Abstract

Pleiades Constellation is composed of two satellites, both controlled, operated and programmed from CNES. Located on the same helio-synchronous polar orbit, at 180 from each other, they will offer a great acquisition capability when both are in operations. Whether the images are for civilian purposes or military uses, the customer always looks for an increasing reactivity of his image programming in order to reduce the interval between the request deposit and the image data capture. That's why Pleiades innovative chronogram is based on 3 programming periods per day, while Spot satellites programming is only uploaded once a day. In the meantime, it is important to maintain 2 criteria that had been previously improved for SPOT satellites: safety of the operations and operational organization at reasonable costs. This paper will first introduce the new Pleiades chronogram, pointing out the significant differences with Spot chronograms. This comparison will be illustrated with the help of features such as: meteorological forecasts, reactivity according to geographical areas of interest, margins for recovery procedures.... Then, the paper will present some tools and facilities, implemented in CNES Control Center that help the operational teams to be compliant with the following two contradictory constraints: shorter time available for running procedures but also enough time margin to recover failure situations.... Finally, the paper will conclude with a summary of the very first months of in-orbit life of Pleiades-1A and will propose some more improvements, already stated for some specific Pleiades Images receiving stations and called "Direct Tasking" facility.