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Author: Mr. Jan Schulte Kongsberg Satellite Services AS, Norway, jans@ksat.no

COPERNICUS GROUND STATION SUPPORT EVOLUTION AT THE SVALBARD STATION 2014-2022

Abstract

Since the launch of the first ESA COPERNICUS Sentinel satellite in 2014, Kongsberg Satellite Services has provided the core data acquisition station at the SvalSat Ground Station at 78 deg Northern latitude. The operational concept has significantly evolved in the last 8 years. While archiving and payload data processing was performed using tapes in the first years, a full cloud-based data processing, archiving and access solution has been implemented in 2019. In this paper, KSAT reviews the operational concept of the Copernicus Ground Station antenna pool at the Svalbard station. A highly automated operations capability including the entire operational chain from scheduling, pass monitoring to reporting of pass statistics and performance indicators has been developed. This state-of-the-art operational environment has proven to be a cornerstone of providing a service with unprecedented performance figures. In the year 2021, a total of 30494 COPERNICUS passes was supported from the SvalSat antenna pool. Out of these scheduled passes only 4 passes were considered unsuccessful which corresponds to a proficiency of 99,986

Statistics of 8 years of successful operations will be presented including a conceptual overview of the automation techniques applied.