

EGYPTSAT-1; THREE YEARS IN ORBIT: EXPERIENCE IN OPERATION AND UTILIZATION

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ABSTRACT:

EgyptSat-1 is an Egyptian small satellite for remote sensing launched on 17th, April 2007. The satellite is designed and manufactured by Yuzhnoye SDO of Ukraine with some participation from Egyptian engineers and specialists who were involved mainly in testing, training and technology transfer. The satellite carries a 7.8 m ground resolution optical scanner which images in 3 spectral bands and a panchromatic band. The satellite also carries a near infra-red scanner with a resolution of 39m. The satellite has been operating in orbit for slightly more than three years. The EgyptSat-1 satellite images have been taken, analyzed and used in a wide range of studies and applications over the last 2 plus years. A soon to be completed atlas and archive of images of Egypt by EgyptSat-1 has been produced. This paper aims at tracing the operation and utilization of EgyptSat-1 satellite since its insertion in orbit. The study concentrates on the history operation in orbit and the effectiveness of the utilization of the satellite. A classification of the topics and areas in which the satellite data is used is introduced. The study attempts to cast a light on the effectiveness of utilization of small satellites developed and launched in the last decade (2000-2001) by developing countries for use in development objectives.

TOPIC: New earth observation satellites

ALTERNATIVE TOPIC: Operational remote sensing programs