

## **TURKEY'S FIRST EARTH OBSERVATION SATELLITE RASAT STARTED TRANSMITTING IMAGES FROM SPACE**

Images from different parts of the world recorded by the first Turkish made remote sensing satellite RASAT, designed, developed, tested and operated by TÜBİTAK UZAY, the space technologies research institute of Turkish Government, have been downloaded to TÜBİTAK UZAY's main ground station in the Middle East Technical University campus in Ankara, Turkey.

RASAT satellite was launched on August 17<sup>th</sup> from Russia to a polar orbit and completes one orbit around the Earth in nearly 98 minutes. The satellite orbited the earth nearly 1250 times since the launch.

During the commissioning phase after launch, an additional ground station in Andoya, Norway which is operated by TÜBİTAK UZAY engineers remotely from Turkey and TÜBİTAK UZAY's main ground station in Ankara, Turkey were used.

During the tests in the commissioning phase, RASAT's new generation, state of the art homegrown satellite flight computer named BiLGE, 100 Mbit/s X-band communication system named T-REKS, and a real-time image processing module named GEZGiN, all designed, developed and tested by TÜBİTAK UZAY, were proved to perform successfully in orbit and started gathering space heritage.

Test images acquired by RASAT are used to calibrate the camera, which has 7.5 m PAN, 15 m multispectral resolution. Although commissioning and test sequences are still performed, all the modules onboard are now proven to perform as planned.

Systems engineering, systems design and all the tests of RASAT satellite were performed in Turkey by the Turkish engineers and technicians of TUBİTAK UZAY.

The satellite, which has 3 year mission lifetime, is a major milestone for the Turkish space projects. Images acquired by RASAT will be used by public and academic institutions, and the satellite will serve as a test and validation platform for Turkey's future space missions.