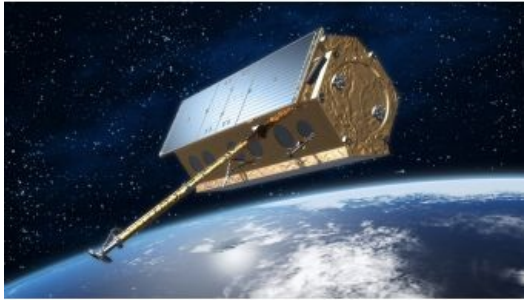


Airbus Celebrates 10th Anniversary of TerraSAR-X Satellite



Designed to operate for five years, Airbus's Synthetic Aperture Radar (SAR) satellite TerraSAR-X has achieved ten years of flawless operations in orbit providing high-resolution radar images in all weather conditions, 24 hours a day. Developed and constructed by Airbus Defence and Space teams from Friedrichshafen for the German Aerospace Centre (DLR), the satellite orbits at a height of 514km and provides radar imagery to a wide variety of scientific and commercial users.

TerraSAR-X has not only achieved double its service life, having orbited the Earth 55,459 times and travelled 2.4 billion kilometres, all while boasting 99.9 percent availability, it has also delivered an outstanding performance, said Eckard Settelmeier, head of Earth Observation, Navigation and Science at Airbus in Germany. TerraSAR-X is

in such a good condition that a current assessment indicates it can be operated for a few more years in space until a follow-on system is in place.

Wide range of applications

TerraSAR-X features a unique geometric accuracy, said François Lombard, head of the Intelligence Business Cluster at Airbus Defence and Space. With six imaging modes, it offers flexible coverage and resolutions ranging from 0.25m to 40m, and answers the needs of a wide range of domains, like engineering companies to ensure the safe operation of large construction projects, oil and gas enterprises to monitor their production, or Intelligence and Security agencies for targeted surveillance and detailed change detection.

Since the launch of its almost identical twin TanDEM-X in 2010, both satellites have been flying in formation with the distance between them only a few hundred metres. They have acquired a huge amount of data which provides the basis for the new standard of global elevation models, WorldDEM, covering the entire Earth.

Future developments

TerraSAR-X and TanDEM-X offer high acquisition frequency, regardless of area of interest or weather conditions, which is crucial for natural or man-made disasters, where reactive mapping is needed to support rescue planning. Following the launch of the PAZ satellite at the end of this year on the same orbit, the three satellites will be operated in a constellation to deliver even more optimised revisit time, increased coverage and improved services.

Airbus Defence and Space is working on the next generation of Synthetic Aperture Radar (SAR) satellites as a follow-on mission to TerraSAR-X and TanDEM-X from 2022.

Visit the TerraSAR-X image gallery [here](#).