

## **VNREDSat-1 Space cooperation**

VNREDSat-1 was placed in orbit on 6 May 2013 aboard a Vega rocket from the European Space Centre in Kourou, French Guiana.

The satellite has been built with VAST, the Vietnamese academy for Science and technology, at Astrium's Toulouse site. During the project 15 Vietnamese engineers were integrated and trained by the Astrium team. The VNREDSat-1 system is based on the 130kg Astrium operational AstroSat100 satellite and platform (accumulating more than 55 years in orbit experience), and delivering very high quality 2.5m images in panchromatic mode and 10 m in multi-spectral mode (four bands) with a 17.5km swath.

The VNREDSat-1 system comprises an optical satellite capable of capturing images with a resolution of 2.5 metres, the associated ground control, image receiving and processing stations, and a co-operation and training programme for Vietnamese engineers. The VNREDSat-1 programme, awarded to Astrium in 2010, is the result of an initiative by the Vietnamese government to create a space infrastructure enabling the country to better monitor and study the effects of climate change, predict and take measures to prevent natural disasters, and optimise the management of its natural resources. The contract between Astrium and VAST covers the development, manufacture and launch of an Earth observation optical satellite system.