

Press Release

16 September 2015

# SSTL's DMC3 Constellation demonstrates 1-metre capability

The first 1-metre high resolution optical satellite imagery from the DMC3/TripleSat Constellation satellites has been released today. This follows the successful launch of the three Earth Observation mini-satellites on an Indian PSLV in July and in-orbit commissioning and calibration by engineers from Surrey Satellite Technology Ltd (SSTL).

The very high resolution imager on board the satellites provides 1-metre native ground sampling distance (GSD) in panchromatic mode and 4-metre GSD in multispectral mode with a swath width of 24km..



Image-1: This 1m resolution pan-sharpened image taken on 2<sup>nd</sup> August 2015 shows the Athens Olympic stadium.

Sir Martin Sweeting, SSTL's founder and Chief Executive, welcomed a comment from Dave Parker, Chief Executive of the UK Space Agency, who said "Congratulations to SSTL on the acquisition of these one metre resolution images of our planet from the DMC3 constellation - a real demonstration of technical precision. SSTL's expertise in small



satellites plays a major role in the space sector's £3.6bn contribution to the UK economy through exports."

The Twenty First Century Aerospace Technology Company Ltd (21AT), a commercial Earth observation satellite operator based in Beijing, has bought 100% of the imaging capacity of the three satellites for 7 years to provide their satellite data services from the TripleSat Constellation. 21AT will also create new applications for customers and business opportunities for worldwide partners through its operational information services powered by the TripleSat Constellation.



Image-2: This 1m resolution pan-sharpened image taken on 31<sup>st</sup> July 2015 is an extract showing the airport in Sydney (Australia)

The wide swath width of the imagers combined with agile off-pointing will enable the TripleSat Constellation to target anywhere on Earth at least once per day and provides the best combination of spatial resolution and time resolution – aiming at stimulating operational monitoring applications, such as urban planning and intelligent management, based on changes detected by timely regular, cloud-free, very high-resolution imagery.



The DMC3 satellites were placed into a 651km sun-synchronous Low Earth Orbit by a PSLV-XL launch vehicle from the Satish Dhawan Space Centre, Sriharikota launch site in India on 10<sup>th</sup> July 2015. The launch was provided by ANTRIX and the Indian Space Research Organisation (ISRO).

The DMC3 satellites in the TripleSat Constellation are phased 120 degrees apart around the same orbit using their on-board propulsion systems. 21AT has contracted SSTL to provide satellite platform services for the Constellation in orbit.

The DMC3/TripleSat Constellation satellites use the 450kg SSTL-300S1 series platform, which provides 45 degree fast slew off-pointing and is capable of acquiring multiple targets in one pass using multiple viewing modes.

SSTL has already manufactured a fourth SSTL-S1 Earth Observation satellite for another customer and has a production line ready to deliver further satellites of this type. In agreement with 21AT, future satellites may have the opportunity to join the TripleSat Constellation.

### Notes to editor:

Accompanying full resolution images for this press release can be downloaded at www.sstl.co.uk/News-and-Events/2015-News-Archive/SSTL-s-DMC3-Constellation-demonstrates-1-metre-cap

Video of the DMC3 Constellation satellites during final assembly at SSTL is available via YouTube at https://www.youtube.com/watch?v=MCONXL76f5Q

This press release can be viewed, shared, or downloaded as a Word or PDF document at

www.sstl.co.uk/News-and-Events/2015-News-Archive/SSTL-s-DMC3-Constellation-demonstrates-1-metre-cap

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# **About SSTL**

Surrey Satellite Technology Limited (SSTL) is the world's leading small satellite company, delivering operational space missions for a range of applications including Earth



observation, science and communications. The Company designs, manufactures and operates high performance satellites and ground systems for a fraction of the price normally associated with space missions, with 450 staff working on turnkey satellite platforms, space-proven satellite subsystems and optical instruments.

Since 1981, SSTL has built and launched 47 satellites for 20 international customers – as well as providing training and development programmes, consultancy services, and mission studies for ESA, NASA, international governments and commercial customers, with an innovative approach that is changing the economics of space.

Headquartered in Guildford, UK, SSTL is part of the Airbus Group. www.sstl.co.uk

#### **About 21AT**

Twenty First Century Aerospace Technology Co. Ltd. is the first and only Earth Observation commercial satellite operator in China. With headquarters in Beijing, 21AT employs more than 300 people and has been providing remote sensing applications in China since the launch of its first satellite, Beijing-1, in 2005. Beijing-1 was one of five satellites in the Disaster Monitoring Constellation providing disaster response through an International Charter. Based on the success of Beijing-1, 21AT has acquired the new capability of three 1-metre satellites in a constellation for imagery data services. 21AT will provide in-depth application support from its comprehensive value added services and create business opportunities for worldwide partners through its operational monitoring services powered by the TripleSat Constellation. 21AT (Asia) in Singapore has been established to support streamlined access to the worldwide market. www.21at.com.cn