SURREY SATELLITE TECHNOLOGY LTD

Precision an ultra-high resolution satellite

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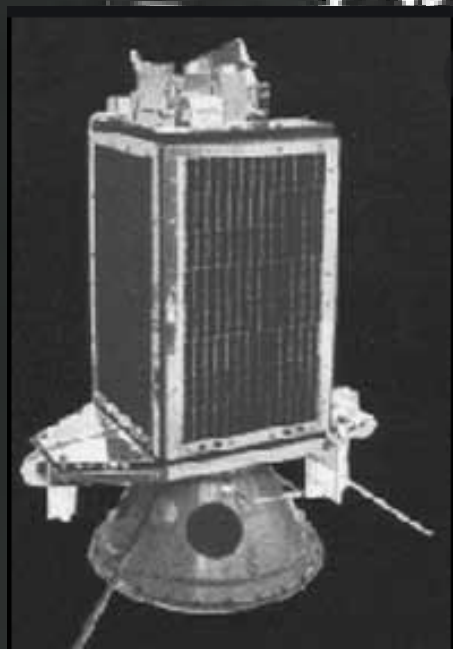
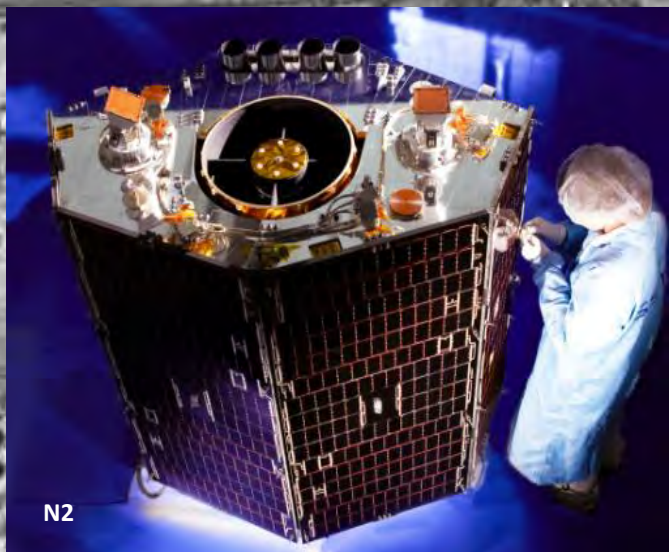
2080 – UoSat 1



2002 – DMC1

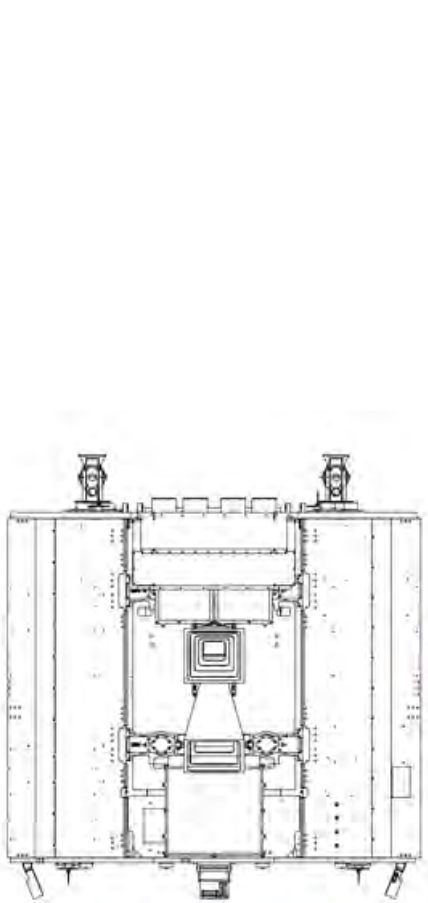
2011 – SSTL-300



2015 – SSTL-300 S1

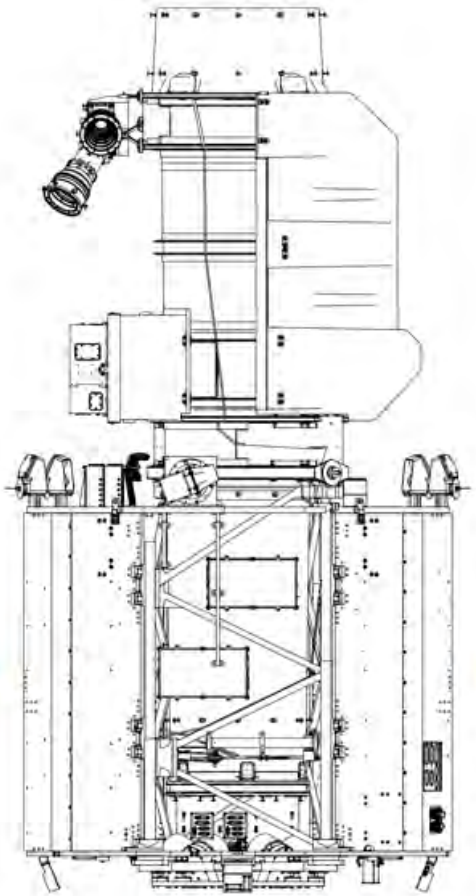
Courtesy of Antrix

SIZE matters



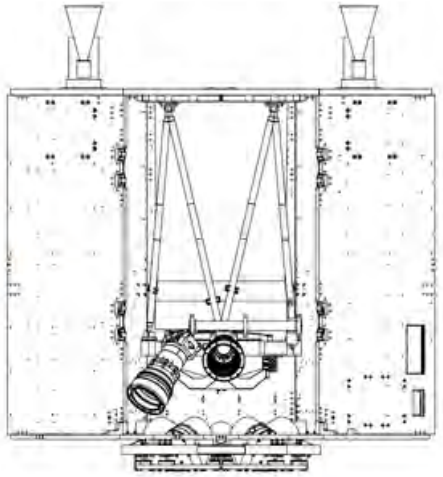
SSTL300 N2

Image Resolution: 2.5m @700km



SSTL300 S1

Image Resolution: 1m @650km



PRECISION

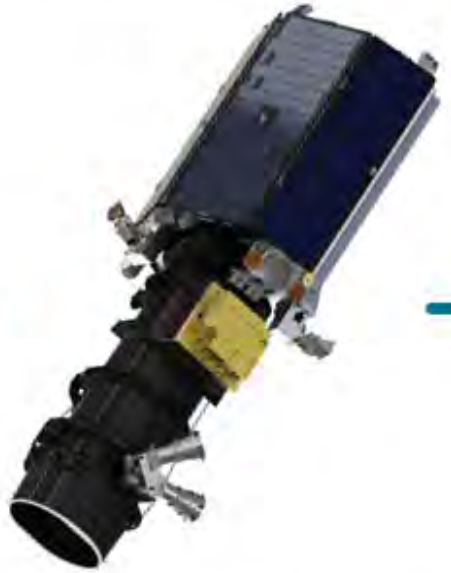
Image Resolution: <0.5m @500km

SIZE matters

SSTL-300 N2

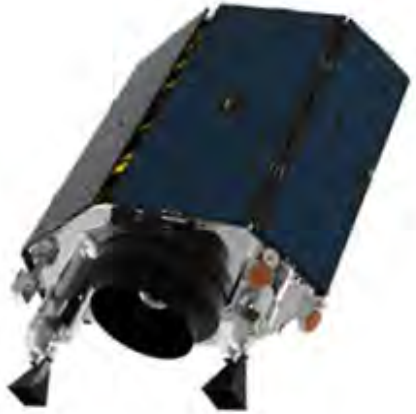
2.5m GSD
Launch Mass < 270 kg

SSTL-300 DMC-3/TripleSat



1m GSD
Launch Mass < 450 kg

SSTL-Mini Precision



0.6m GSD
Launch Mass < 300 kg

PRECISION satellite

The **SSTL-Precision** satellite provides very high resolution, high quality imagery.

The spacecraft is designed to be compact in order to support affordable operations as a stand-alone unit or in constellations providing higher temporal resolution..

Modes

- Strip
- Spot
- 2x2 area
- along track and cross track stereo
- inclined strip

Applications

Mapping, surveillance, infrastructure and asset monitoring, disaster monitoring, insurance and loss adjustment.

Parameter	Specification
GSD	0.6 m PAN (< 0.5 m with ½ pixel shift) 1.2 m multispectral
Swath	9.5 km
Bands	PAN, R, G, B, NIR
Sensor Type	CCD-in-CMOS TDI detector
Throughput	~130,000 km², 1.5 TB per day
SNR	>100
Technical	Orbit: 500km Mass: 290kg Lifetime: 7 years Data storage: 3TByte Downlink: 1.2Gbps Propulsion : >130m/s Agility: ±45deg Roll / Pitch
Lifetime	- 7 years with 10 year target - Dual-redundant avionics and payload chain

PRECISION payload

Precision is a very high resolution multispectral imager which utilizes a novel CCD-in-CMOS time delay and integration (TDI) line scan detector and innovative opto-mechanical techniques to achieve cutting edge performance at a market-leading size, weight and power.