## Pleiades 1A

First satellite to be launched for creation of Pleiades constellation was Pleiades 1A. It was launched in December, 2011 from French Guiana. The Pleiades-1A constellation provides very-high-resolution optical products in record time, offering daily revisits to any point on the globe and acquisition capabilities tailored to meet the full spectrum of civil and military requirements.

Pleiades swath covers 20 km at nadir, the satellites' high agility allows to acquire in the same pass a mosaic of images covering a larger area (up to 120km*120km), or stereoscopic images of 300 km long. In all cases, minimum area is 25 sq.km. for archive imagery and 100 sq.km. for tasked imagery, with a width of at least 5 km in any direction for tasked imagery (500m for archive imagery). User can select acquisition according area, 5 acquisition modes are there Target, Strip Mapping, Tri-stereo, Corridor and Persistent Surveillance. Please contact us for Pleiades imagery price list.
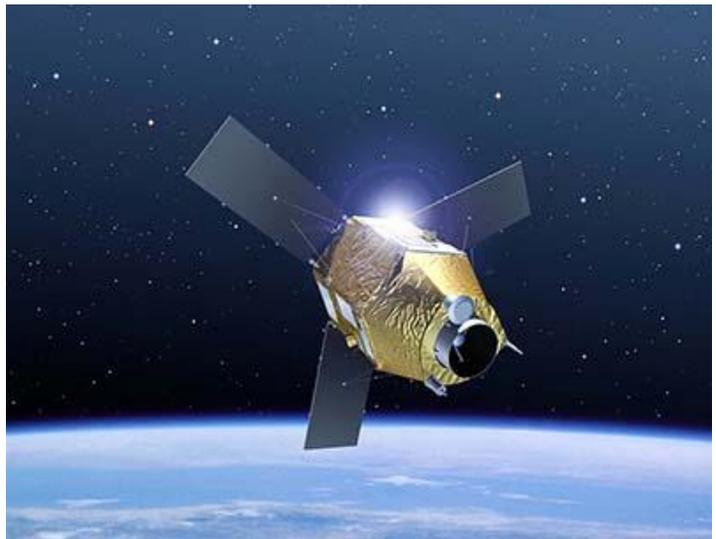
Specifications of the satellite-

Resolution:
50-cm black and white
50-cm color
Multispectral 2.0 m
Bundle: 50-cm B&W and 2-meter multispectral

Nominal swath width: 20km at Nadir

Spectral Bands:
Pan: 450-830 nm
Blue: 430-550 nm
Green: 500-620 nm
Red: 590-710 nm
Near IR: 740-940 nm

Archive availability: From September 2012

Pre-processing Levels: Sensor, Ortho

Programmability: Yes

Image Location Accuracy: With ground control points: 1m
Without ground control points: 3m (CE90)

Minimum area of purchase: 25 sq. km. for Archive Imagery
100 sq. km. for New Collect imagery

Stereo available: Yes

Best scale: 1 : 2000

Imaging Capacity:
Daily constellation capacity: 1,000,000 sq.km.
Strip mapping (mosaic): 100 km x 100 km
Stereo imaging: 20 km x 280 km
Max. spots over 100 km x 200 km: 30 (crisis mode)

Products:

Following products are available from Pleiades:

Both satellites provide Panchromatic, Multispectral (4 bands), Pansharpened 3 band true colour (BGR), Pansharpened 3 band false colour (RGNIR) or Bundle imagery. Products from either sensor are of exactly same quality and accuracy. Geometry wise Primary and Ortho products will be available. Orthoretification facilitates the management of several layers of products, from the same sensor or others, while reducing local data gaps that can be caused by different viewing angles or relief parallax between various image strips. The standard 3D model used for ground corrections is the worldwide Elevation30 dataset (also known as Reference3D).

Spectral properties of the Sensor: