

QuickBird

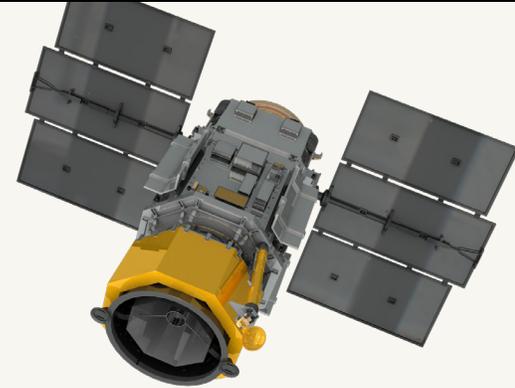
The retired Vantor™ Quickbird satellite is no longer collecting imagery but continues to offer sub-meter resolution imagery with high geolocational accuracy through the imagery archive. With global collection of panchromatic and multispectral imagery, QuickBird imagery supports a wide range of geospatial applications.

Features

- + Sub-meter resolution imagery
 - o 55 cm panchromatic at nadir
 - o 2.16 m multispectral at nadir
- + High geolocational accuracy
 - o Stable platform for precise location measurement
- + Fast large-area collection
 - o 14.9 km imaging swath width
- + High image quality
 - o Off-axis unobscured design of QuickBird's telescope: large field-of-view
 - o High contrast (MTF)
 - o High signal-to-noise ratio
- + Large on-board data storage
 - o 128 gigabits on-board image storage capacity

Benefits

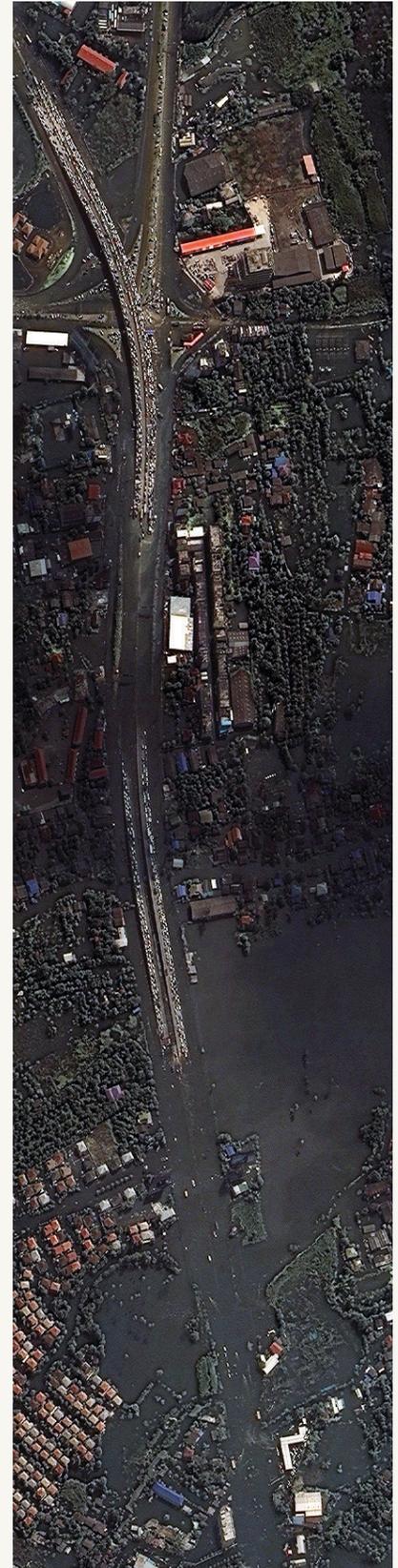
- + Acquire high-quality satellite imagery for map creation, change detection, and imagery analysis
- + Geolocate features to create maps in remote areas without the use of ground control points
- + Collect a greater supply of frequently updated global imagery products
- + Extend the range of suitable imaging-collection targets and enhance image interpretability



QuickBird clean room pre-launch preparations

Specifications

Launch information	<ul style="list-style-type: none"> + Date: 10/18/2001 + Launch vehicle: Delta II + Launch site: SLC-2W, Vandenberg Air Force Base, California Rocky9 Rocky9 	
Spacecraft size	+ 2400 lbs., 3.04 m (10 ft.) in length	
ALTITUDE 482 KM		
Orbit	<ul style="list-style-type: none"> + Type: Sun-synchronous, 10:00 a.m. descending node + Period: 94.2 min 	<ul style="list-style-type: none"> + Type: Sun-synchronous, 10:30 a.m. descending node + Period: 100 min
Sensor resolution and spectral bandwidth	<ul style="list-style-type: none"> + Panchromatic: 65 cm GSD at nadir + Black & white: 405-1053 nm + Multispectral: 2.62 m GSD at nadir + Blue: 430-545 nm + Green: 466-620 nm + Red: 590-710 nm + Near-IR: 715-918 nm 	<ul style="list-style-type: none"> + Panchromatic: 61 cm GSD at nadir + Multispectral: 2.44 m GSD at nadir
Dynamic range	+ 11 bits per pixel	
Swath width	+ Nominal swath width: 18.0 km at nadir	+ Nominal swath width: 16.8 km at nadir
Attitude determination and control	+ Type: 3-axis stabilized Star tracker/IRU/reaction wheels, GPS	
Retargeting agility	+ Time to slew 200 km: 37 sec	+ 38 sec
Onboard storage	+ 128 GB capacity	
Communications	<ul style="list-style-type: none"> + Payload data: 320 Mbps X-band + Housekeeping: X-band from 4, 16 and 256 Kbps, 2 Kbps S-band uplink 	
Revisit frequency (at 40 degrees North latitude)	<ul style="list-style-type: none"> + 2.5 days at 1 m GSD or less + 5.6 days at 20 degrees off-nadir or less 	<ul style="list-style-type: none"> + 2.4 days at 1 m GSD or less + 5.9 days at 20 degrees off-nadir or less
Metric accuracy	+ 23 m CE90, 17 m LE90 (without ground control)	
Capacity	+ 200,000 sq km per day	



Floods in Bangkok, Thailand
24 October, 2011 | QuickBird