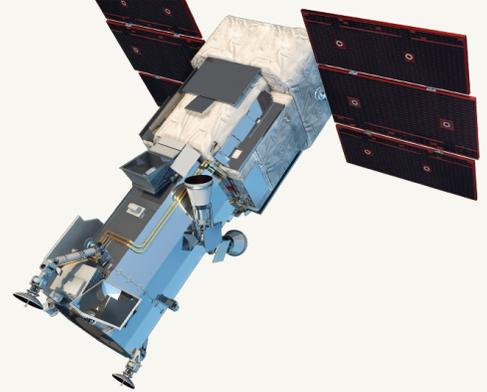


WorldView-2



WorldView-2, launched October 2009, is the first high-resolution 8-band multispectral commercial satellite. Operating at an altitude of 770 km, WorldView-2 provides 46 cm panchromatic resolution and 1.85 m multispectral resolution. WorldView-2 has an average revisit time of 1.1 days and can collect up to 1 million sq km of 8-band imagery per day, greatly enhancing Vantor's multispectral collection capacity for more rapid and reliable collection. WorldView-2 substantially expands imagery product offerings to all Vantor customers.



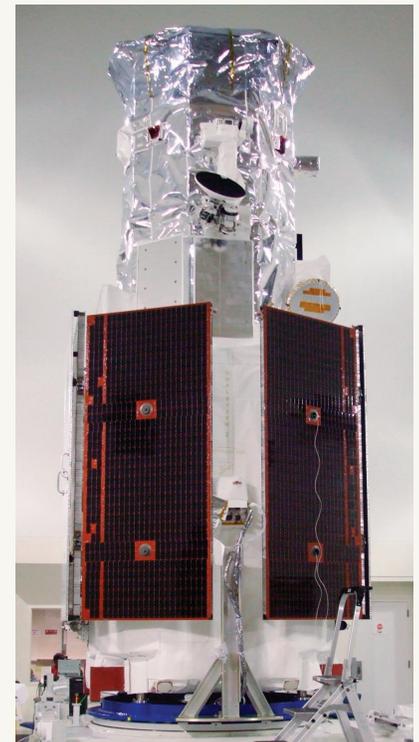
WorldView-2
Great Saint James Island, U.S. Virgin Islands
25 November 2019

Features

- + Highest resolution available
- + The most spectral diversity commercially available
- + 4 standard colors: blue, green, red, near-IR1
- + 4 new colors: coastal, yellow, red edge, near-IR2
- + Industry-leading geolocation accuracy
- + High capacity over a broad range of collection types
- + Bi-directional scanning
- + Rapid retargeting using Control Moment Gyros (>2x faster than any competitor)
- + Direct downlink to customer sites available
- + Frequent revisits at high resolution

Benefits

- + Provides highly detailed imagery for precise map creation, change detection, and in-depth image analysis
- + Geolocate features to less than 5 m to create maps in remote areas, maximizing the utility of available resources
- + Collects, stores, and downlinks a greater supply of frequently updated global imagery products than competitive systems
- + Stereoscopic collection on a single pass ensures image continuity and consistency of quality
- + Provides the ability to perform precise change detection, mapping, and analysis at unprecedented resolutions in 8-band multispectral imagery

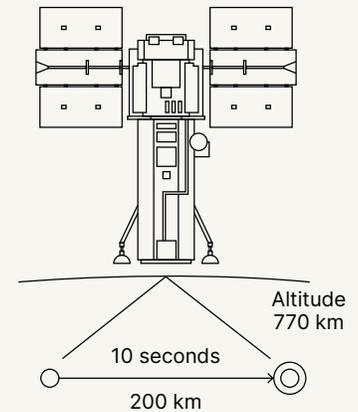


WorldView-2 clean room
pre-launch preparations

Specifications

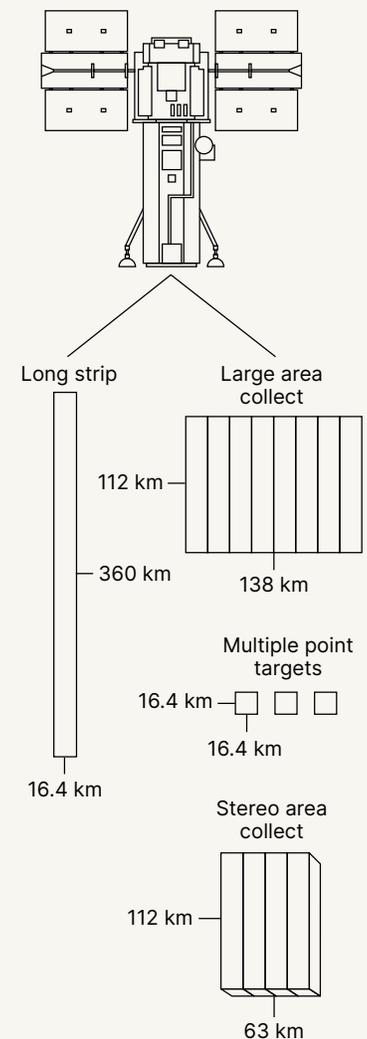
Launch information	Date: 10/08/2009 Launch vehicle: Delta 7920 (9 strap-ons) Launch site: Vandenberg Air Force Base, California	
Orbit	Altitude: 770 km Type: Sun-synchronous, 10:30 a.m. descending node Period: 100 min	
Spacecraft size, mass, and power	5.7 m (18.7 ft.) tall x 2.5 m (8 ft.) across 7.1 m (23.4 ft.) across the deployed solar arrays 2615 kg (5765 lbs.) 3.2 kW solar array, 100 Ahr battery	
Sensor bands	Panchromatic: 450–800 nm	
	8 Multispectral:	
	Coastal: 400–450 nm Blue: 450–510 nm Green: 510–580 nm Yellow: 585–625 nm	Red: 630–690 nm Red Edge: 705–745 nm Near-IR1: 770–895 nm Near-IR2: 860–1040 nm
Sensor resolution	Panchromatic: 0.46 m GSD at nadir, 0.52 m GSD at 20° off-nadir Multispectral: 1.85 m GSD at nadir, 2.07 m GSD at 20° off-nadir	
Dynamic range	11-bits per pixel	
Swath width	16.4 km at nadir	
Attitude determination and control	3-axis stabilized Actuators: Control Moment Gyros (CMGs) Sensors: star trackers, solid state IRU, GPS	
Pointing accuracy and knowledge	Accuracy: <500 m at image start and stop Knowledge: Supports geolocation accuracy below	
Retargeting agility	Time to slew 200 km: 10 sec	
Onboard storage	2199 GB solid state with EDAC	
Communications	Image and ancillary data: 800 mbps X-band Housekeeping: 4, 16, or 32 kbps real-time, 524 kbps stored, X-band Command: 2 or 64 kbps S-band	
Max Contiguous Area Collected in a Single Pass (30 degrees off-nadir angle)	Mono: 138 × 112 km (8 strips) Stere0: 63 × 112 km (4 pairs)	
Revisit frequency (at 40 degrees North latitude)	1.1 days at 1 m GSD or less 3.7 days at 20 degrees off-nadir or less (0.52 m GSD)	
Geolocation accuracy (CE90)	Demonstrated <3.5 m CE90 without ground control	
Capacity	1M sq km per day	

Altitude and slew time



Collection scenarios

(30 degrees off-nadir angle)



Sensor bands

