GeoEye™

GEOEYE-1

The world's highest resolution commercial Earth-imaging satellite

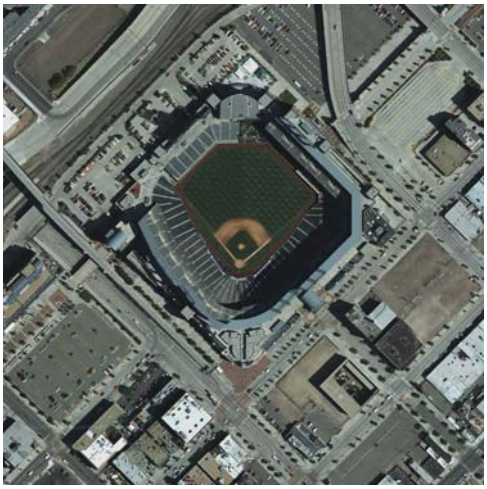
The GeoEye-1 satellite is scheduled for launch in 2007. GeoEye-1 will be equipped with the most advanced technology ever used in a commercial remote sensing system. The satellite will be able to collect images at 0.41-meter panchromatic (black & white) and 1.65-meter multispectral resolution*. Just as important, GeoEye-1 will be able to precisely locate an object to within 3 meters of its true location on the surface of the Earth. This degree of inherent geolocation accuracy has never been achieved in any commercial imaging system. The satellite will be able to collect up to 700,000 square kilometers of panchromatic (and up to 350,000 square kilometers of pan-sharpened multispectral) imagery per day. This capability is ideal for large scale mapping projects. GeoEye-1 will be able to revisit any point on Earth once every three days or sooner. Customers will have a choice of ordering BASIC, GEO, ORTHO and STEREO imagery as well as imagery-derived products, including DEMs (digital elevation models) and DSMs (digital surface models), large-area mosaics, and feature maps.

A polar orbiting satellite, GeoEye-1 will make 12 to 13 orbits per day flying at an altitude of 684 kilometers or 425 miles with an orbital velocity of about 7.5 km/sec or 45,000 mi/hr. Its sun-synchronous orbit allows it to pass over a given area at about 10:30 a.m. local time every day. The entire satellite will be able to turn and swivel very quickly in orbit to point the camera at areas of the Earth directly below it, as well as from side-to-side and front-to-back. This agility will enable it to collect much more imagery during a single pass.

Dulles, VA-based GeoEye is the prime contractor responsible for developing the entire GeoEye-1 satellite system. GeoEye-1 is designed and manufactured by General Dynamics/C4 Systems (Gilbert, AZ). ITT (Rochester, NY) is providing the electro-optical camera to General Dynamics, including the optical telescope assembly, the detectors and focal plane assembly and the high-speed digital processing electronics. MacDonald, Dettwiler and Associates and Orbit Logic are upgrading elements of GeoEye's ground segment. Receiving antennae will be located at the Company's headquarters in Dulles, VA and Barrow, AK. Kongsberg Satellite Services will provide leased ground terminal services in Tromso, Norway and Troll, Antarctica.

CURRENT VS. FUTURE RESOLUTION COMPARISON

1-meter resolution (currently available)



.41-meter resolution (simulated for GeoEye-1)

GeoEye-1 Fact Sheet

GEOEYE-1 IMAGING & COLLECTION SPECIFICATIONS

Scheduled Launch Date	2007		
Camera Modes	• Simultaneous panchromatic and multispectral (pan-sharpened) • Panchromatic only • Multispectral only		
Resolution	0.41 m / 1.34 ft* panchromatic (nominal at Nadir) 1.65 m / 5.41 ft* multispectral (nominal at Nadir)		
Metric Accuracy/Geolocation	CE stereo: 2 m / 6.6 ft LE stereo : 3 m / 9.84 ft CE mono: 2.5 m / 8.20 ft These are specified as 90% CE (circular error) for the horizontal and 90% LE (linear error) for the vertical with no ground control		
Swath Widths & Representative Area Sizes	• Nominal swath width - 15.2 km / 9.44 mi at Nadir • Single-point scene - 225 sq km (15x15 km) • Contiguous large area - 15,000 sq km (300x50 km) • Contiguous 1° cell size areas - 10,000 sq km (100x100 km) • Contiguous stereo area - 6,270 sq km (224x28 km) (Area assumes pan mode at highest line rate)		
Imaging Angle	Capable of imaging in any direction		
Revisit Frequency at 684 km Altitude (40° Latitude Target)	Max Pan GSD (m)	Off Nadir Look Angle (deg)	Average Revisit (days)
	0.42	10	8.3
	0.50	28	2.8
	0.59	35	2.1
Daily Monoscopic Area Collection Capacity	Up to 700,000 sq km/day (270,271 sq mi/day) of pan area (equivalent to about the size of Texas) Up to 350,000 sq km/day (135,135 sq mi/day) of pan-sharpened multispectral area (equivalent to about the size of New Mexico)		

**Data reflects ground sample distance resolution at Nadir for exclusive use by the U.S. government and any foreign government that the U.S. government may designate. Imagery sold to commercial customers will be resampled to 0.5-meter resolution. GeoEye's current operating license with NOAA does not permit the commercial sale of imagery below 0.5-meter resolution.*

GEOEYE-1 TECHNICAL INFORMATION

Launch Vehicle	Delta II
Launch Vehicle Manufacturer	Boeing Corporation
Launch Location	Vandenberg Air Force Base, California
Satellite Weight	1955 kg / 4310 lbs
Satellite Storage and Downlink	1 Terabit recorder; X-band downlink (at 740 mb/sec or 150 mb/sec)
Operational Life	Fully redundant 7+ year design life; fuel for 15 years
Satellite Modes of Operation	• Store and forward • Real-time image and downlink • Direct uplink with real-time downlink
Orbital Altitude	684 kilometers / 425 miles
Orbital Velocity	About 7.5 km/sec or 45,000 mi/hr
Inclination/Equator Crossing Time	98 degrees / 10:30am
Orbit type/period	Sun-synchronous / 98 minutes

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