

WorldView-3 Imagery for Exploration and Mining

Technical Specifications

Swath Width	At nadir: 13.1 km			
Revisit Frequency (at 40°N Latitude)	1 m GSD: <1.0 day 4.5 days at 20° off-nadir or less			
Orbit	Altitude: 617 km Type: Sun-synchronous, 10:30 am local time Period: 97 minutes for Earth orbit			
Geolocation Accuracy	Predicted <3.5 m CE90 without ground control			
Dynamic Range	11-bits per pixel Pan and MS; 16-bits per pixel SWIR			
Sensor Bands	Panchromatic: 450 - 800 nm			
Sensor Resolution (Ground Sample Distance)	8 Visible and Near-Infrared Bands:			
	Coastal:	397 - 454 nm	Red:	626 - 696 nm
	Blue:	445 - 517 nm	Red Edge:	698 - 749 nm
	Green:	507 - 586 nm	Near-IR1:	765 - 899 nm
	Yellow:	580 - 629 nm	Near-IR2:	857 - 1039 nm
	8 SWIR Bands:			
	SWIR-1:	1184 - 1235 nm	SWIR-5:	2137 - 2191 nm
	SWIR-2:	1546 - 1598 nm	SWIR-6:	2174 - 2232 nm
	SWIR-3:	1636 - 1686 nm	SWIR-7:	2228 - 2292 nm
	SWIR-4:	1702 - 1759 nm	SWIR-8:	2285 - 2373 nm
	12 Atmospheric Bands:			
	Desert Clouds:	405 - 420 nm	Water-3:	930 - 965 nm
Aerosol-1:	459 - 509 nm	NDVI-SWIR:	1220 - 1252 nm	
Green:	525 - 585 nm	Cirrus:	1365 - 1405 nm	
Aerosol-2:	635 - 685 nm	Snow:	1620 - 1680 nm	
Water-1:	845 - 885 nm	Aerosol-1:	2105 - 2245 nm	
Water-2:	897 - 927 nm	Aerosol-2:	2105 - 2245 nm	
Panchromatic Nadir:	0.31 m			
20° Off-Nadir:	0.36 m			
Multispectral Nadir:	1.24 m			
20° Off-Nadir:	1.38 m			
SWIR Nadir:	3.70 m			
20° Off-Nadir:	3.82 m			
CAVIS Nadir:	30.00 m			

Processing and Products

- » Geoscientific image products are generated to enhance and discriminate geology, lithology and alteration plus advanced multivariate and spectral unmixing processing techniques are used to target a variety of ore deposit lithologic and alteration styles
- » Basic raw imagery data is corrected for radiometric response between detectors, optical sensor corrections and geometric resampling
- » Atmospheric bands are used to measure atmosphere properties including cloud, aerosol, water vapor, ice and snow to correct imagery for atmospheric effects
- » Environmental products are designed to support Environmental Impact Assessments, Environmental Management Plans and related ecological, land use and change assessments

Ordering and Deliverables

Imagery is ordered by the square kilometer with a minimum purchase of 100 sq km per order. Products are delivered by secure ftp and digital media in a variety of geocoded formats compatible with leading commercial GIS and image processing software. All projects include reporting to document the project and all deliverables. Contact Exploration Mapping Group to search the archive or task the satellite with a new collection request for your area of interest.

