

INFORMATION PRODUCTS





Stereo Imagery

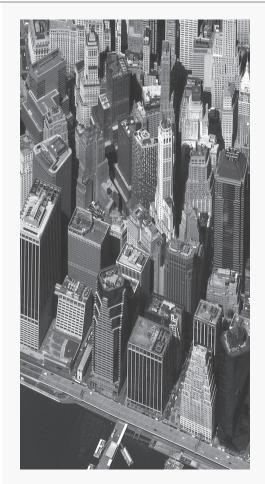
Stereo Imagery products are designed for users with advanced image processing capabilities and photogrammetric tools. This product is ideal for Digital Elevation Model (DEM) generation, 3D visualization, and feature extraction applications. Stereo images are collected in-track, meaning on the same orbit, and are acquired at angles optimal for stereo viewing and manipulation. Stereo Imagery products come in two varieties: Basic Stereo and Ortho Ready Stereo.

Features

- » High three-dimensional accuracy Stereo accuracy
 - 5.0 m CE90 at <30° off nadir
 - 5.0 m LE90 at <30° off nadir
- » High resolution
 - 30 cm panchromatic
 - 2 m multispectral
- » Large image swath collection size
 - 16.4 km 17.6 km width at nadir
- » High radiometric response
 - 11-bit digitization (up to 2,048 levels of gray scale)
- » Superior image classification and analysis
 - Discrete non-overlapping spectral bands
- » Open systems
 - Integrated camera model in most leading commercial photogrammetry software packages
 - Popular image file formats

Benefits

- » More accurate mapping and terrain modeling results
- » Provides high density terrain posting to produce highly detailed surface data
- » Flexible product composition
 - Basic Stereo Imagery unit size is at least 16.4 km wide by 14 km long
 - Ortho Ready Stereo Imagery area-framed based on AOI
 - 100 sq km minimum (Ortho Ready)
 - Tiling available (Ortho Ready)
- » Ease-of use in commercial photogrammetry tools resulting in faster processing



New York City, New York, U.S.A.



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Specifications

Order Parameters			
	Basic stereo	Ortho ready stereo	
Product type	Panchromatic, Multispectral 4-band, or Bundle (pan + 4-band multispectral)	Panchromatic, Multispectral 4-band, 8-band, 4-band/8-band Bundle (Pan + MS), Natural Color, 4-band Pan-sharpened	
Image bits / pixel	8 or 16 bits		
File formats	GeoTIFF 1.0, NITF 2.1, NITF 2.0		
Resampling options	 4x4 cubic convolution Nearest neighbor MTF kernel Enhanced Kernel Pan-sharpened Kernel 		
Minimum AOI size	210 km²	100 km²	
Product framing	Full-width framed (products delivered in units that are the swath width of sensor, 14 km long) or AOI divided into equal parts (some limitations due to file size)	Area-framed	
Tiling	None	Pixel Based: 8k, 14k, 16k Map Based	

Image Accuracy Specifications**		
Horizontal	5.0 m CE90	
Vertical	5.0 m LE90	

Processing			
	Basic stereo	Ortho ready stereo	
Radiometric corrections	Relative radiometric response between detectors, non- responsive detector fill, conversion to absolute radiometry		
Sensor corrections	Internal detector geometry, optical distortion, scan distortion, any line-rate variations		
Geometric corrections	None	Projected to a plane using a map projection and datum, projected to a constant base elevation (calculated on the average terrain elevation based on order area of interest)	

Deliverables

Stereo Imagery can be acquired directly from the DigitalGlobe archive or you can submit a new collection request. Ortho Ready Stereo is delivered based on the AOI and can be tiled. Products are delivered by FTP or on DVD with all the Image Support Data files needed for photogrammetric processing, including a stereo file that identifies the images in the pair and collection angles, attitude and ephemeris data, geometric calibration, camera model, image metadata, radiometric data, and rational functions.

Delivery methods



Media delivery: DVD



Media delivery: external HD



Web-based delivery: FTP

DS-STER 11/14

^{*} Enhanced resampling kernel available for pan and pan-sharpened Stereo products.

^{**} Pan-sharpened kernel available for pan-sharpened Stereo products only.

^{***} Up to 30° off nadir