

# EVWHS FOR PGC USERS

Webinar Training



A MAXAR COMPANY

How to access high-resolution  
satellite imagery directly online

# OUTLINE:

Basic training for PGC Users to utilize EnhancedView Web-Hosting Service (EVWHS) provided by Maxar's DigitalGlobe and the National Geospatial-Intelligence Agency.

## Background Information

- PGC Introduction
  - Products & Services, NextView License
- DigitalGlobe Overview
  - About Sensors, EGD, EVWHS

## Live Demo

- Navigation Controls
- Bookmarks & Alerts
- Search & Ordering
- Useful Links

# PGC Introduction

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**The Polar Geospatial Center is a polar science and logistics support organization at the University of Minnesota with core funding provided by the National Science Foundation's (NSF) Office of Polar Programs (OPP).**



## MISSION

- Domain and institutional knowledge to solve a broad range of polar geospatial problems
- Access to sub-meter commercial satellite imagery for the Antarctic and Arctic and the expertise to task, manage, process, and deliver high-level, value-added products
- Educational courses and online material to transfer PGC's knowledge and experience to the community

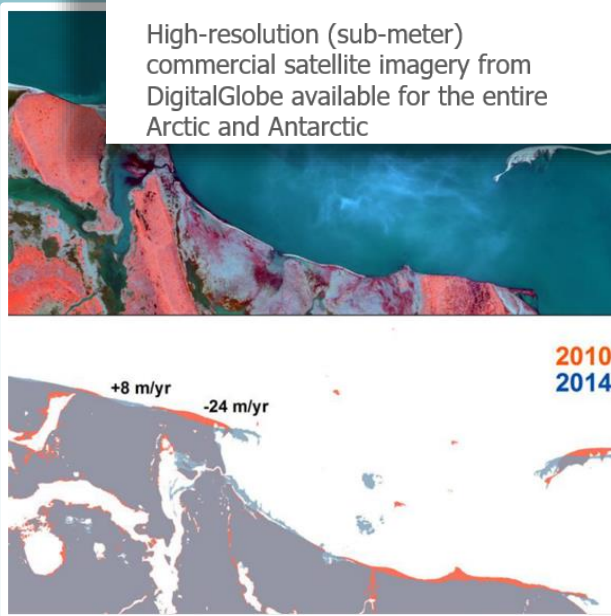


# PGC Products & Services



## Satellite Imagery

High-resolution (sub-meter) commercial satellite imagery from DigitalGlobe available for the entire Arctic and Antarctic



## Terrain Models

High-resolution Digital Elevation Models (DEM) derived from Stereoscopic DigitalGlobe imagery



## Digital Maps

Historical and custom map products for logistics planning, field site selection, publications, reference, etc.



## Geospatial Support

Advanced solutions and expertise for novel or challenging remote sensing and geospatial problems



# PGC.UMN.EDU

ABOUT ▾

DATA + SERVICES ▾



COMMUNITY ▾

GUIDES ▾

## Guides

Search Articles...

### User Services

6 Articles

- Introduction to User Services
- Information for Proposers
- Working with PGC

### Commercial Imagery

10 Articles

- Introduction to Satellite Imagery
- DigitalGlobe Satellite Constellation
- Imagery Eligibility

### Stereo Elevation Models

5 Articles

- Introduction to Stereoscopic Imagery
- Processing Algorithms
- Usage Guidelines

### ArcticDEM

4 Articles

- Introduction to ArcticDEM
- Data Description
- Distribution

### Web Mapping Applications

4 Articles

- Using PGC Web Mapping Services in ArcGIS Desktop, Pro, and QGIS
- PGC Imagery Viewers
- PGC Coordinate Converter

### Miscellaneous

3 Articles

- Polar Satellite Imagery Resources
- Polar GIS Data Resources
- Polar Elevation Resources

**PGC website  
provides exhaustive  
information about  
PGC: background,  
data, services, news,  
and tutorials.**

Check out our growing  
online Guides section  
[pgc.umn.edu/guides](http://pgc.umn.edu/guides)

# NextView License

## LICENSE TERMS

- Imagery available for a U.S. Government purpose only (civilian researchers, contractors included)
- Derived Products (e.g. DEMs, NDVI, feature extraction) are not subject to the license, but must include acknowledgement
- Must not compete with the “commercial interest” or share publicly

## USER REQUIREMENTS

- Supply proper copyright and acknowledgement
- Use for the intended purpose (project) only while actively funded

## PGC’S ROLE

- Provide the imagery to NSF-OPP actively-funded researchers & contractors
- Provide approachable reference documentation (e.g. PGC Acknowledgement Policy, Imagery Eligibility, Usage Guidelines guides online)
- Coordinate “Public Release” approval with NGA (required)



NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

Know the Earth... Show the Way... Understand the World

UNCLASSIFIED

## NextView License and You

### You must:

- Properly attribute (mark) all NV imagery and imagery derived products (IDP) with its Copyright information and educate anyone shared with on the license terms. Example of proper attribution:

Copyright 2011, DigitalGlobe, Inc.

### You may:

- Share imagery or any IDPs with anyone directly working with/for the USG, including:
  - U.S. Government Employees/Contractors\*
  - Universities supporting USG via contract(s)
- Share imagery or IDPs with those supporting USG interests
  - State/Local Governments
  - Foreign Governments
  - Intergovernmental Agencies
  - NGO's & Non-profit Organizations
- Post properly attributed reduced-resolution **non-manipulatable** imagery on public web sites
- Post/disseminate imagery using access-controlled web/FTE sites
- \*Contractors' Government sponsor must provide oversight and approval for this sharing arrangement.

### You must not:

- Provide/share imagery or IDPs made from NV licensed imagery with anyone planning to sell it or **use** it for commercial gain
- Post-full resolution imagery on a web site

### You should seek clarification (see POC list) before:

- Publicly releasing or openly disseminating imagery or IDPs with image metadata
- Sharing with Educational Institutions for strictly educational/research purposes (**not connected with the Government**)
- Sharing with a company or other entity that might profit from the imagery shared
- Posting imagery to a web site without access controls
- Allowing Imagery or IDPs to be shared with a third party
- Sharing Imagery or IDPs with Universities with USG grant(s)
- Contacting the Vendors directly

### Definitions

- Imagery is the image and associated metadata. Imagery can be further manipulated, enhanced, & processed. Example: GeoPDF, GeoTiff, NITF.
- Image Derived Product (IDP) – any product created from raw imagery – could include metadata, but generally does not and often referred to as “dumb-image”
- Third Party Partner – Party otherwise affiliated with the original USG sharing partner, but not the USG directly.

UNCLASSIFIED



# DigitalGlobe Overview



## About:

DigitalGlobe, Inc., is a commercial satellite imagery company founded in 2001 and merged into the Maxar Technologies family in 2017. They are currently headquartered in Westminster, CO

## Imagery Specifications:

- Resolution of 32-50 cm panchromatic and 1.2-2 m multispectral
- 4 and 8 multispectral bands in visible and near-infrared
- 17 km wide images up to 100 km long (postage stamps vs strips)
- Polar orbiting satellites with ~100 min orbits



**G-EGD**  
EVWHS

Username

Password

☐ I accept the [terms of use](#)

LOG IN

CAC ACCESS

[FORGOT PASSWORD](#)

[GET REGISTERED](#)

# DigitalGlobe **G-EGD**

(Global Enhanced GEOINT Delivery)

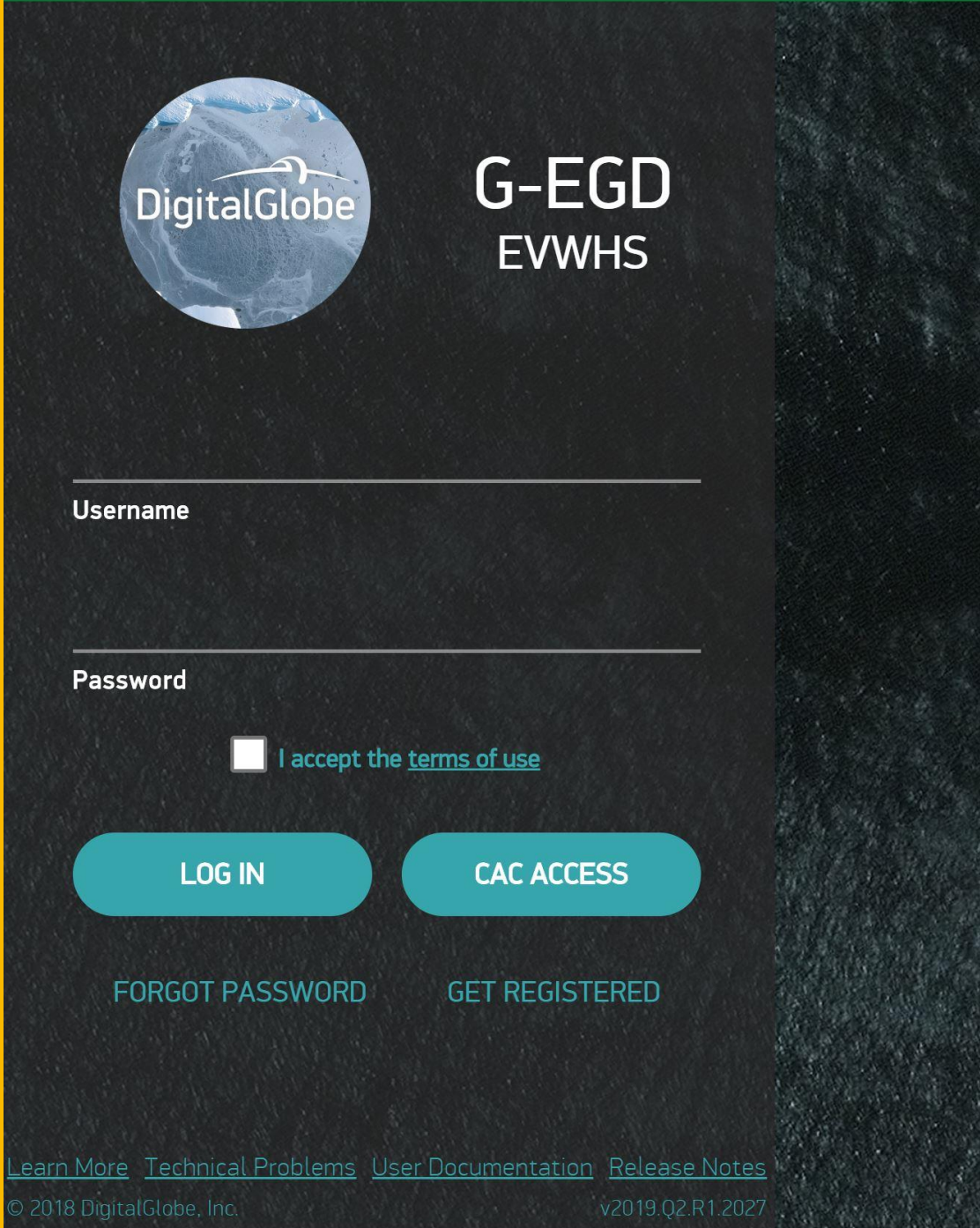
- NGA sponsored program
- Generates millions of square kilometers of DigitalGlobe sub-meter satellite imagery products
- U.S. Government uses and purposes
- Began in 2009 as the Rapid Delivery of Online GEOINT (RDOG)



# DigitalGlobe **EVWHS**

(EnhancedView Web-Hosting Services)

- Subscription service for EGD users to access DigitalGlobe sub-meter satellite imagery via web-based application
- Quickly and easily view, analyze and download DG data
- Access to over 900 million square kilometers of content, including DG archive
- Over 1 million square kilometers of new imagery coverage is added daily (often less than one hour from satellite acquisition!)



The image shows a login page for DigitalGlobe EVWHS. At the top left is the DigitalGlobe logo, which is a circular satellite image of Earth with the text 'DigitalGlobe' overlaid. To its right is the text 'G-EGD EVWHS'. Below these are two input fields: 'Username' and 'Password'. Under the password field is a checkbox and the text 'I accept the [terms of use](#)'. There are two teal buttons: 'LOG IN' and 'CAC ACCESS'. Below the buttons are two links: 'FORGOT PASSWORD' and 'GET REGISTERED'. At the bottom, there are four links: 'Learn More', 'Technical Problems', 'User Documentation', and 'Release Notes'. The footer contains the copyright notice '© 2018 DigitalGlobe, Inc.' and the version 'v2019.Q2.R1.2027'.

DigitalGlobe

G-EGD  
EVWHS

Username

Password

☐ I accept the [terms of use](#)

LOG IN

CAC ACCESS

[FORGOT PASSWORD](#)

[GET REGISTERED](#)

[Learn More](#) [Technical Problems](#) [User Documentation](#) [Release Notes](#)

© 2018 DigitalGlobe, Inc. v2019.Q2.R1.2027



## Image Strips

- Global Daily Intake is 800-1,000 strips per day
- Cloud cover 50% equatorial, 35% elsewhere
- Typical delivery timeline

Sometimes less than 15 minutes

65% < 3 hours

88% < 6 hours

99% < 18 hours

## Orthomosaics

- 1/4 - full geocells
- UTM WGS84
- Cloud cover 5% or better

An aerial photograph of a rugged, rocky terrain, possibly a desert or coastal area, showing various rock formations and textures. A large yellow rectangular box is overlaid on the bottom half of the image, containing the text 'EVWHS CONTENT' in bold black letters, followed by a horizontal line, and then 'Product Specs & Timelines' in a larger black font.

# **EVWHS CONTENT**

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## **Product Specs & Timelines**

## Accuracy

- Without Ground Control Points = CE90 at 6.429 m
- With Ground Control Points = CE90 at 4.054 m

## DEMs Used

- SRTM90 (moving to SRTM30)
- USGS NED 30 m over CONUS & AK, NED 10 m over HI
- InterMap World30m, ASTER-based, north of 60°

# WV Product Summary

Core Products	Accuracy Specifications			Processing			Geographic Availability
	CE90/LE90	RMSE	NMAS Scale	Radiometrically & sensor corrected	Georectified	Orthorectified	
System-Ready (Basic)	5 m*	2.3 m*	N/A	X			Worldwide
System-Ready (Basic stereo pair)	5 m*/5 m	2.3 m	N/A	X			Worldwide
View-Ready (Standard )	5 m*	2.3 m*	N/A	X	X		Worldwide
View-Ready (Ortho Ready Standard)	5 m*	2.3 m*	N/A	X	X		Worldwide
View-Ready (Ortho Ready Stereo)	5 m*/5 m	3.3 m	N/A	X	X		Worldwide
Map-Ready (Map Scale Ortho)	4.2 m	2.0 m	1:5,000	X		X	Worldwide, limited to fine DEM coverage (SRTM + USGS NED)
Map-Ready (Map Scale Ortho)	10.2 m	4.8 m	1:12,000	X		X	Worldwide, limited to fine DEM coverage (SRTM + USGS NED)
Map-Ready (Map Scale Ortho)	25.4 m	11.8 m	1:50,000	X		X	Worldwide, limited to fine DEM coverage (SRTM + USGS NED)

Table 1: WorldView product summary

Source: DigitalGlobe, Inc.



# 3rd PARTY Capabilities

OGC Services:

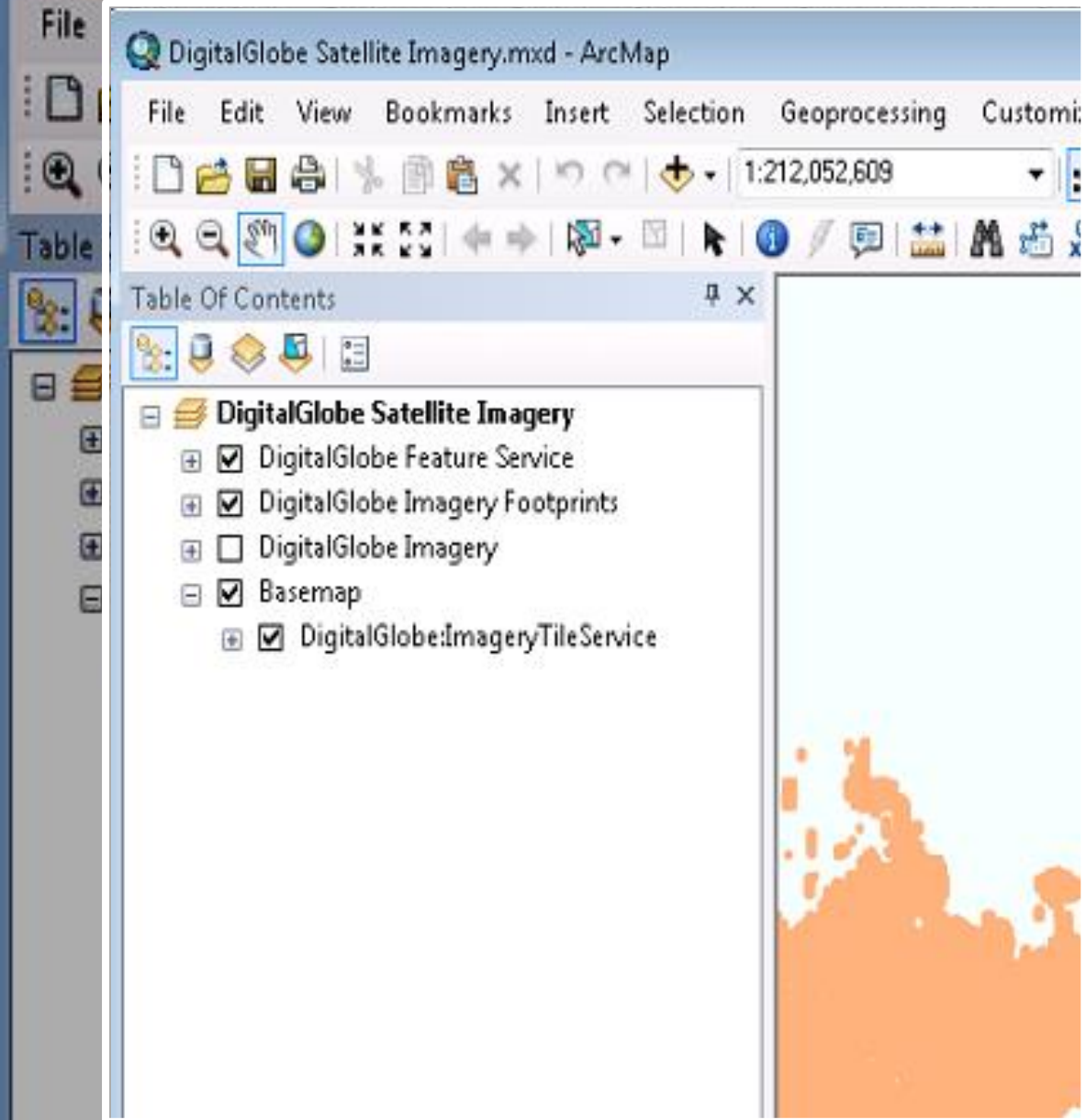
ESRI ArcMap, BAE GXP Explorer,  
Intergraph, GeoMedia,  
FalconView

Earth Services: GoogleEarth

USG Mobile Support

External Portal Integration

DigitalGlobe Satellite Imagery.mxd - ArcMap





A MAXAR COMPANY

Create EV WebHosting Account \* Indicates required fields

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About You

Do you have a CAC Card? ☐ Yes ☐ No

First Name\*

Last Name\*

Agency/Department\*

Sub Organization\*

Title

Phone\*

Select phone type\*

Business/Official Email\*  ?

Confirm Email\*

Are you a contractor? ☐ Yes ☐ No

How did you hear about us?

Citizenship\* ☒ U.S. Citizen ☐ Foreign National

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Login Information

Username\*

Password\*

[View Password Rules](#)

☐ Unmask Password

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Access Details

Geographic Areas of Interest\*

Detailed Justification for Access Requested\*

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Terms of Service

The DigitalGlobe Products and Services licensed, and accessible, with the furnished API key are made available to you subject to DigitalGlobe's EV WebHosting Terms of Use. By clicking "ACCEPT" or otherwise utilizing the included API key and/or accessing the DigitalGlobe Products and/or Services made available by DigitalGlobe herein, you acknowledge that you have read, and agree, to be bound by, the the DigitalGlobe EV WebHosting Terms of Use.

[View Full Terms of Use](#)

☐ Accept Terms

Source: DigitalGlobe, Inc.

# EVWHS Account Registration

>> Account requests are made directly through DigitalGlobe (not PGC)

>> PGC serves as an access point for eligible PGC users (NSF-OPP or NASA Cryo)



# LIVE DEMO



# THANK YOU

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## Useful Links

PGC	<a href="https://www.pgc.umn.edu/">https://www.pgc.umn.edu/</a>
PGC Guides	<a href="https://www.pgc.umn.edu/guides/">https://www.pgc.umn.edu/guides/</a>
PGC Commercial Imagery Usage Guidelines	<a href="https://www.pgc.umn.edu/guides/commercial-imagery/usage-guidelines/">https://www.pgc.umn.edu/guides/commercial-imagery/usage-guidelines/</a>
PGC Acknowledgement Policy	<a href="https://www.pgc.umn.edu/guides/user-services/acknowledgement-policy/">https://www.pgc.umn.edu/guides/user-services/acknowledgement-policy/</a>
PGC Citation & Publication Approval	<a href="https://www.pgc.umn.edu/guides/commercial-imagery/citation-and-publication-approval/">https://www.pgc.umn.edu/guides/commercial-imagery/citation-and-publication-approval/</a>
EVWHS Login	<a href="https://evwhs.digitalglobe.com">https://evwhs.digitalglobe.com</a>
EVWHS User Documentation	<a href="https://gcs-docs.s3.amazonaws.com/EVWHS/Home.htm">https://gcs-docs.s3.amazonaws.com/EVWHS/Home.htm</a>