EnhancedView
Web Hosting Service
User Guide

v. 6.0 Rev. B

Applies to My DigitalGlobe v. 2015.3

Disclaimer & Copyright

Contents

List of Figures

1 Introduction

The EnhancedView Web Hosting Service (EV-WHS) is a service you can access through a web-based application to quickly and easily view, analyze, and download DigitalGlobe data. Your subscription may contain DigitalGlobe satellite or aerial imagery, or even custom sources of geospatial data. EV-WHS allows you to identify the best available image(s) for your area of interest and then view and download them in the format that integrates most efficiently into your workflow. You can watch a short introductory video about My DigitalGlobe by clicking the **View Video Now** button on the homepage.

> NOTE: If you are viewing EnhancedView Web Hosting Service via a mobile device, some features may not be available.

1.1 Overview of Main Screen Layout

The main screen of My DigitalGlobe is shown in *Figure 1.1 My DigitalGlobe Main Screen* on page 8.

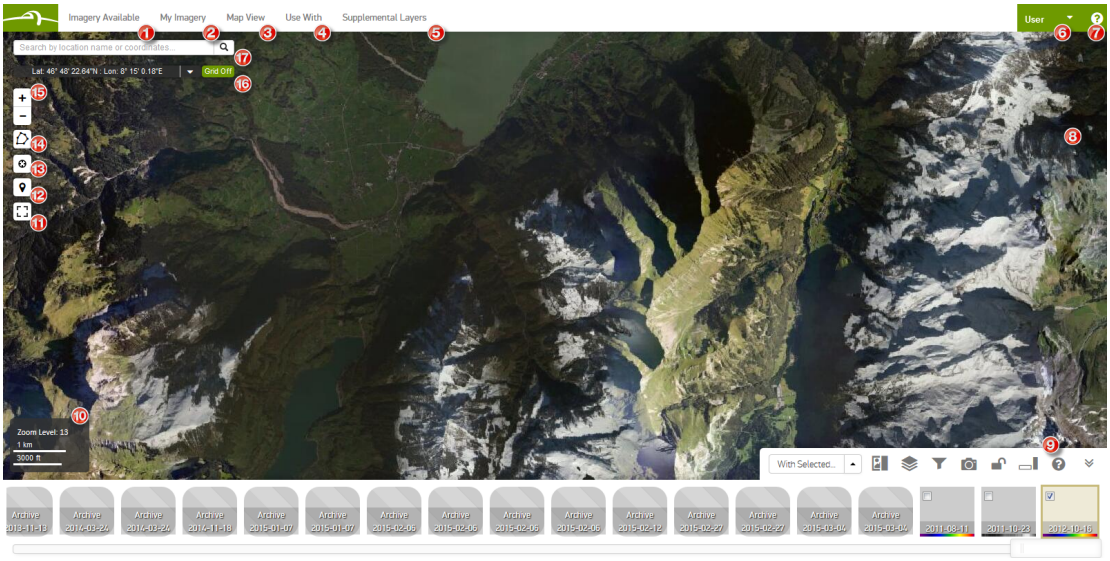

FIGURE 1.1 MY DIGITALGLOBE MAIN SCREEN

The areas of the main screen are:

1	**Imagery Available.** Filter images based on currency. This feature is available at zoom levels 3 through 12. Refer to *Finding Areas with Available Images on page 22*.
2	**My Imagery.** Manage your library of images, bookmarks, alerts, mosaic projects, and tilesets. Refer to *Saving and Downloading Your Imagery: Image Library on page 50*, *Creating and Managing Bookmarks and Alerts on page 45*, and *Managing Mosaic Projects on page 28* for details. You can also perform advanced searches through this menu. Refer to *Working with Advanced Search on page 40* for details.
3	**Map View.** Show image boundaries, show image in mosaic, and reveal the basemap. Refer to *Changing Map Views on page 24* for details.
4	**Use With.** View with Google Earth™, ArcGIS™ 10.1+, or other Web Service. Refer to *Connecting to EV-WHS with a Third-Party Tool on page 66* for details.

5	**Supplemental Layers.** Add external WMS layers or toggle the visibility of the RPM layer and other hosted vector layers. Refer to *Working with Supplemental Layers on page 58* for details.
6	**<Username>.** Manage your user profile, change your account, change your password, and log out of My DigitalGlobe; refer to *Logging in and Account Management on page 11*. Changing the basemap is also under this menu; see *Changing the Basemap on page 25*.
7	**(Help).** View getting started tooltips, keyboard shortcuts, user guides, and licenses, or send feedback. Refer to *Getting Help and Support on page 19* for details.
8	**Vertical Carousel.** If you have your carousel orientation set to "vertical", the carousel tab displays here at zoom levels 13–20. Refer to *Working with the Carousel on page 34*.
9	**Horizontal Carousel.** If you have your default carousel preference set to "horizontal", the carousel tab displays here at zoom levels 13–20. Refer to *Working with the Carousel on page 34*.
10	**Current View Data.** Data about the current view, including current zoom level.
11	**(View Fullscreen).** Click to expand the map view to fullscreen to optimize your screen real estate.
12	**(Toggle markers).** Click to show and hide the markers for bookmarks and alerts.
13	**(Show me where I am).** My DigitalGlobe navigates to your current location. Note that you must share your geo-location information with My DigitalGlobe to use this feature.
14	**(Define your area of interest).** Click to define an area of interest by drawing a polygon, dragging a rectangle, entering a well-known text string, or uploading a shapefile. You can also measure the distance between two or more points on the map.
15	**Zoom Tool.** Use to zoom in and out on an area. Refer to *Zooming In and Out on page 1* for details.
16	**Coordinates.** Click to switch between Lat/Lon degrees/minutes/seconds, Lat/Lon decimal degrees and Military Grid Reference System (MGRS). Depending on the option you choose, the coordinates of the area that you last hovered over with the mouse display to the right. See *Changing Coordinate Units Display on page 26* **Grid Off/On.** Click to turn on the reference grid. Note that when the MGRS grid is on, it only displays at zoom levels 9 through 20. Refer to *Viewing the Coordinates Reference Grid on page 27* for details.
17	**Search Box.** Enter search criteria in various formats. Refer to *Searching for a Location on page 21* for details.

1.2 Keyboard Shortcuts

To view keyboard shortcuts, click the ("help") button and select **Keyboard Shortcuts**.

1.3 Supported Browsers and Mobile Devices

For optimal viewing, use one of the following supported browser versions:

- Internet Explorer 8 and above
- Chrome 42 and above

- Firefox 37 and above
- Safari 8 and above

A minimum screen resolution of 1280 x 720 is required.

The following mobile devices are supported:

- iOS-based smart phones and tablets with iOS 8.0 and above.
- Android-based smart phones and tablets with OS 4.3 (Jelly Bean) and above.

2 Logging in and Account Management

2.1 Logging In Manually

If you have trouble logging in, please contact DigitalGlobe at 1-866-810-2297 or deftechsupport@digitalglobe.com.

1. Open an Internet browser and go to: https://evwhs.digitalglobe.com. The *Login* screen opens (*Figure 2.1 Login Screen*).

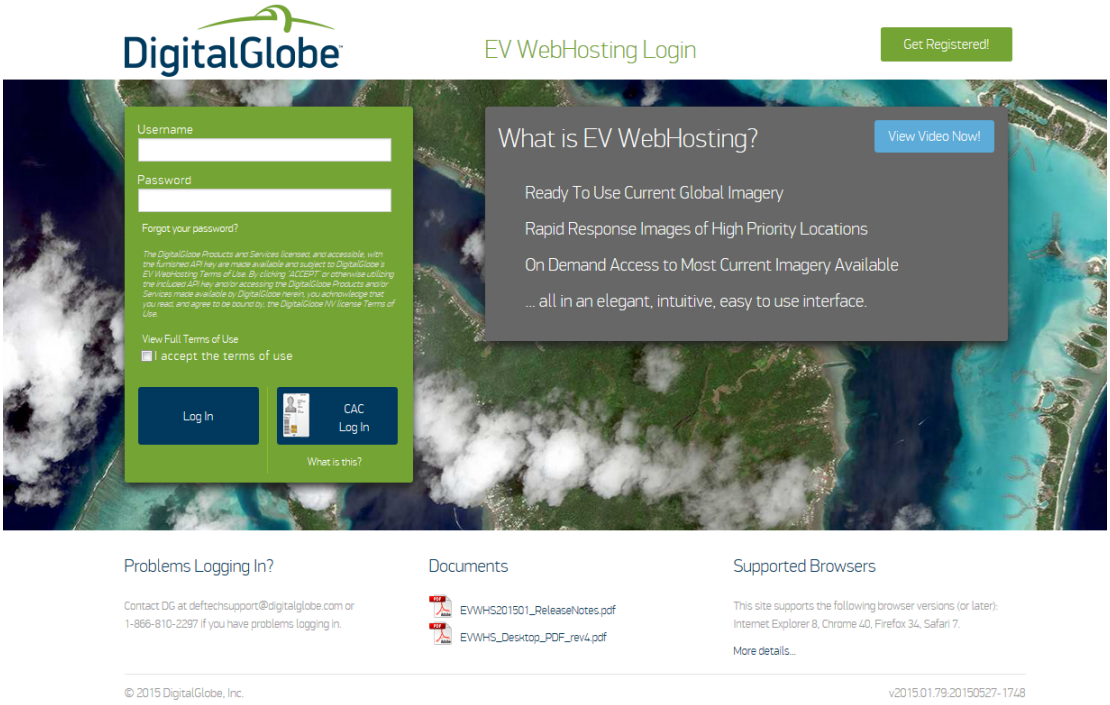

FIGURE 2.1 LOGIN SCREEN

2. In the **Username** field, type your username.
3. In the **Password** field, type your password.
4. Click the check box to accept the terms of use.
5. Click **Log In**.

> NOTE: Concurrent sessions are not allowed. If a concurrent session is started, the first log in is terminated. Also, My DigitalGlobe logs you out after some period of inactivity.

2.2 Using a Common Access Card (CAC) to Log In

If you have a CAC, you can log in to My DigitalGlobe either with the CAC and your PIN or, after your first login, with your DoD ID number and the password you create when you first access My DigitalGlobe with your CAC. You can use these same credentials to connect to EV-WHS with third-party tools; see *Connecting to EV-WHS with a Third-Party Tool on page 66*.

NOTE: Users with existing non-CAC accounts who then log in with a CAC do not connect to their existing user accounts. First use of a CAC creates an additional (new) account.

NOTE: Firefox does not work out-the-box with a CAC reader. If you prefer to use Firefox, first download and install ActivClient from the following URL (free for DoD): https://militarycac.com/activclient.htm

The first time you log in, you must have your CAC and CAC reader to authenticate; follow the directions below:

1. Insert your CAC into your CAC reader.
2. Open an Internet browser and go to: https://evwhs.digitalglobe.com. The *My DigitalGlobe Login* screen opens (*Figure 2.1 Login Screen*).
3. Click the **CAC Login** button on the *My DigitalGlobe Login* screen and enter your PIN at the prompt.
4. If you are in a pre-approved group based upon the information available on your CAC:
    a. Enter (or confirm) your email address, create a password, and select (or confirm) your organization using a dropdown (*Figure 2.2 Required Information Dialog Box*).

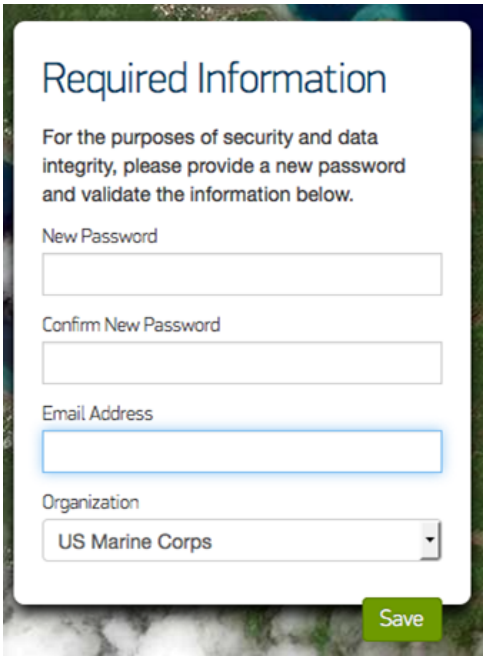

FIGURE 2.2 REQUIRED INFORMATION DIALOG BOX

    b. Select and answer security questions; providing answers allows you to reset your password later (*Figure 2.3 New Security Questions dialog Box*).

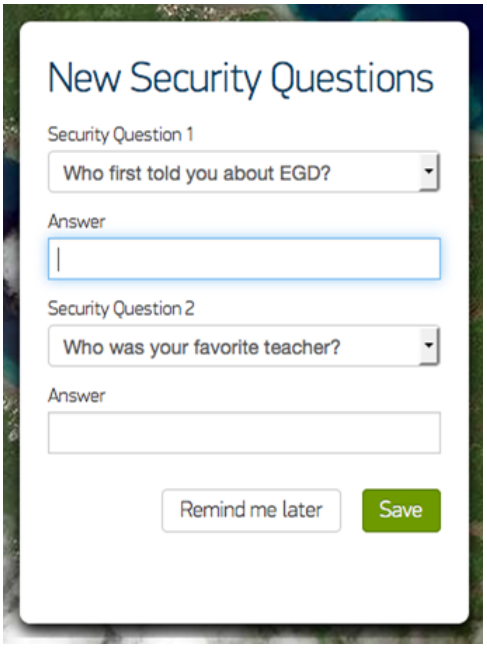

FIGURE 2.3 NEW SECURITY QUESTIONS DIALOG BOX

c. Your first log in opens a message containing information about your access (*Figure 2.4 Example CAC Card Message Upon First Log In*). Review the content of the message and click **OK**

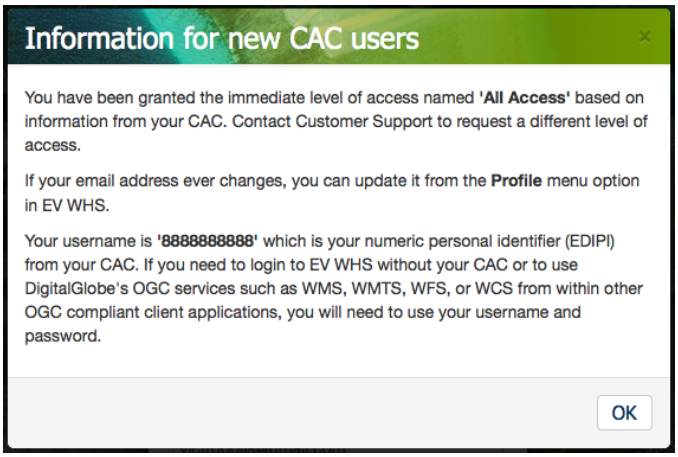

FIGURE 2.4 EXAMPLE CAC CARD MESSAGE UPON FIRST LOG IN

5. If your credentials require approval before access is granted, the registration page opens (*Figure 2.5 CAC Registration Page*). Follow the directions in *Registering for Access on page 13*

2.3 Registering for Access

1. If you don't have an account, open an Internet browser and go to: http://evwhs.digitalglobe.com:
   - Non-CAC users: Click the **Get Registered!** button on the *Login* screen (*Figure 2.1 Login Screen*).
   - CAC users: insert your CAC in the reader, and click the **CAC Login** button on the *Login* screen and enter your PIN at the prompt.

   The registration page opens (*Figure 2.5 CAC Registration Page*).

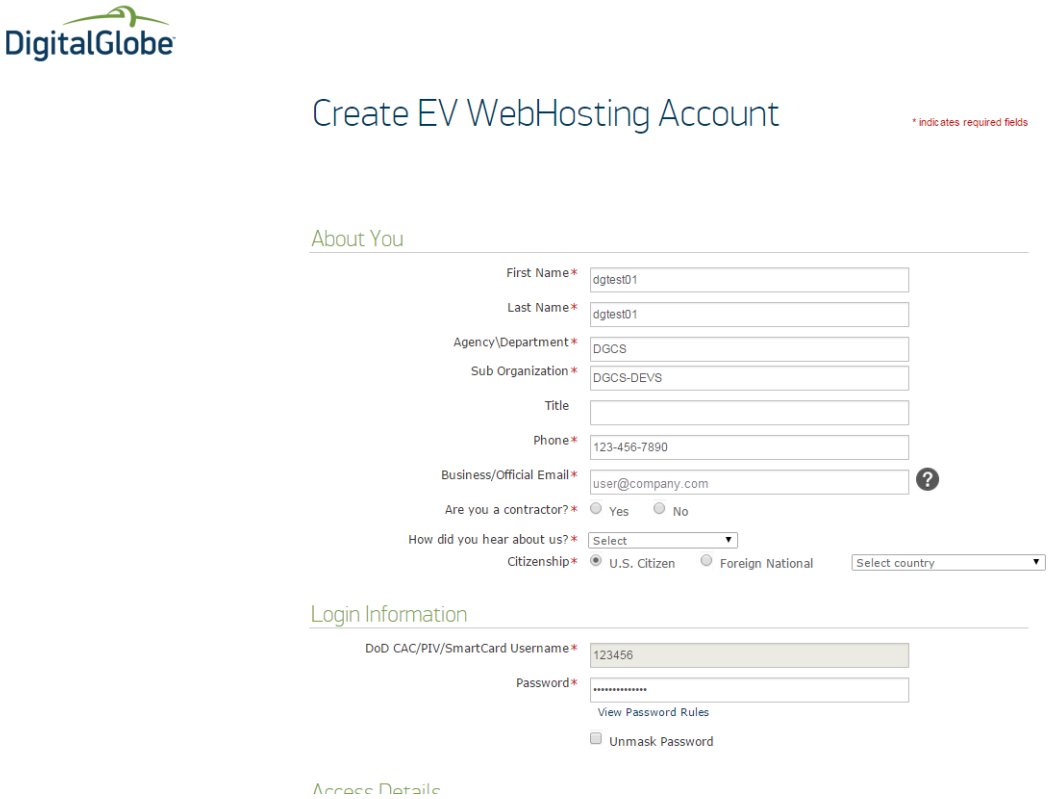

FIGURE 2.5 CAC REGISTRATION PAGE

2. Fill in the required fields and submit the form, which generates a confirmation page (*Figure 2.6 EV-WHS Account Request Confirmation Page*).

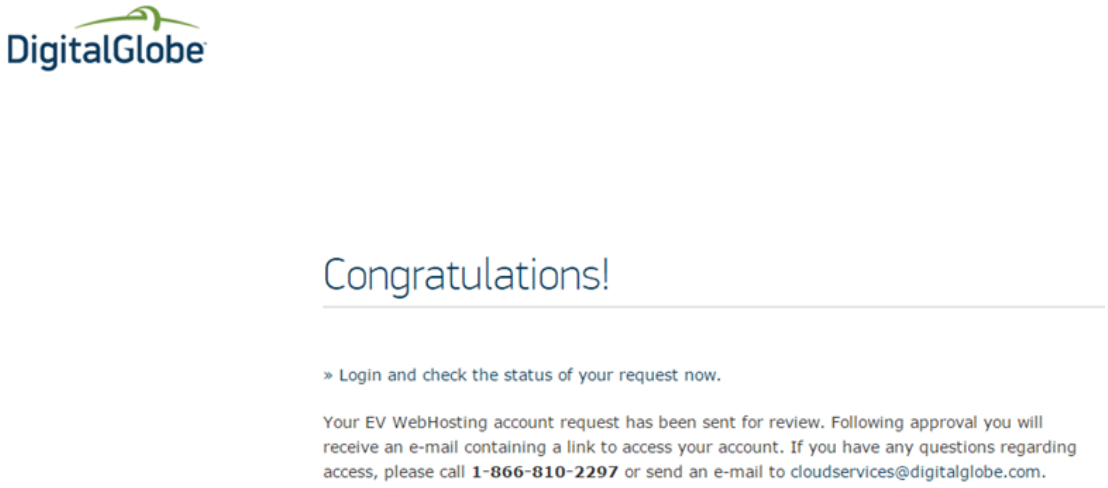

FIGURE 2.6 EV-WHS ACCOUNT REQUEST CONFIRMATION PAGE

3. Your account is now pending approval by an NGA administrator. Until approval is granted, your login page shows "User's status is Pending". When you are approved, you will receive a confirmation e-mail.

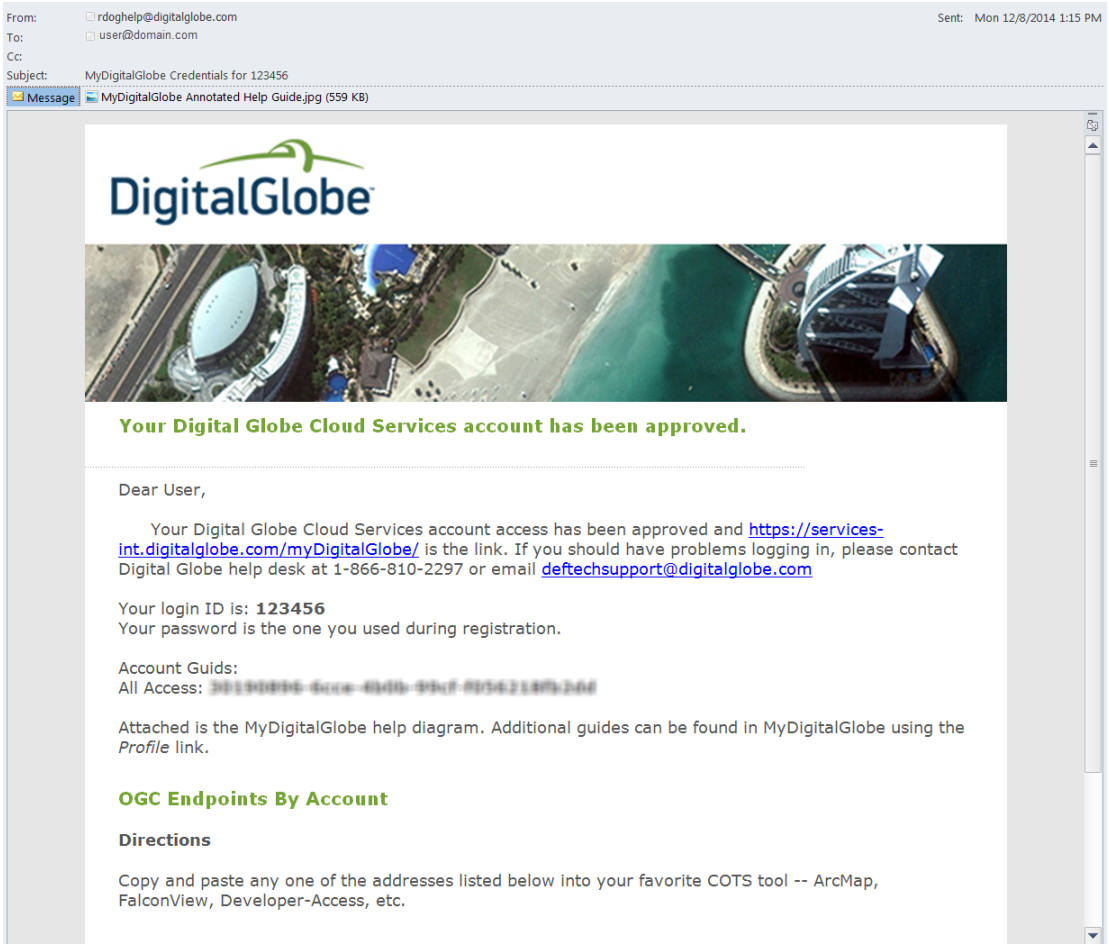

FIGURE 2.7 EV-WHS ACCOUNT APPROVAL CONFIRMATION

4. Insert your CAC in the reader and click the URL in the e-mail to log in to EV-WHS.
5. Click the CAC Login button on the My DigitalGlobe Login screen and enter your PIN at the prompt. The account information message opens (*Figure 2.4 Example CAC Card Message Upon First Log In*).
6. Click **OK**. You will be logged in.

If you have trouble logging in, please contact DigitalGlobe at 1-866-810-2297 or deftechsupport@digitalglobe.com.

2.4 Logging Out

At the top right corner of the main screen, click your username and select **Log Out**.

2.5 Your Password

Your password:

- Must not contain your username
- Must be at least 14 characters long
- Must contain at least one uppercase and one lowercase letter
- Must contain at least one special character
- Must contain at least one digit

2.5.1 Resetting Your Password

If you forget your password or your account gets suspended for non-use or password expiration, you can reset it yourself.

1. On the *Login* screen, click the **Forgot your password?** link. The *Forgot Your Password* dialog box opens (*Figure 2.8 Forgot Your Password Dialog Box*).

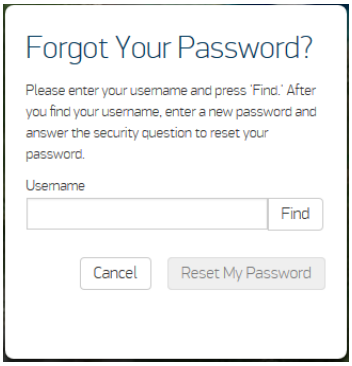

FIGURE 2.8 FORGOT YOUR PASSWORD DIALOG BOX

2. In the **Username** field, type your username.
3. Click **Find**. The dialog box expands to show a **New Password** field and an area with a security question (*Figure 2.9 Forgot Your Password Dialog Box, with Security Question*).

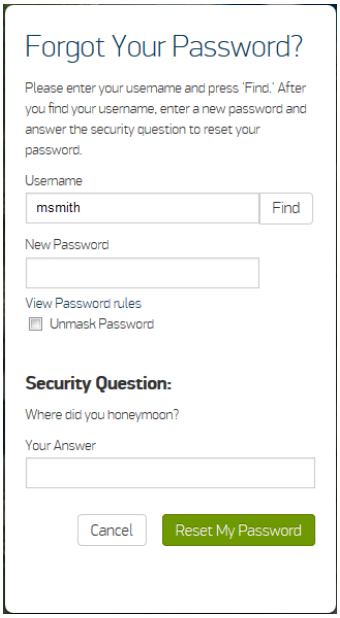

FIGURE 2.9 FORGOT YOUR PASSWORD DIALOG BOX, WITH SECURITY QUESTION

4. In the **New Password** field, type your new password.
5. Under **Security Question**, enter the answer to the security question on your account.
6. Click **Reset My Password**. A confirmation opens.
7. Return to the *Login* screen and log in with your new password.

2.5.2 Changing Your Password

To change your password:

1. At the top right corner of the main screen, click your username and select **Change Password**. The *Change Password* dialog box opens (*Figure 2.10 Change Password Dialog Box*).

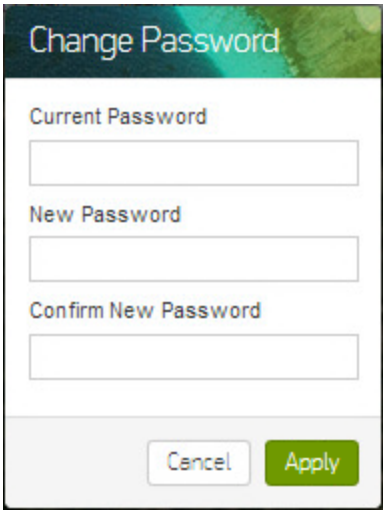

FIGURE 2.10 CHANGE PASSWORD DIALOG BOX

2. In the **Current Password** field, type your current password.
3. In the **New Password** and **Confirm New Password** fields, type the new password you want to use.
4. Click **Apply**. Your password is changed.

2.6 Viewing and Editing Your Profile

1. At the top right corner of the main screen, click your user name and select **View Profile**. The *User Profile* screen opens (*Figure 2.11 User Profile Dialog Box*).

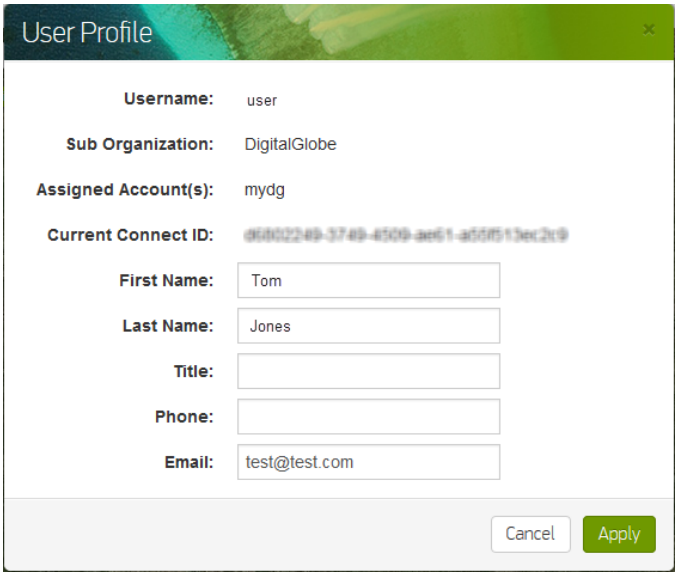

FIGURE 2.11 USER PROFILE DIALOG BOX

2. The **Username**, **Sub Organization**, **Assigned Account(s)**, and **Current Connect ID** fields cannot be edited. However, you can edit the **First Name**, **Last Name**, **Title**, **Phone**, and **Email** fields.
3. After you make changes, click **Apply**.

2.7 Changing Accounts

Access to accounts is controlled by the NGA system administrator. You may have access to multiple accounts; if so, you can change the account you are using by following these instructions:

1. Click your username at the top right corner of the main screen and select **Change Account**. The *My Accounts* dialog box opens (*Figure 2.12 My Accounts Dialog Box*).

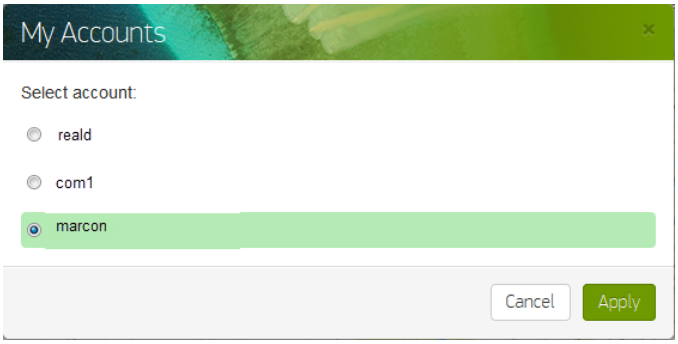

FIGURE 2.12 MY ACCOUNTS DIALOG BOX

2. Select the account you want to use.
3. Click **Apply**. Your session changes to the selected account.

3 Getting Help and Support

3.1 Viewing Getting Started Tooltips

View tooltips to get a quick overview of the user interface.

1. At the top right corner of the main screen, click and select **Getting Started**. Various tooltips overlay the map window (*Figure 3.1 Tooltips*).

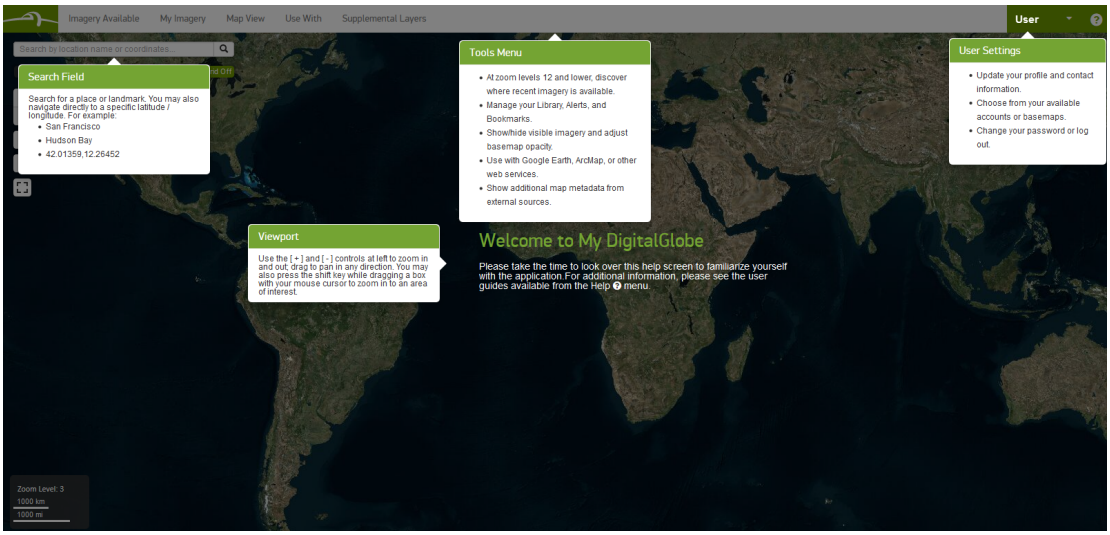

FIGURE 3.1 TOOLTIPS

2. Click anywhere on the window to close the tooltips.

3.2 Accessing User Guides

1. At the top right corner of the main screen, click and select **User Guides + Licenses**. The *User Guides + Licenses* window opens (*Figure 3.2 User Guides + Licenses Window*).

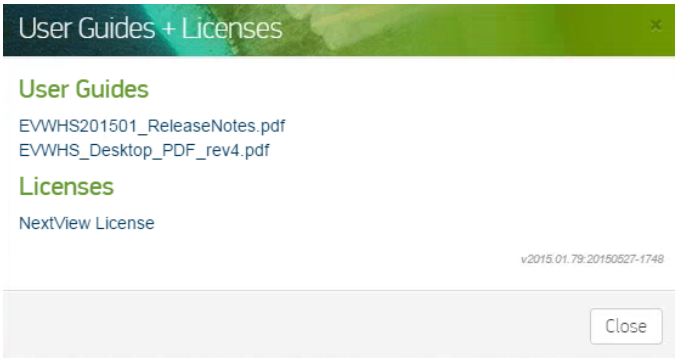

FIGURE 3.2 USER GUIDES + LICENSES WINDOW

2. Click the hyperlink for the user guide you want to view. The file download process begins.
3. Open the downloaded file to read the user guide.
4. Click **Close** to return to the main screen.

3.3 Viewing License Information

1. At the top right corner of the main screen, click **?** and select **User Guides + Licenses**. The *User Guides + Licenses* window opens (*Figure 3.2 User Guides + Licenses Window*).
2. Click the hyperlink for the license you want to view. The file download process begins.
3. Open the downloaded file to view details about the license.
4. Click **Close** to return to the main screen.

3.4 Sending Feedback

We would like to hear your comments about My DigitalGlobe. To provide your feedback:

1. At the top right corner of the main screen, click **?** and select **Send Feedback**. The *Feedback* dialog box opens (*Figure 3.3 Feedback Dialog Box*)

> NOTE: Although every effort is made to keep this documentation up to date, information does change between revisions. Therefore, the contact information shown (*Figure 3.3 Feedback Dialog Box*) may be out of date. Refer to the contact information listed on your *Feedback* dialog box.

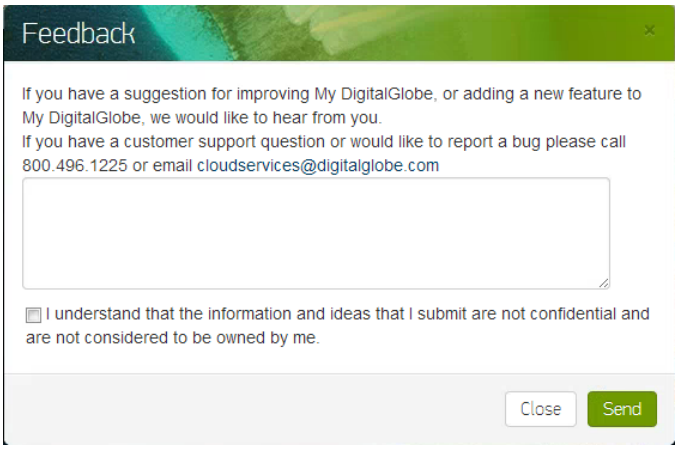

FIGURE 3.3 FEEDBACK DIALOG BOX

2. Complete the form, select the checkbox and click **Send**. Alternately, you may contact DigitalGlobe through the contact information at www.DigitalGlobe.com.

4 Navigating in My DigitalGlobe

4.1 Zooming In and Out

When you first log in, the full globe is populated with 90-meter LANDSAT imagery, which you'll see as you zoom in through zoom level 10. Zoom levels 11– 19 contain hosted imagery. Zoom in to see more detail or zoom out for more context using one of these methods:

- At the top left corner of the map view window, click the + button to zoom in one level or click the clicking the - button to zoom out one level. See *Introduction on page 8* for the location of the toolbar on the main screen.
- Double click anywhere in the map view window to zoom in one level. The map view window recenters on the point you double clicked.
- Press **z** then enter the desired zoom level. For example, **z** then 1 then 3 zooms to level 13; press **g h** to zoom out to the world view (see also *Opening a Specific Bookmark Upon Next Log In on page 45*).
- While pressing the SHIFT key, click and drag a rectangle; releasing the mouse zooms to the enclosed area.
- Press the **+** and **–** keys on the keyboard.
- Use the scroll wheel on your mouse, if applicable.
- Use the polygon tool, described in *Defining an Area of Interest on page 22*.

A small legend in the lower left shows the current zoom level, as well as a very simple distance bar.

4.2 Panning in the Map View Window

To pan the map image, click and drag in the map view window or use your keyboard arrow keys.

4.3 Searching for a Location

You can search for a location by:

- partial address
- full address
- latitude/longitude in decimal format (e.g., 41.7453, 71.3181)
- atitude/longitude in degrees, minutes, seconds separated by spaces (e.g., 41 74 53, 71 31 81)
- name (for example, landmark name)
- BE number (a unique identifier within the NSG)
- MGRS grid reference

1. Type your search term in the search box.
2. Press the ENTER key or click .
    a. If there is only one result, the view zooms in to that location.
    b. For feature ID searches, the view zooms to show the full extent of the image. The carousel is locked with only the single image selected.
    c. If multiple results are available, possible matches are listed just under the search box.
    d. If a match is not available, the system displays a "No results" message. If that happens, try generalizing your search. For example, if *1234 Main San Francisco CA* doesn't return results, try just *San Francisco, CA*.

NOTE: Search functionality is limited in some security domains.

4.4 Finding Areas with Available Images

Depending on your subscription, imagery may not be available everywhere. To locate areas with available images, select a time frame from the **Imagery Available** menu. On the map view, areas that have available images within the selected time frame are highlighted in orange (at levels 3–8). Starting at level 9, the footprint display changes to a color-coded polygon with image date displayed. Note that you can change the opacity of the basemap for additional context. Refer to *Viewing the Basemap on page 24* for more instructions.

4.5 Showing Your Location on the Map View

To zoom to your location, click the  ("show me where I am") icon. Note that you must share your geolocation information with My DigitalGlobe to use this feature.

> NOTE: This feature is most useful on a mobile device; hardware connected to a LAN shows server or ISP locations.

4.6 Defining an Area of Interest

You can define an area of interest by drawing a polygon, dragging a rectangle, entering a WKT, or uploading a shapefile.

1. On the main screen, click the  ("define an area of interest") icon and select an option.
    - Rectangle: click and drag a rectangle on the map.
    - Polygon: click on the map to start drawing a polygon and click at each location where you want to place each vertex. Double click to close the polygon.
    - WKT: copy well-known text from your source application and paste it in this dialog box.
    - Shapefile: these restrictions apply:
        - No self-intersecting polygons.
        - Only individual polygons should be included in a shapefile.
        - No shapes with fewer than 3 vertices (lines and single points).
        - No projections other than EPSG:4326 (“WGS84”) and UTM (for every zone).
        - Must be a zip file.

The **With This Area of Interest...** window opens (*Figure 4.1 With This Area of Interest Window*).

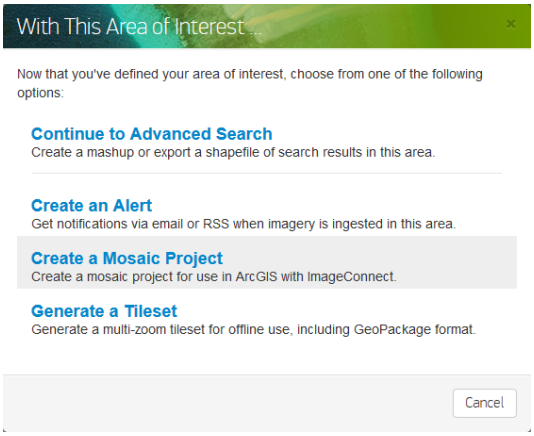

FIGURE 4.1 WITH THIS AREA OF INTEREST WINDOW

2. At this point, you can do one of the following:
   - **Advanced Search.** Refer to *Working with Advanced Search on page 40* for further instructions.
   - **Create an Alert.** See *Using Alerts on page 46*.
   - **Create a Mosaic Project.** Refer to *Managing Mosaic Projects on page 28*.
   - **Generate a Tileset.** Refer to *Generating a Tileset on page 51Navigating in My DigitalGlobe on page 21*

4.7 Measuring Distances Between Points on the Map

You can quickly and easily measure the distance between multiple points on the map view.

1. On the main screen, click the  ("define an area of interest") button and select the **Measure Distance** option.
2. Click once on the map view at the point from which you want to begin measuring.
3. Double click again on the map view to end the measurement. If you'd prefer to continue measuring, click once to add a vertex. The distance for each leg displays in nautical miles (nm), kilometers (km), and miles (mi). If you have multiple legs, the cumulative distances display in black and the distance of each leg displays in gray as (+ x.x).

FIGURE 4.2 MEASURING DISTANCES

4. To clear the measurement, click the  ("remove") button.

4.8 Changing Map Views

4.8.1 Viewing The Basemap

The basemap shows boundaries, location names, and features (including towns, roads, rivers, and so on). To view the basemap, from the **Map View** menu, adjust the slider under **Reveal Basemap**. To see only the basemap (*Figure 4.3 Viewing the Basemap*), set this option to 100%. Move the slider to any percentage between 0% and 100% to see more or less of the basemap. To view full imagery again, set the slider to 0%.

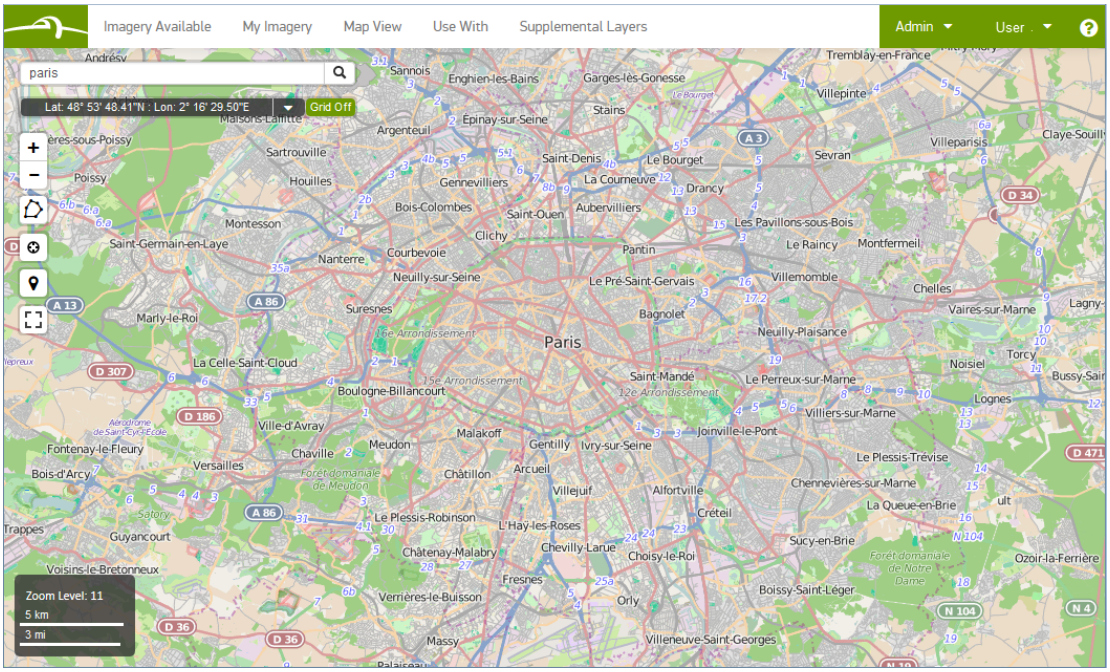

FIGURE 4.3 VIEWING THE BASEMAP

4.8.2 Changing The Basemap

You can set your basemap to Google Maps or OpenStreetMap.

> NOTE: Basemap options are not available on some networks.

1. At the top right corner of the main screen, click your username and then select **Change Basemap** from the menu. The *Change Basemap* dialog box opens (*Figure 4.4 Change Basemap Dialog Box*).

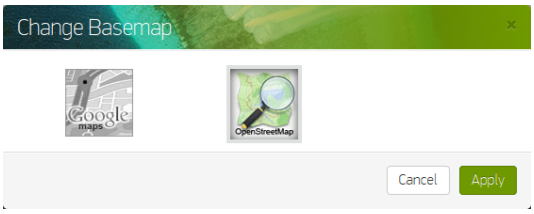

FIGURE 4.4 CHANGE BASEMAP DIALOG BOX

2. Click **Google Maps** or **OpenStreetMap**.
3. Click **Apply**.

4.8.3 Viewing Image Boundaries

Image boundaries are the lines at which images overlap. To show image boundaries, from the **Map View** menu, select **Show Image Boundaries**. Transparent rectangles in various colors overlay the map view window. Images that are visible in the map view window are outlined in the same color as in the carousel so that you can clearly identify each image (*Figure 4.5 Show Image Boundaries*).

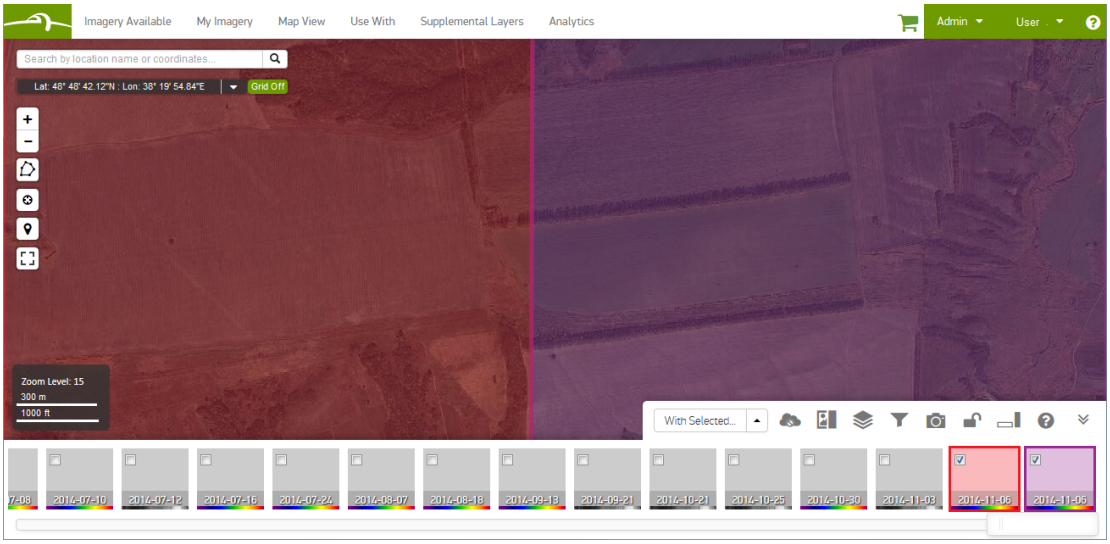

FIGURE 4.5 SHOW IMAGE BOUNDARIES

4.8.4 Viewing Image In Mosaic

You can view an image in mosaic format to see where images begin and end by tiles or image strip boundaries. A mosaic project is available to all users within your account. To see an image in mosaic:

1. Find the area you want to view. Refer to *Searching for a Location on page 1* and *Finding Areas with Available Images on page 1* for instructions.
2. Zoom to level 13 or higher (mosaic only displays at zoom levels 13–20). Refer to *Navigating in My DigitalGlobe on page 21* for details.
3. From the **Map View** menu, select **Show Image in Mosaic**. Transparent rectangles overlay the map view window (*Figure 4.6 Show Image in Mosaic View*).

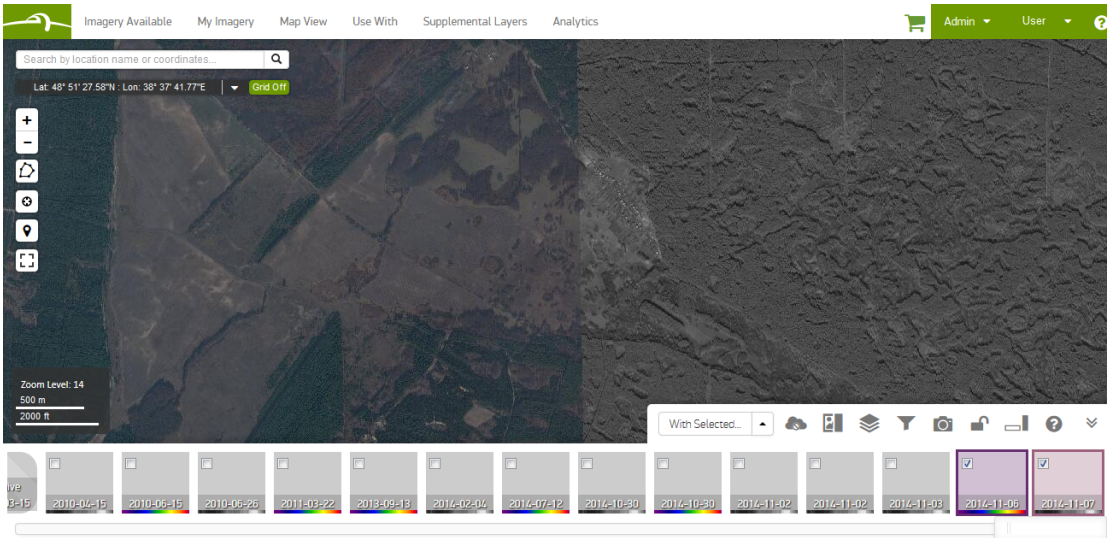

FIGURE 4.6 SHOW IMAGE IN MOSAIC VIEW

4.9 Changing Coordinate Units Display

You can choose which coordinate units to display, either military grid reference system (MGRS), lat/long degrees/minutes/seconds,or lat/long decimal degrees. To change the setting:

1. Click the dropdown next to the coordinate box at the top left corner of the map view (*Figure 4.7 Changing Coordinate Units*).

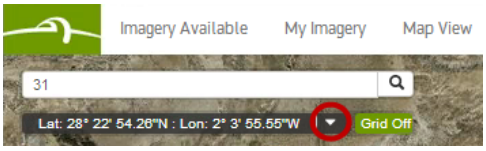

FIGURE 4.7 CHANGING COORDINATE UNITS

2. Select the desired coordinate units. The selected setting persists for the remainder of the current session or until you change it again. New sessions revert to the default, lat/long degrees/minutes/seconds.

4.10 Viewing the Coordinates Reference Grid

You can view a reference grid showing the selected coordinate units in the map view window. To turn on the grid, toggle the **Grid Off/Grid On** button. Alternately, you can press the **G** keyboard shortcut. The grid displays (*Figure 4.8 Show Grid*). To turn the grid off, toggle the **Grid Off/Grid On** or press the **G** keyboard shortcut again.

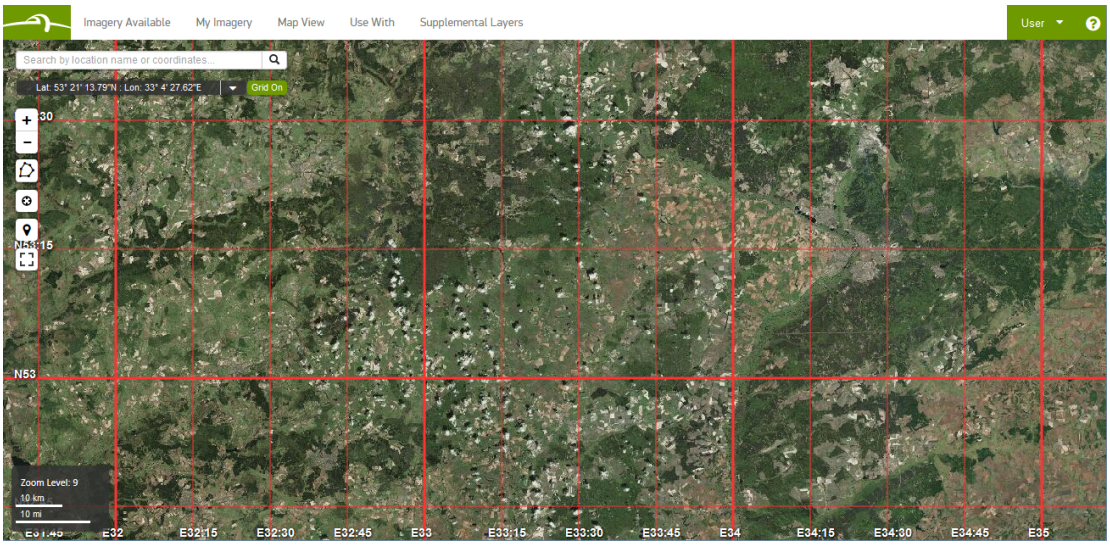

FIGURE 4.8 SHOW GRID

> NOTE: If your coordinates are set to MGRS, zoom to level 9 through 20 because the MGRS grid only displays at those zoom levels.

4.11 Viewing Image Wireframes

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. Zoom to level 9–12.
3. Choose an option from the **Imagery Available** menu. Notice that images are highlighted with colored borders (*Figure 4.9 Wireframes of Images on the Map View*).

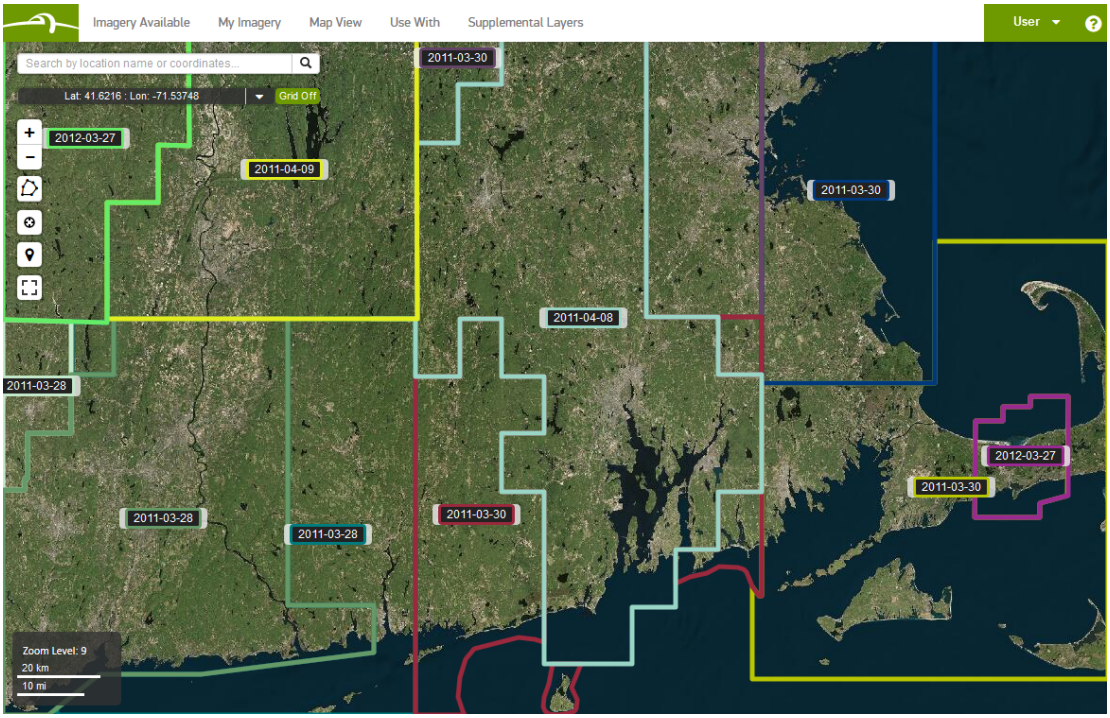

FIGURE 4.9 WIREFRAMES OF IMAGES ON THE MAP VIEW

4.12 Managing Mosaic Projects

> NOTE: This functionality is not available to all users.

You can create mosaic projects by drawing a polygon, using map viewport, or uploading a large area of interest by shapefile. With an area uploaded, the online system produces a mosaic identifier/source package that results in the area being frozen to those collects at that time. This provides a mechanism to ensure that new acquisitions collected by DigitalGlobe do not change your project area's content.

4.12.1 Defining A Mosaic Project By Drawing A Polygon

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. From the **My Imagery** menu, select **Mosaic Projects**. The *Mosaic Projects* dialog box displays (*Figure 4.10 Mosaic Projects Dialog Box*).

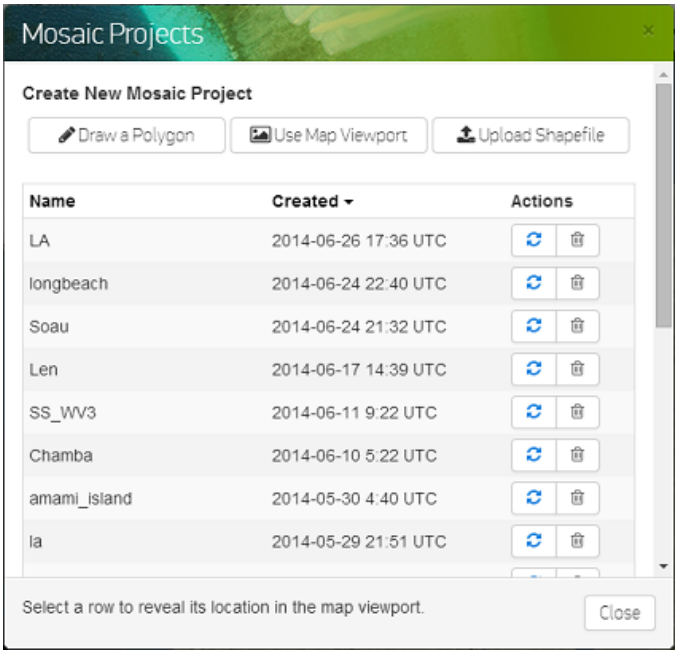

FIGURE 4.10 MOSAIC PROJECTS DIALOG BOX

3. Click **Draw a Polygon**.
4. On the map view, click the map to add vertices. When finished, double click the map to close the polygon. Note that only simple, single polygons are supported. The *New Mosaic Settings* dialog box opens (*Figure 4.11 New Mosaic Settings Dialog Box*).

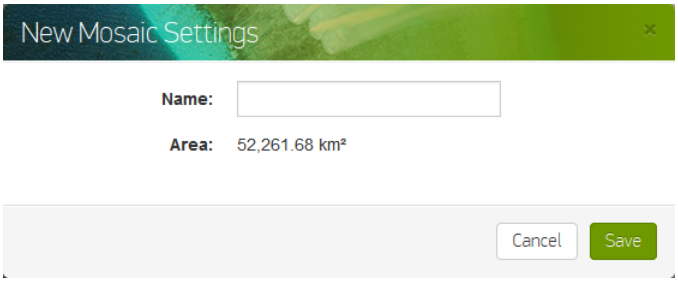

FIGURE 4.11 NEW MOSAIC SETTINGS DIALOG BOX

5. In the **Name** field, assign a name for the mosaic.
6. Click **Save**. The new mosaic is listed in the *Mosaic Projects* dialog box (*Figure 4.10 Mosaic Projects Dialog Box*).

4.12.2 Defining A Mosaic Project By Map Viewport

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. From the **My Imagery** menu, select **Mosaic Projects**. The *Mosaic Projects* dialog box opens (*Figure 4.10 Mosaic Projects Dialog Box*).
3. Click **Use Map Viewport**. The *New Mosaic Settings* dialog box opens (*Figure 4.11 New Mosaic Settings Dialog Box*).
4. In the **Name** field, assign a name for the AOI.

5. Click **Save**. The new mosaic is listed in the *Mosaic Projects* dialog box (*Figure 4.10 Mosaic Projects Dialog Box*).

4.12.3 Defining A Mosaic Project By Uploading A Shapefile

You can upload a shapefile in order to use it to define a mosaic project. However, keep in mind that the shapefile must meet these requirements:

- No self-intersecting polygons.
- Only individual polygons should be included in a shapefile.
- No shapes with fewer than 3 vertices (lines and single points).
- No projections other than EPSG:4326 ("WGS84") and UTM (for every zone).
- Must be a zipped file.

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. Click **Upload Shapefile**. The *Upload Shapefile* dialog box displays (*Figure 4.12 Upload Shapefile Dialog Box*).

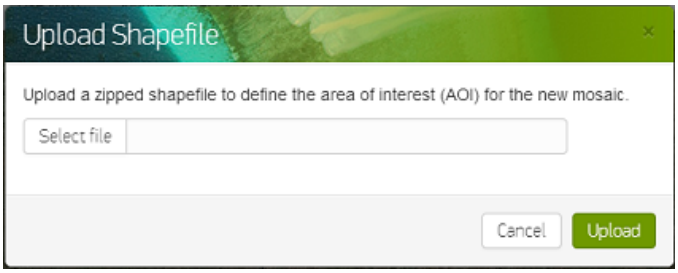

FIGURE 4.12 UPLOAD SHAPEFILE DIALOG BOX

3. Click **Select file** to browse for the desired shapefile (must be a zip file).
4. Click **Upload** to begin the upload process.
5. In the **Name** field, assign a name for the AOI.
6. Click **Save**. The new mosaic is listed on the *Mosaic Projects* dialog box (*Figure 4.10 Mosaic Projects Dialog Box*).

4.12.4 Opening A Mosaic In ImageConnect

DigitalGlobe's ImageConnect is a unique GIS extension that instantly brings georeferenced high-resolution satellite and aerial photos into your GIS project from your My DigitalGlobe library. You can eliminate the overhead of integrating different layers every time. ImageConnect embeds a simple, easy-to-use toolbar directly into the GIS workspace.

With ImageConnect, you can connect directly to the DigitalGlobe Cloud Services through plugins for desktop mapping software, ArcGIS. Retrieving images from ImageConnect alleviates exporting and manipulating from multiple image sources and allows you to look for new images directly from the GIS solution. You can also automatically save the images for further use. ImageConnect shows the most recent data and you can check the library for other images that DigitalGlobe has taken over time.

Refer to the *DGCS in ArcGIS® User Guide* for instructions on installing ImageConnect.

To open a mosaic in ImageConnect, you'll first need to generate a mosaic identifier using these instructions:

1. From the **My Imagery** menu, select **Mosaic Projects**. The *Mosaic Projects* dialog box opens (*Figure 4.10 Mosaic Projects Dialog Box*).

2. Click the (“generate mosaic definition”) button related to the AOI you want to view. The *Mosaic Identifier* window opens (*Figure 4.13 Mosaic Identifier Window*).

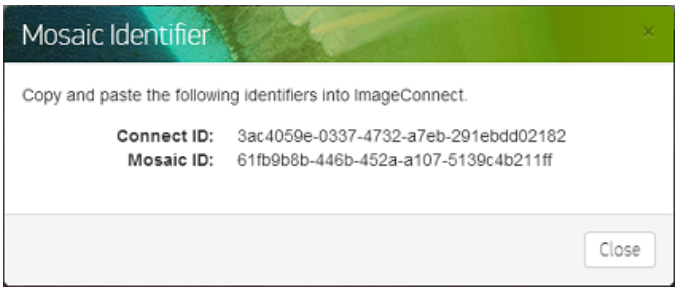

FIGURE 4.13 MOSAIC IDENTIFIER WINDOW

3. Copy the connect ID and mosaic identifiers.
4. Open ImageConnect and paste the identifiers.

4.12.5 Deleting Saved Mosaic Projects

Mosaic projects can be deleted by any user on the account. To delete a mosaic project:

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. Click the (“Delete Mosaic Project”) button. A confirmation dialog box opens (*Figure 4.14 Confirm Delete Mosaic Dialog Box*).

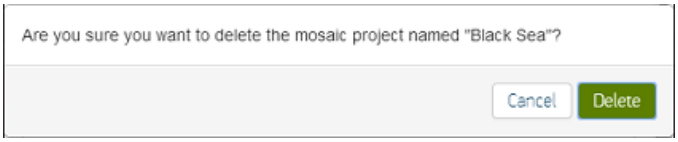

FIGURE 4.14 CONFIRM DELETE MOSAIC DIALOG BOX

3. Click **Delete** to confirm the deletion.

5 Content Search and Discovery

My DigitalGlobe has two methods for finding and working with imagery:

- Carousel: The carousel is a tool for viewing images individually, creating a custom collage of images (a "snapshot"), and comparing images. The carousel is designed for close-in work, and opens at zoom levels 13–20.
- Advanced Search: Advanced Search is a tool for selecting imagery and then creating mashups or shapefiles of areas up to 10,000 sqkm.

Several functions are the same in both tools, but some differ. The first several sections below address identical tools, followed by unique information for each tool.

5.1 Using the Image Menu ( )

The image menu in both the carousel (hover over the thumbnail) and Advanced Search (in the *Actions* column to the right of the image information) provides options for working with individual images. Click the ("image menu") icon to see the image menu items (*Figure 5.1 Image Menu*).

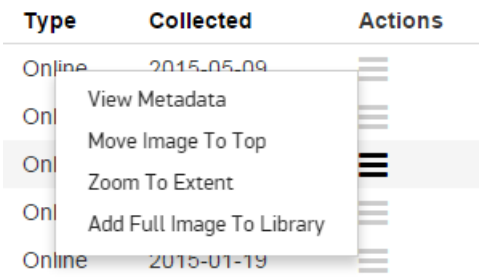

FIGURE 5.1 IMAGE MENU

Options are:

- **View Metadata**: An image's metadata provides information about the image such as acquisition date, sensor type, sun elevation, and cloud cover percentage (*Figure 5.2 View Metadata Window*).

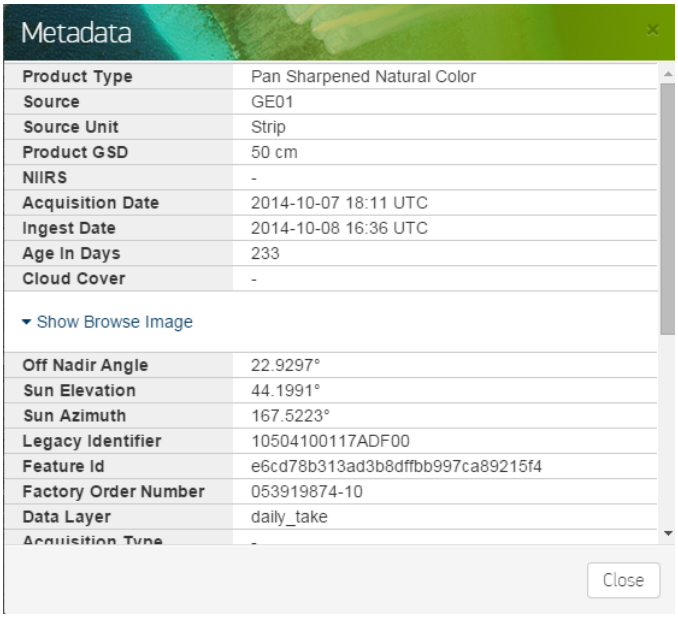

FIGURE 5.2 VIEW METADATA WINDOW

- **Move Image to Top**: Puts the image on the top in the viewport, and moves the image all the way to the right or top in the carousel or to the top of the list in Advanced Search.
- **Zoom to Extent**: The map pane zooms to show the full image centered in the viewport.
- **Add Full Image to Library**: See *Adding a Snapshot to the Library on page 53*.

5.2 Filtering

Filters help you customize the imagery shown in your map view. You can filter by:

- Image acquisition date: use the **From** and **To** fields or click the calendar button and set a date range.
- Cloud cover: click and drag the slider to the maximum cloud cover percentage.
- Sensor type: select from Satellite, Aerial, and Radar.
- Content type: selections depend on your subscription.
- NIIRS: click and drag the slider to select the desired NIIRS.
- Maximum ground sample distance (GSD): click and drag the slider to select the desired maximum GSD.
- Image band: select one or more image band types.
- Off nadir angle: click and drag the slider to select the desired off nadir angle.
- Sun elevation: click and drag the slider to select the desired sun elevation.
- Target azimuth: click and drag the slider to select the desired target azimuth.

Follow these steps to open the filter dialog box and start filtering:

1. From either the carousel or advanced search, click the ▼ ("filter" button). The *Filters* dialog box opens (*Figure 5.3 Filters Dialog Box*).
2. Use the dropdown arrow to open the filter(s) you want to apply.
3. After selecting and setting one or more filters, click **Apply**. The images refresh to show only the images that fall within the filter settings, and the "filter" button shows in blue (▼), signifying that a filter is active.

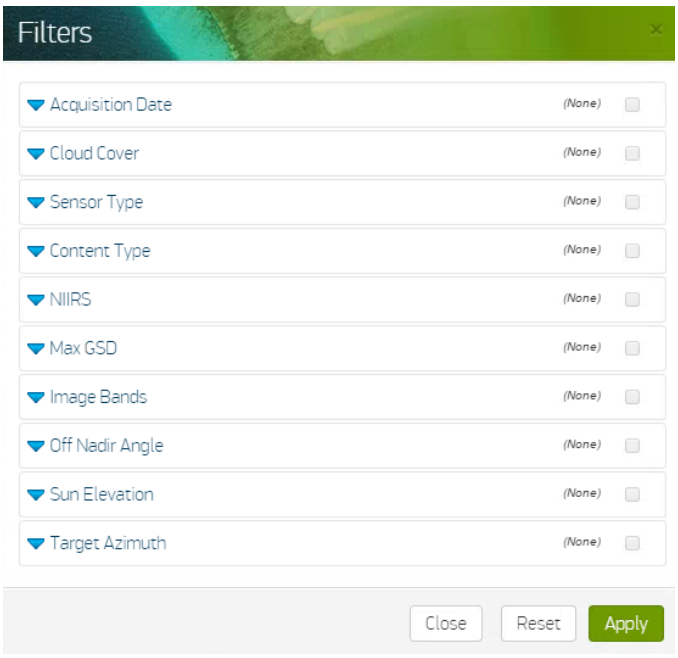

FIGURE 5.3 FILTERS DIALOG BOX

NOTE: Filter settings remain in place until they are cleared. To see all possible images of an area, clear all filters as described in *Clearing Filters on page 34*.

5.2.1 Clearing Filters

You can clear filters individually or completely.

1. Click the (“filter” button) on the carousel or in advanced search. The *Filters* dialog box opens (*Figure 5.3 Filters Dialog Box*).
2. Clear the checkbox(es) for the filter(s) you want to remove, or click **Reset** to remove all filters.
3. Click **Apply**. The map view refreshes. If any filters remain, filter button remains blue, signifying that a filter is active; if all filters are removed, the filter button returns to gray.

5.3 Working with the Carousel

Follow these steps to use the carousel:

1. Find the area you want to view. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 1* for instructions.
2. Zoom to level 13 or higher (the carousel only displays at zoom levels 13–20). The carousel opens, showing available images (*Figure 5.4 Carousel (in horizontal orientation)*) and (*Figure 5.5 Carousel (in Vertical orientation)*). Depending on your account settings, the most relevant images that are at least partially visible in the viewport are checked on; others are checked off.

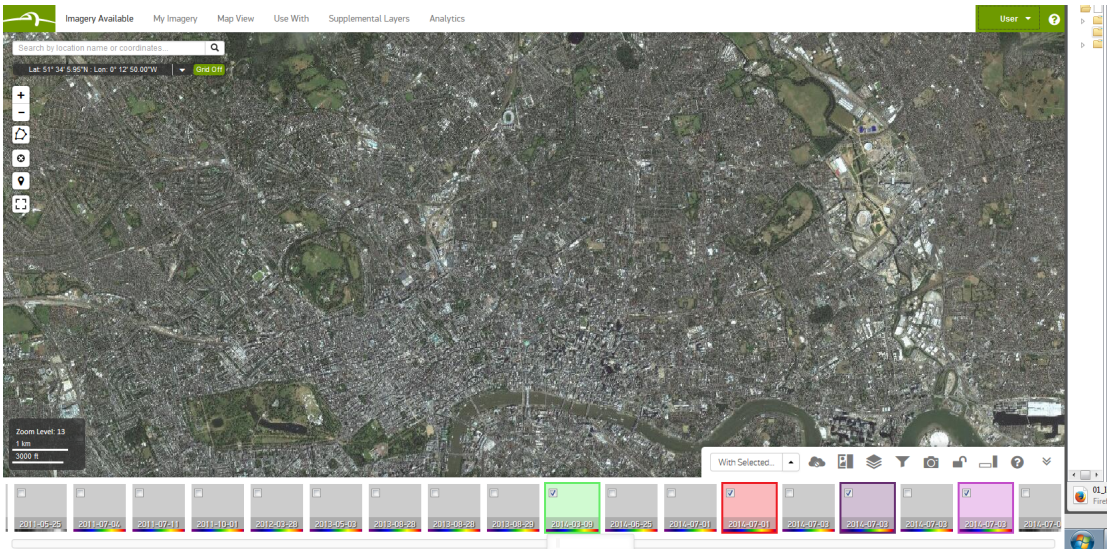

FIGURE 5.4 CAROUSEL (IN HORIZONTAL ORIENTATION)

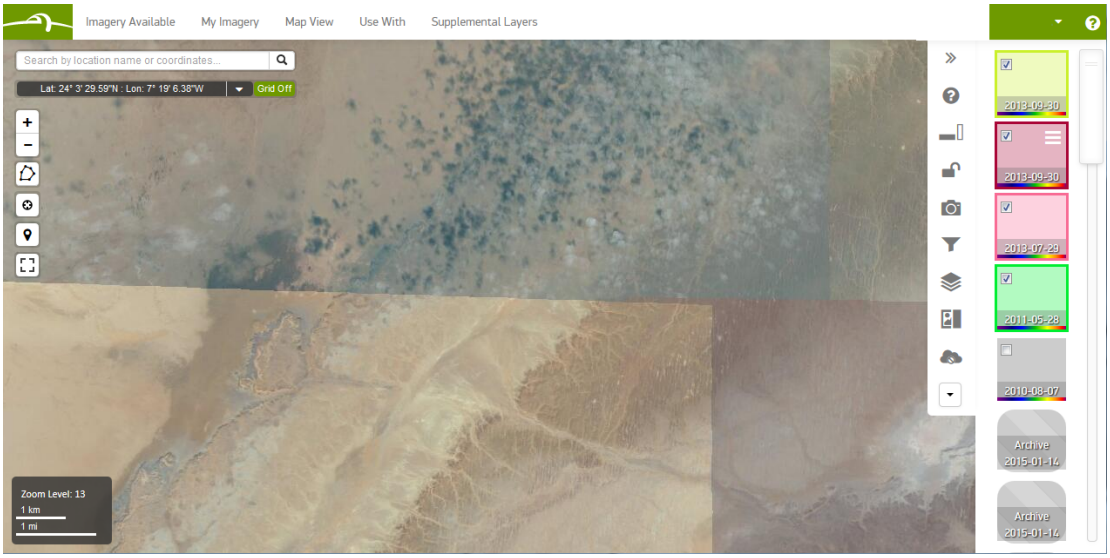

FIGURE 5.5 CAROUSEL (IN VERTICAL ORIENTATION)

3. Hover over the thumbnails to see the image footprint in the map view and to show the thumbnail menu icon ( ).
4. Select an image to show or hide in the viewport using the checkbox in the thumbnail (*Figure 5.6 Selecting an image*).

FIGURE 5.6 SELECTING AN IMAGE

> NOTE: Images that are totally covered by other selected images do not show in the map view. The thumbnails for visible images have a solid, colored outline that corresponds to the image boundaries overlay; covered images have dashed outlines.

5. Click and drag the thumbnail and drop it the desired place in the carousel to move it up or down in the stacking order.
6. To change the orientation of the carousel, click the ("switch orientation") button; your selected orientation persists across user sessions.

5.3.1 Specifying The Stacking Order

You can choose the order in which the images are stacked in the carousel.

1. Click the ("stacking profile") button on the carousel. The *Stacking Profile* dialog box opens (*Figure 5.7 Stacking Profile Dialog Box*).

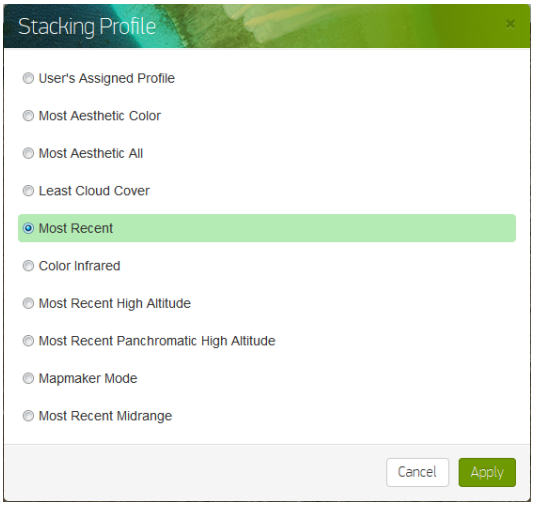

FIGURE 5.7 STACKING PROFILE DIALOG BOX

2. Select one of the following choices:
   - **User's Assigned Profile.**The stacking profile specified by DigitalGlobe.
   - **Most Aesthetic Color.** Stacks the images with the most aesthetic color on top.
   - **Most Aesthetic All.** Stacks the images with the most aesthetic image on top.
   - **Least Cloud Cover.**Stacks the images with the least cloud cover on top.
   - **Most Recent.** Stacks the images with the most recent on top.
   - **Color Infrared.**False color imagery.
   - **Most Recent High Altitude.** Provides high resolution imagery up to zoom level 9.
   - **Most Recent Panchromatic High Altitude.** Provides high resolution panchromatic imagery up to zoom level 9.
   - **Mapmaker Mode.** Provides all high resolution imagery without restriction in provided order.
   - **Most Recent Midrange.** Provides high resolution imagery only from level 9 through level 12.
5. Click **Apply**. The thumbnails are rearranged, displaying in the order selected.

5.3.2 Viewing Browse Images In The Thumbnails

By default, thumbnails in the carousel display blank, without an image (*Figure 5.8 Default Thumbnail in Carousel*).

FIGURE 5.8 DEFAULT THUMBNAIL IN CAROUSEL

To see the brows images in the thumbnails, click the  ("show/hide thumbnails") button on the carousel. Each image may not cover the extent of the map view window; the browse images in the thumbnails provide context on the coverage provided, with any white area indicating no coverage.

> NOTE: For better performance, thumbnail browse images are automatically turned off when panning in the viewport when the carousel is unlocked.

5.3.3 Saving A Snapshot To The Library

After selecting and stacking the imagery as needed, you can save a snapshot of the current viewport to the library.

1. Click the (“snapshot” button). The *New Snapshot* dialog box opens (*Figure 5.9 New Snapshot Dialog Box*).

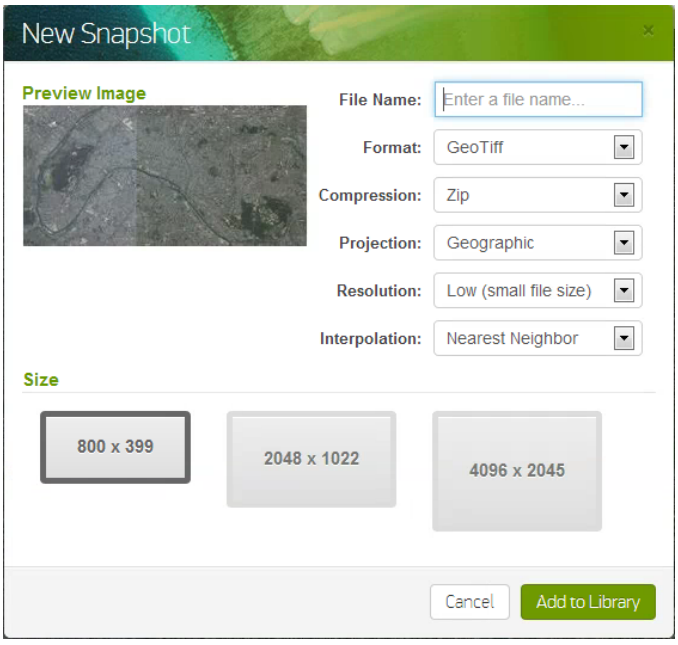

FIGURE 5.9 NEW SNAPSHOT DIALOG BOX

2. In the **File Name** field, type the name you want to assign the file.
3. From the **Format** dropdown, select a type. Depending on your account, these may include:
   - GeoTiff
   - JPEG
   - JPEG2000
   - MrSid
   - GeoPDF
   - NITF 2.1 (NPJE JP2 4:1)
   - RPF 0.5 Meters
   - RPF 1 Meter
   - RPF 5 Meters
5. From the **Compression** dropdown, select **Tar** or **Zip**.
6. From the **Projection** dropdown, select **Geographic** or **UTM**.
7. From the **Resolution** dropdown, select **Low (small file size)** or **High (large file size)**.
8. From the **Interpolation** dropdown, select **Nearest Neighbor**, **Bilinear**, or **Bicubic**.
9. From the **Size** options, select a dimension.
10. Click the **Add to Library** button. Low resolution images are created by DigitalGlobe’s Web Processing Service. Depending on the size of the image, this process may take several minutes or longer to complete. A message explains the process. Click **Go to Library** to view the status in the *Library* window. Once underway, the image creation process continues, even if you log out. If you log out, you can log in later and download the image. Once the image has been created, the file is listed in the Library, including its file name, creation timestamp, file size, and download links.

> NOTE: Snapshots are saved in the image library for two weeks; after that, they are deleted.

5.3.4 Comparing Images

1. On the carousel, select two or more thumbnails.
2. Click **With Selected** (on the horizontal carousel) or the dropdown arrow (on the vertical carousel) and select **Compare**. A slider displays next to the carousel toolbar.
3. Move the slider to see the differences between the images. The order of the thumbnails in the carousel corresponds to the slider. If you rearrange the thumbnails or toggle image visibility to change the order, the compare tool reinitializes.

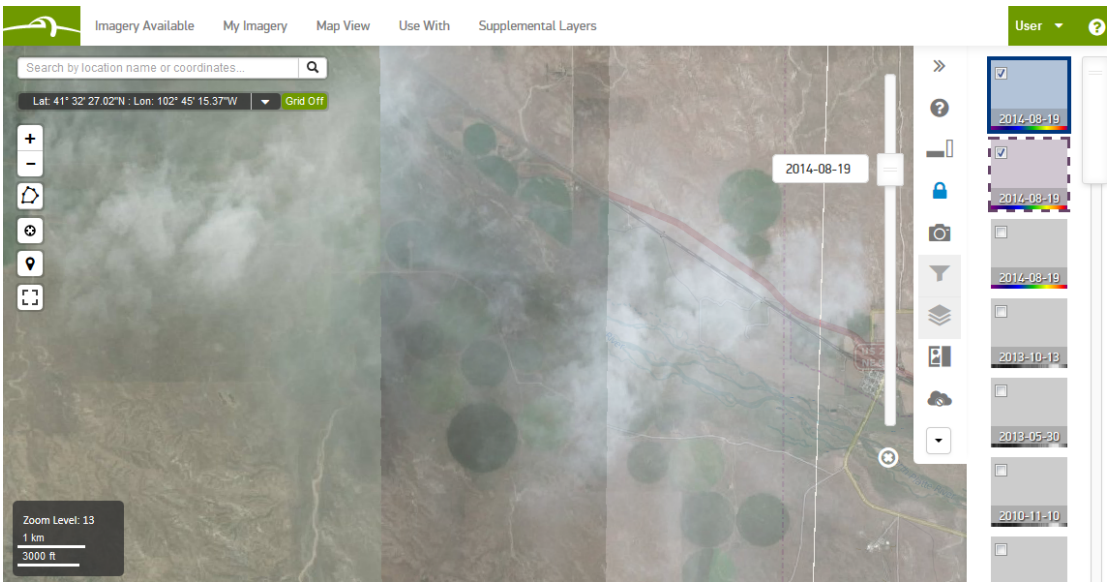

FIGURE 5.10 COMPARE SLIDER

5.3.5 Viewing Cloud-Free Imagery (Availability Subject To Account Subscription)

You can use the the ("toggle cloudless mode") button to view a cloud-free mashup of imagery and then capture the view as a snapshot (see *Saving a Snapshot to the Library on page 36*), or save the full image minus the clouds (see *Adding a Snapshot to the Library on page 53*).

Cloudless mode uses a cloud cover polygon to mask clouds so that the layer below shows through the cloudy area.

> NOTE: This feature only applies to content hosted on the platform after early-to-mid April 2015.

1. Zoom to your AOI and look for the ("toggle cloudless mode") icon associated with an image that contains clouds. The icon indicates that a cloud cover polygon is associated with the image (*Figure 5.11 Imagery with Cloudless Mode Disabled*).

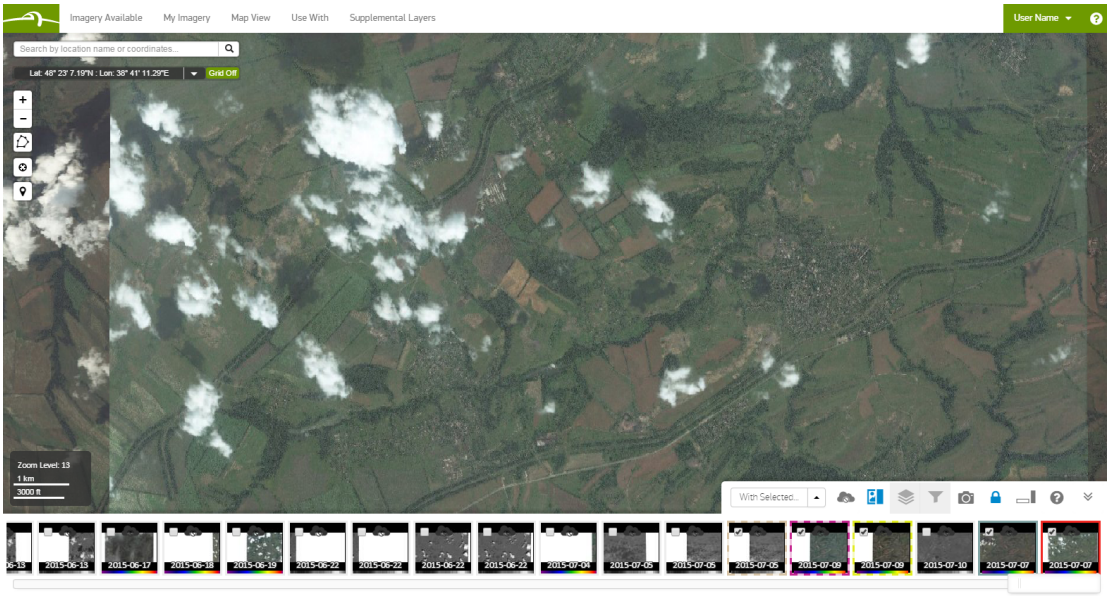

FIGURE 5.11 IMAGERY WITH CLOUDLESS MODE DISABLED

2. On the carousel, click the ("toggle cloudless mode") button. The map view hides the clouds in any images that have a cloud cover polygon, showing a mashup with those clouds eliminated (*Figure 5.12 Imagery with Cloudless Mode Enabled*), and the icon turns blue to indicate that cloudless mode is turned on.

FIGURE 5.12 IMAGERY WITH CLOUDLESS MODE ENABLED

3. Rearrange and sort images to get the coverage you want to see, and if desired, take a snapshot (see *Saving a Snapshot to the Library on page 36*), or save the full image minus the clouds (see *Content Search and Discovery on page 32*).

4. To turn cloudless mode off again, click the ("toggle cloudless mode") button again. The icon turns grey to indicate that cloudless mode is turned off.

5.3.6 Locking And Unlocking The Carousel

Lock the list of images in the carousel so you can rearrange and toggle the visibility of images. You won't lose your work if you pan or zoom in the map view. Keep in mind that sort and filter settings as well as image boundaries are disabled when the carousel is locked. When you log out or close the web browser, the lock resets to “unlocked”. In other words, the lock setting is not persisted across sessions. Note that the carousel automatically locks when you do any of the following:

- Select or deselect images in the carousel.
- Drag an image to change its relative position in the stack.
- Move an image to top from the thumbnail contextual menu.
- Open the compare tool.

The carousel automatically unlocks when you do any of the following, resetting the map view to your default settings:

- Navigate to an alert.
- Navigate to a bookmark.
- Navigate to a mosaic project.
- Search for a new location with the search toolbar.

To manually lock and unlock the carousel, click the “lock/unlock” button to the right of the carousel; the icon displays (“locked”) or (“unlocked”).

5.4 Working with Advanced Search

> NOTE: Redrawing the AOI re-initializes the advanced search workflow and resets the search results.

Advanced Search has two tabs:

- **Results**: Lists all of the images that intersect your AOI. On this tab you can filter images (see *Filtering on page 33*), use the ("image menu") icon to work with a single image, and select images for other tasks.
- **Selected**: After selecting images on the **Results** tab, on the **Selected** tab you can work with a single image using the ("image menu") icon, rearrange your results, create a mosaic from your selections, and export a shapefile of your selections.

> NOTE: The ("filter") icon shows on both tabs, but filters apply only to the **Results** tab. Once items are added to the **Selected** tab you can deselect them, but you cannnot use a further filter to narrow down those images.

5.4.1 Starting Advanced Search

You can start Advanced Search by either of these methods:

1. Define an area of interest as described in *Defining an Area of Interest on page 22*, then select **Continue to Advanced Search** in the **With This Area of Interest...** window.
2. Select **Advanced Search** under the **My Imagery** menu and then use one of the options in the ("define an area of interest") icon to create an area of interest in the same way you would from the main screen.
   The results are listed in the left pane and shown in the map view (*Figure 5.13 Advanced Search Results Window*).

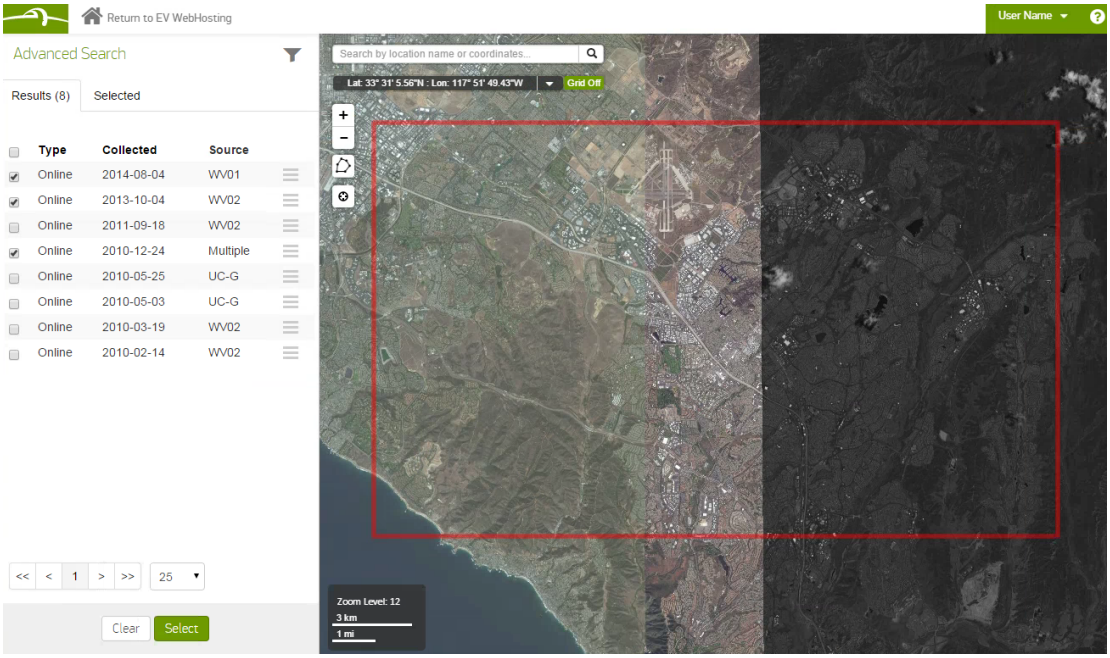

FIGURE 5.13 ADVANCED SEARCH RESULTS WINDOW

5.4.2 Showing And Hiding Images In Advanced Search

Select the checkboxes for the images you want to see in the map view. Deselect the checkboxes for the images that you want to hide.

5.4.3 Rearranging Images

1. On either tab: to move an image to the top, click the ("image menu") icon next to the image, then select *Move Image To Top*.
2. On the Selected tab only: click and drag an image up or down.

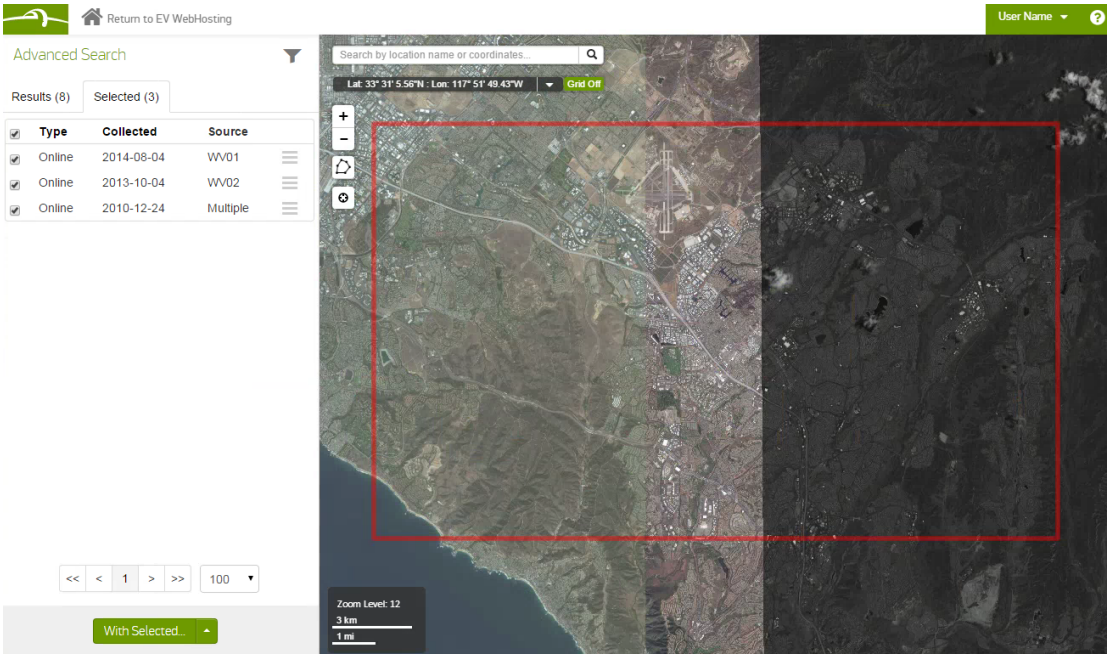

FIGURE 5.14 ADVANCED SEARCH, SELECTED TAB

5.4.4 Creating A Mosaic Of Images In Advanced Search

After selecting and arranging the imagery as needed, you can save a mashup to the library.

NOTE: The AOI must be smaller than 10,000 square kilometers.

1. On the **Results** tab of *Advanced Search*, select all the images with which you want to work.
2. Click the **Select** button. A list of those images displays on the **Selected** tab (*Figure 5.14 Advanced Search, Selected Tab*).
3. Select the images from which you want to create a mosaic.
4. Click the **With Selected** button and select **Create Mosaic** from the menu (*Figure 5.15 with Selected Menu*). NOTE: If the **With Selected** button is not enabled, make sure you have selected at least one image on the **Selected** tab. The *New Mosaic* dialog box opens (*Figure 5.16 New Mosaic Dialog Box*).

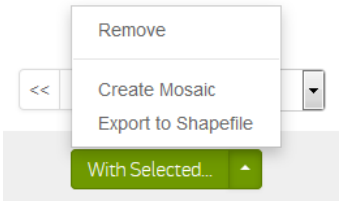

FIGURE 5.15 WITH SELECTED MENU

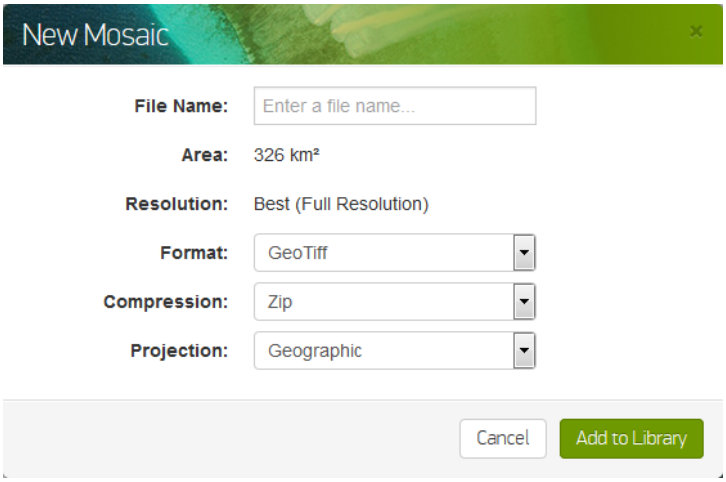

FIGURE 5.16 NEW MOSAIC DIALOG BOX

5. In the **File Name** field, type a file name for the mosaic (file names are automatically concatenated).
6. From the the **Format** dropdown, select the desired format. The options include:
   - GeoTiff, comprised of multiple JPEG-compressed tiles.
   - MrSid
   - NITF 2.1 (NPJE JP2 4:1)
7. From the **Compression** dropdown, select **Tar** or **Zip**.
8. From the **Projection** dropdown, select **Geographic** or **UTM**.
9. Click **Add to Library**. The system displays this message: "Your request is being processed and will soon be available to download from your Library."
10. To see the processed mosaic, click **Go to Library**. You can download the processed mosaic using instructions in *Downloading Images from the Library on page 53*. Otherwise, click **Close**.

5.4.5 Exporting Advanced Search Images To A Shapefile

1. On the **Results** tab of *Advanced Search*, select all the images with which you want to work.
2. Click the **Select** button. A list of those images displays on the **Selected** tab (*Figure 5.14 Advanced Search, Selected Tab*).
3. Select what you want to export to a shapefile.
4. Click the **With Selected** button and select **Export to Shapefile** from the menu that displays (*Figure 5.15 with Selected Menu*)

> NOTE: If the **With Selected** button is not enabled, make sure you have selected at least one image on the **Selected** tab.

The *Opening xxx.zip* dialog box displays (*Figure 5.17 Opening Zip File Dialog Box*).

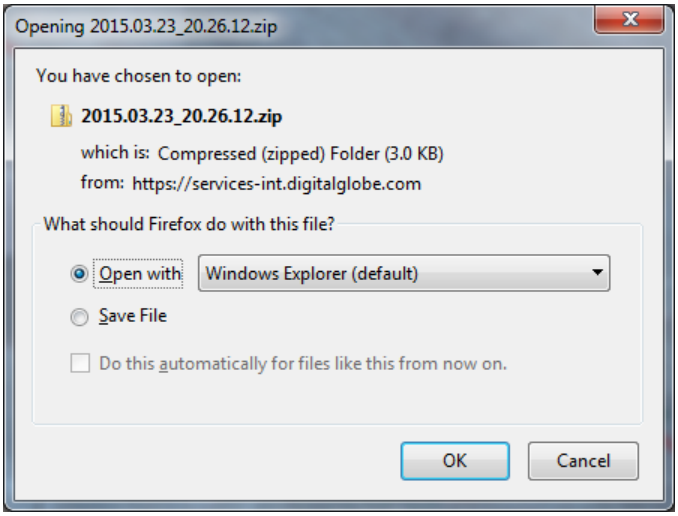

FIGURE 5.17 OPENING ZIP FILE DIALOG BOX

5. Select **Save File**. The file is downloaded to your computer.

6 Creating and Managing Bookmarks and Alerts

Book marks and alerts help users who work on specific locations or AOIs. Bookmarks allow you to quickly zoom to a location that you need to visit often, while alerts send you an email when imagery is added that intersects your AOI.

6.1 Using Bookmarks

6.1.1 Adding A Bookmark

1. Find the area you want to bookmark. Refer to *Searching for a Location on page 21* and *Finding Areas with Available Images on page 22* for instructions.
2. From the **My Imagery** menu, select **Bookmarks**. The *Bookmarks* dialog box opens (*Figure 6.1 Bookmarks Dialog Box*).

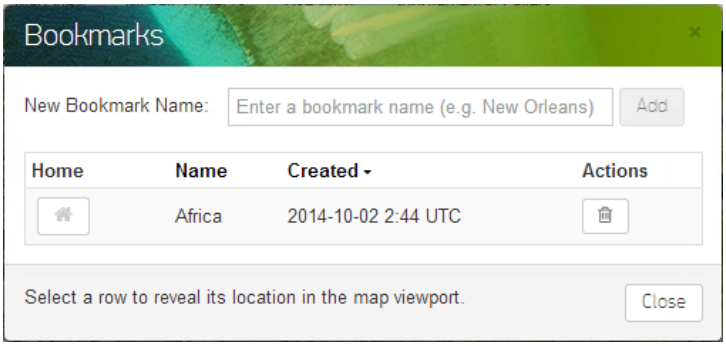

FIGURE 6.1 BOOKMARKS DIALOG BOX

3. In the **New Bookmark Name** field, type a name for the bookmark.
4. Click **Add**.
5. Click **Close**. The new bookmark is added.

6.1.2 Jumping To A Bookmarked Location

To jump to a bookmarked location:

1. From the **My Imagery** menu, select **Bookmarks**. The *Bookmarks* dialog box opens (*Figure 6.1 Bookmarks Dialog Box*).
2. Click the bookmark you want to open. The map view zooms to your selected AOI.

6.1.3 Opening A Specific Bookmark Upon Next Log In

You can set a bookmarked location to open the next time you log in.

1. From the **My Imagery** menu, select **Bookmarks**. The *Bookmarks* dialog box opens (*Figure 6.1 Bookmarks Dialog Box*).
2. Click the (“Go to this bookmark when I log in”) button next to a bookmark.
3. Click **Close**. Upon your next log in, the map view opens to your selected bookmark.

> NOTE: When you set a bookmark as your "home," the keyboard shortcut **g h** goes to that bookmark and not to zoom level 3.

6.1.4 Deleting A Bookmark

You can clean up old or unwanted bookmarks by deleting them.

1. From the **My Imagery** menu, select **Bookmarks**. The *Bookmarks* dialog box opens (*Figure 6.1 Bookmarks Dialog Box*).
2. To delete a bookmark, click the ("delete") button associated with the bookmark. A confirmation window opens (*Figure 6.2 Confirm Bookmark Delete Window*).

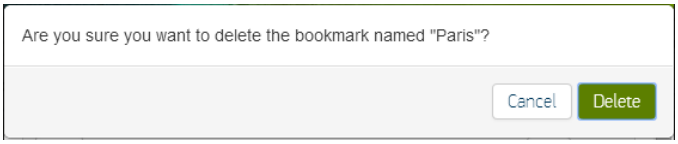

FIGURE 6.2 CONFIRM BOOKMARK DELETE WINDOW

> NOTE: You cannot undo this action; be sure you want to delete before proceeding.

3. Click **Close** on the *Bookmarks* dialog box.

6.2 Using Alerts

You can create up to 50 alerts to be notified of changes to an area of interest. Alert emails are sent whenever an image for your AOI is brought into the system, whether the image is new or from archive.

> NOTE: E-mail alerts are not supported in secure domains.

6.2.1 Creating An Alert

You can create an alert by drawing a polygon, using the map viewport, or uploading a shapefile.

1. From the **My Imagery** menu, select **Alerts**. The *Alerts* dialog box opens (*Figure 6.3 Alerts Dialog Box*).

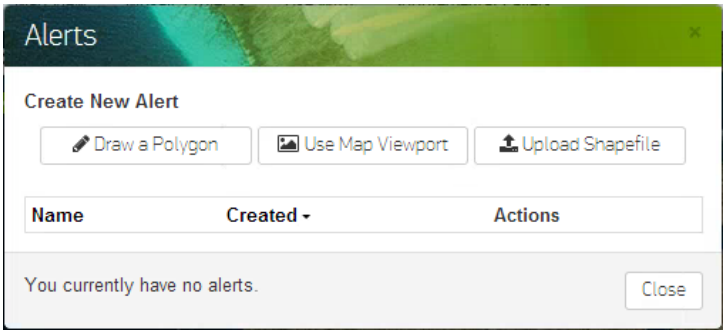

FIGURE 6.3 ALERTS DIALOG BOX

2. Choose an option and follow the prompts. The *New Alert Settings* dialog box opens (*Figure 6.4 New Alert Settings Dialog Box*).

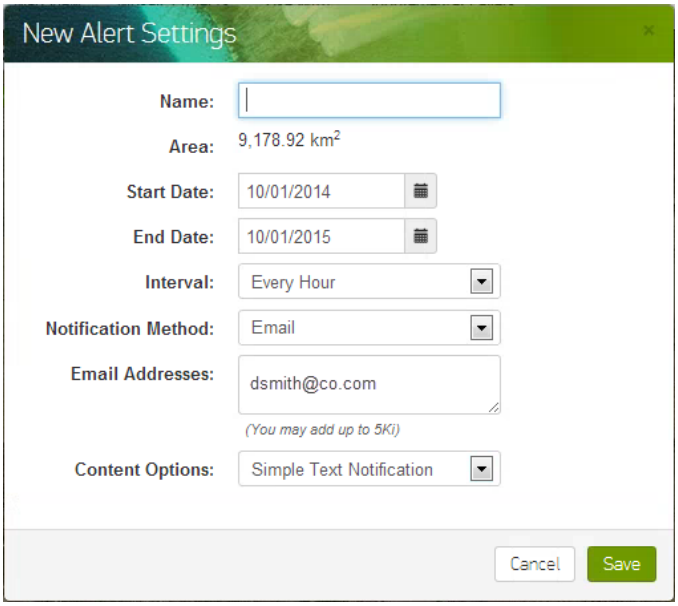

FIGURE 6.4 NEW ALERT SETTINGS DIALOG BOX

4. Enter a name for the alert in the **Name** field.
5. The **Area** field displays the size of the polygon you specified.
6. In the **Start Date** and **End Date** fields, enter start and end dates for your notifications.
7. From the **Interval** dropdown, select the interval at which you want to receive notifications.
8. From the **Notification Method** dropdown, select how you want to receive notifications: by email, RSS, or both.
9. If you chose email notification, an **Email Addresses** field displays. Add one or more email addresses, one per line.

> NOTE: If you chose **RSS**, the URL will be available after you save the alert.

10. From the **Content Options** dropdown, select from the following:
    - **Simple Text Notification**. Select this option to receive an e-mail with a basic message stating how many new images are available and over what time period.
    - **Include Browse and Metadata**. Select this option to receive image sampling and an XML file with related metadata. Due to e-mail size limitations (often 2MB), more recent images may be given preference. You may be able to specify or change these restrictions at the domain level.
11. Click **Save**.

6.2.2 Viewing Alert Settings

To view an alert's settings:

1. From the **My Imagery** menu, select **Alerts**. The *Alerts* dialog box opens with all configured alerts (*Figure 6.5 Alerts Dialog Box (with Configured Alerts)*).

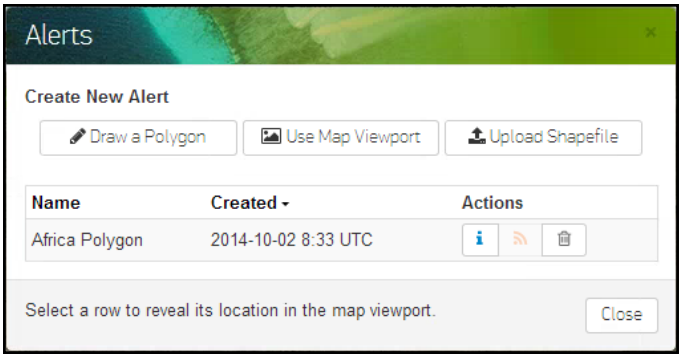

FIGURE 6.5 ALERTS DIALOG BOX (WITH CONFIGURED ALERTS)

2. Click the button ("View Alert Settings") associated with the alert you want to view. The *Alert Settings* window opens (*Figure 6.6 Alert Settings Window*).

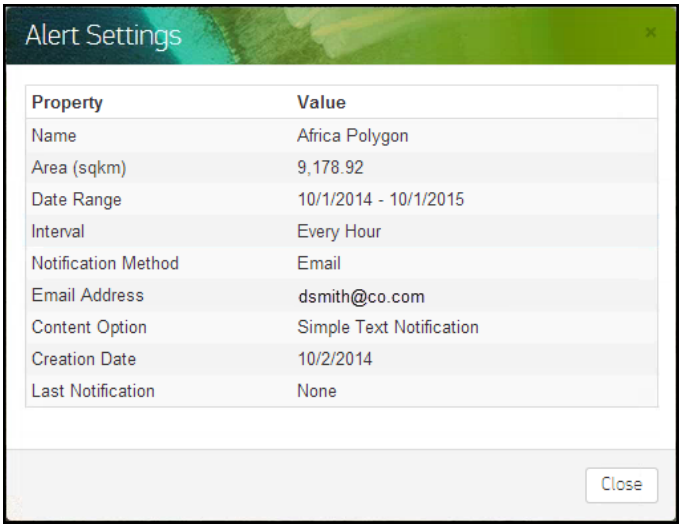

FIGURE 6.6 ALERT SETTINGS WINDOW

3. Review the details of the alert and click **Close** when finished.

6.2.3 Viewing Areas With Alerts

6.2.4 Deleting An Alert

If you determine that you no longer want to receive notifications for an alert, you can delete it.

1. From the **My Imagery** menu, select **Alerts**. The *Alerts* window opens with all configured alerts (*Figure 6.5 Alerts Dialog Box (with Configured Alerts)*).
2. To delete an alert, click the delete button ( ) associated with the alert. A confirmation window opens (*Figure 6.7 Confirm Alert Delete Window*).

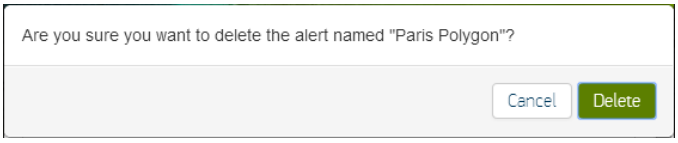

FIGURE 6.7 CONFIRM ALERT DELETE WINDOW

NOTE: You cannot undo this action. Be sure you want to delete before proceeding.

3. Click **Delete**. The alert is removed from the list.
4. Click **Close** on the *Alerts* window.

6.3 Viewing Areas with Bookmarks and Alerts

You can easily view locations for which you have set alerts by using the toggle markers tool. At the top left corner of the map view window, click the  ("toggle markers") button to show and hide the alert markers (). Hover over an alert marker to view its name and created date. Click on an alert marker to zoom to the extent of the alert AOI. Bookmarked locations also show, designated with a blue marker (). See *Overview of Main Screen Layout on page 8* for the location of the toggle markers button on the main screen.

7 Saving and Downloading Your Imagery: Image Library

You can save large image files to your individual "library" and then download them for use offline. To view your saved files, open the **My Imagery** menu and select **Library**. The *Library* window opens, showing your saved imagery (*Figure 7.1 Library Window*).

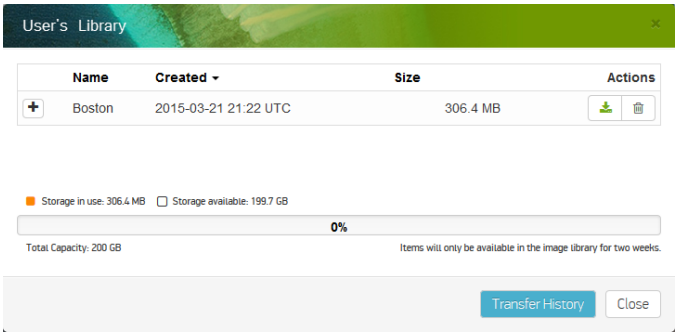

FIGURE 7.1 LIBRARY WINDOW

> NOTE: Images are available in the image library for one to two weeks and then are deleted.

7.1 Saving Imagery to the Library

You can save several types of images to your library: a full image, a tileset, a mosaic (limited to 10,000 square kilometers), or a snapshot (level 13 or above).

When you save an image, the image creation process continues even if you log out; you can log in later and download the image. Once the image has been created, the file is listed in the Library, including its file name, creation timestamp, file size, and download links.

7.1.1 Saving A Full Image To The Library

You can add a full image to the library from either the Carousel or from Advanced Search; see *Working with the Carousel on page 34* or *Working with Advanced Search on page 40*.

1. Click the  ("image menu") icon on the thumbnail in the carousel or next to the image in advanced search , then select **Add Full Image To Library**. The *Add Full Image to Library* dialog box opens (*Figure 7.2 Add Full Image to Library Dialog Box*).

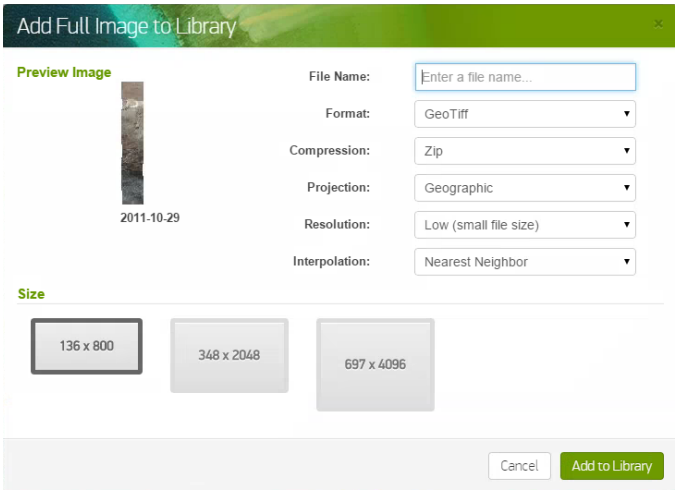

FIGURE 7.2 ADD FULL IMAGE TO LIBRARY DIALOG BOX

2. In the **File Name** field, type the name you want to assign the file.
3. From the **Format** dropdown, select a type. Depending on your account, these may include:
   - GeoTiff
   - JPEG
   - JPEG2000
   - MrSid
   - GeoPDF
   - NITF 2.1 (NPJE JP2 4:1)
   - RPF 0.5 Meters
   - RPF 1 Meter
   - RPF 5 Meters
5. From the **Compression** dropdown, select **Tar** or **Zip**.
6. From the **Projection** dropdown, select **Geographic** or **UTM**.
7. From the **Resolution** dropdown, select **Low (small file size)** or **High (large file size)**.
8. From the **Interpolation** dropdown, select **Nearest Neighbor**, **Bilinear**, or **Bicubic**.
9. From the **Size** options, select a dimension.
10. Click the **Add to Library** button. The system displays this message: "Your request is being processed and will soon be available to download from your Library." Low resolution images are created by DigitalGlobe's Web Processing Service. Depending on the size of the image, this process may take several minutes or longer to complete.
11. Click **Go to Library** to view the status in the *Library* window; otherwise, click **Close**.

7.1.2 Generating A Tileset

You can generate and download tilesets of imagery at zoom levels 13 to 18 for use in disconnected environments, which you can view via Google Earth, a My DigitalGlobe Lite web viewer (included in the download), or any device that supports OGC GeoPackage format; see *Opening Downloaded Tilesets on page 55*.

> NOTE: Tilesets are not available on some networks.

You can generate a tileset by either of these methods:

1. Define an area of interest as described in *Defining an Area of Interest on page 1*, then select **Generate a Tileset** in the **With This Area of Interest...** window. Size is limited to 100,000 km^2.

2. Zoom to level 9 or above and, from the **My Imagery** menu, select **Tilesets**. The *Tilesets* window opens (*Figure 7.3 Tilesets Window*). Choose **Drag a Rectangle**, **Use Map Viewport**, or **Upload Shapefile** and follow the prompts.

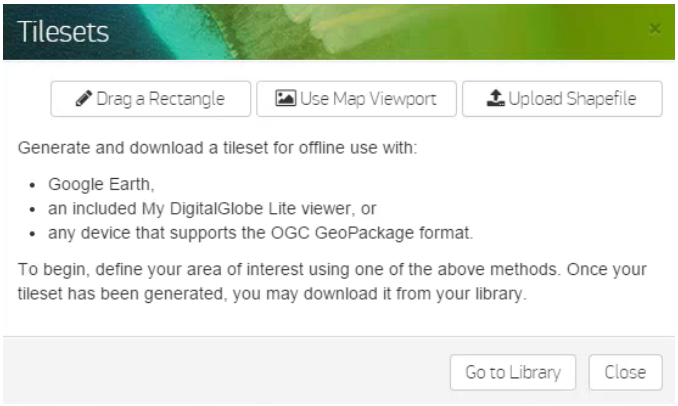

FIGURE 7.3 TILESETS WINDOW

3. Fill in all fields in the *New Tileset Settings* dialog box (*Figure 7.4 New Tileset Settings Dialog Box*):

   a. Give the tileset a unique, easy-to-remember and identify name.
   b. Tile sets are available for zoom levels 13 to 18. The default is for 13 only, but you have the option to increase that if you'd like the full range. Note that increasing the range increases processing time and download file size.
   c. Choose the format. Note that .jpg format is compressed, and .png is not, so .jpg files much smaller and easier to download than .png files.
   d. Choose whether you'd like the file to be in tar (EPSG:3857) or GeoPackage format (EPSG:3857, EPSG:4326, or EPSG:3395). Selecting the tar format generates a .kml file to view the tileset within Google Earth, and a MyDG-Lite.html file to view the tile set using My DigitalGlobe Lite.
   e. For GeoPackage, select the projection.
   f. Click **Save**.

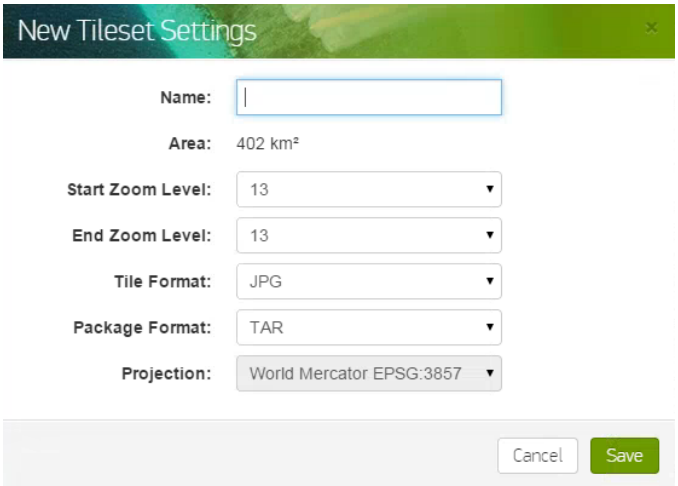

FIGURE 7.4 NEW TILESET SETTINGS DIALOG BOX

4. The system displays a message stating, "Your request is being processed and will soon be available to download from your Library."

5. Click **Go to Library** to view the status in the *Library* window; otherwise, click **Close**.

NOTE: The entry in your library is a link to the files on an FTP site; therefore the file shows a size of 0 bytes.

7.1.3 Adding A Snapshot To The Library

See *Saving a Snapshot to the Library on page 36*

7.1.4 Adding A Mosaic To The Library

See *Creating a Mosaic of Images in Advanced Search on page 42*.

7.2 Downloading Images from the Library

The images added to your Library actually consist of many files, including the image file(s)[1], a 16m browse image[2], a tile map shapefile depicting the tile layout, and a seam line shapefile depicting the source images used in a collage[3]. You can download a .TAR (default) or a .ZIP file containing the entire set of files, or you can download files individually if you only have time to download a smaller file. You can even download the browse image, tile map shapefile, and/or seam line shapefile to determine the content and coverage of each tile, and then download only the desired tiles.

All users can download via HTTPS, similar to how you download other files from the Internet. For some accounts, an option to download via Turbo, FTP, or FTP Push may also be available:

- HTTPS takes a little longer to download, and in some cases the download might time out depending on your network speed and the size of the files you are trying to download.
- Turbo uses the Aspera Connect plugin to improve download time. Starting the download prompts for the plugin installation; allow the plugin installation to proceed. Your browser downloads the file once the plugin is installed.
- FTP allows you to download large files via your FTP client.
- FTP Push allows you to push large files to a remote FTP server.

7.2.1 Downloading Images Via HTTPS Or Turbo

You can either download the entire set of imagery or a specific tile. To see tiles, expand the list by clicking the  ("view files") button. Individual tiles can only be downloaded via HTTPS. Once you've chosen what you want to download, click the  ("download") button for the imagery (or expand the listing to see its related tiles).

- If you're downloading a set of imagery, you can choose from **HTTPS** or **Turbo**.
- If you selected **HTTPS**, a ZIP or TAR file is downloaded. If you selected **Turbo**, the download occurs through the Aspera Connect plugin. The downloaded file contains the following files:

`<filename>_RxCx.<format>`	These files represent the tiled imagery you created. The RxCx indicates the Row and Column number, as described in the <filename>TILE SHAPE.zip
`<filename>TILE SHAPE.zip`	This shapefile indicates the row and column number for each tile.
`<filename>SEAMLINES_SHAPE.zip`	This shapefile indicates the detailed metadata for your files. If multiple images were used to create your file, this shapefile describes the attributes by location.

[1]The number of files depends on size of image and tile size selected.
[2]This option is only available after you download a high resolution image.
[3]Metadata for each image is also included.

BROWSE file	Your library may also include a browse file. This is a low resolution overview image of all the tiles. These are included when “High” Resolution is selected.
NEXTVIEW.txt	This text file contains the NextView Imagery End User License Agreement.

7.2.2 Downloading Images Via FTP

NOTE: FTP downloads are not available for all accounts.

1. Click the ("download") button for the imagery you want to download and select **FTP**. The *FTP Access* dialog box opens (*Figure 7.5 FTP Access Dialog Box*).

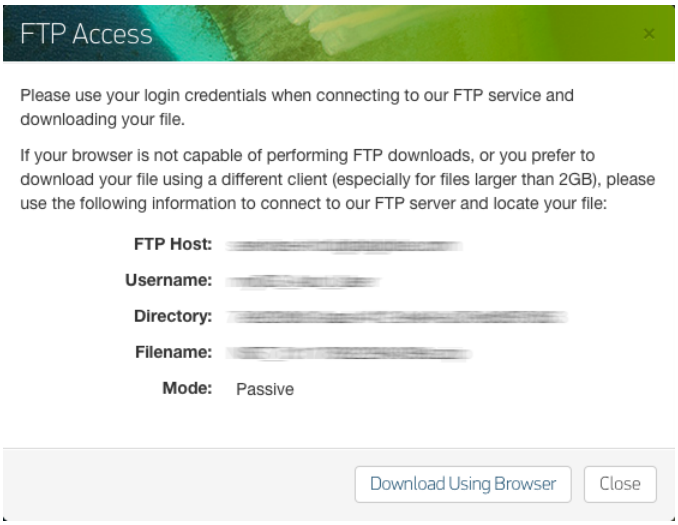

FIGURE 7.5 FTP ACCESS DIALOG BOX

2. Click the **File Download** link. The file is downloaded to your computer.

NOTE: If you encounter problems, you can also connect to the DigitalGlobe FTP server using an FTP client and the credentials provided on the *FTP Access* dialog box.

3. Click **Close**.

7.2.3 Downloading Images Via FTP Push

NOTE: FTP push is not available for all accounts.

1. Click the ("download") button for the imagery you want to download and select **FTP Push**. The *FTP Push Settings* dialog box opens (*Figure 7.5 FTP Access Dialog Box*).

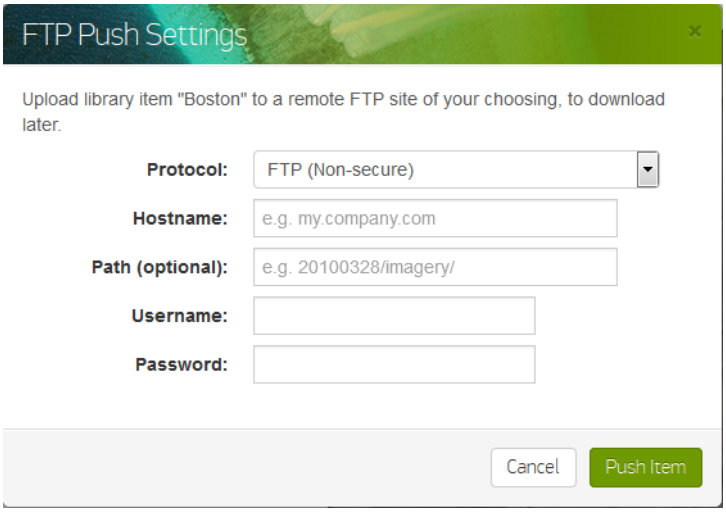

FIGURE 7.6 FTP PUSH SETTINGS DIALOG BOX

2. From the **Protocol** dropdown, select either **FTP (Non-secure)** or **SFTP (Secure, server must support SSL2)**.
3. In the **Hostname** field, type the hostname of your FTP server.
4. (Optional) In the **Path** field, type the path to which you want to push the file.
5. In the **Username** and **Password** fields, enter your FTP credentials.
6. Click **Push Item**. The file is pushed to your FTP server. Depending on the size of the file, the transfer may take several hours or longer to complete.
7. To monitor the progress of FTP push transfers, from the **My Imagery** menu, select **Library**. The *Library* window opens (*7.4 Determining Available Space in the Library*).
8. Click **Transfer History** to view details.

7.2.4 Opening Downloaded Tilesets

1. Browse your local disk and find the tileset's tar file or GeoPackage file.
2. Untar/extract the files if you downloaded the tilesets in tar format.

> NOTE: The tar file's name is used as the folder name.

3. Open the tile set:
    a. Google Earth: under the file folder, double click on the superoverlay.kml. Google Earth opens at the tileset AOI (*Figure 7.7 Opening an AOI in Google Earth*).

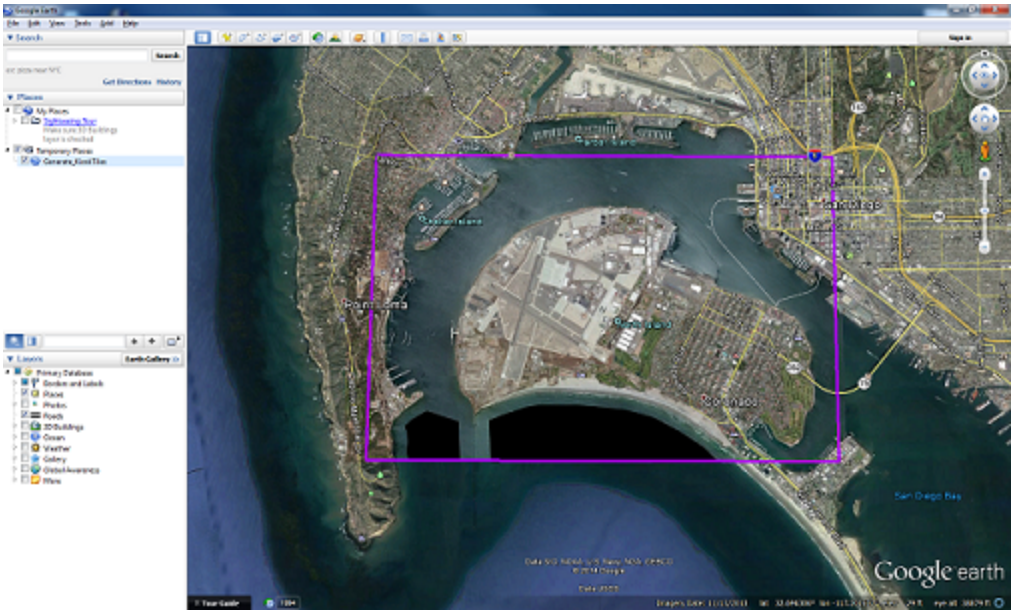

FIGURE 7.7 OPENING AN AOI IN GOOGLE EARTH

b. My DigitalGlobe Lite: browse to your MyDGLite folder and double click MyDG-Lite.html. The generated tileset displays in the MyDG Lite browser (*Figure 7.8 Viewing a Tileset in My DigitalGlobe Lite*).

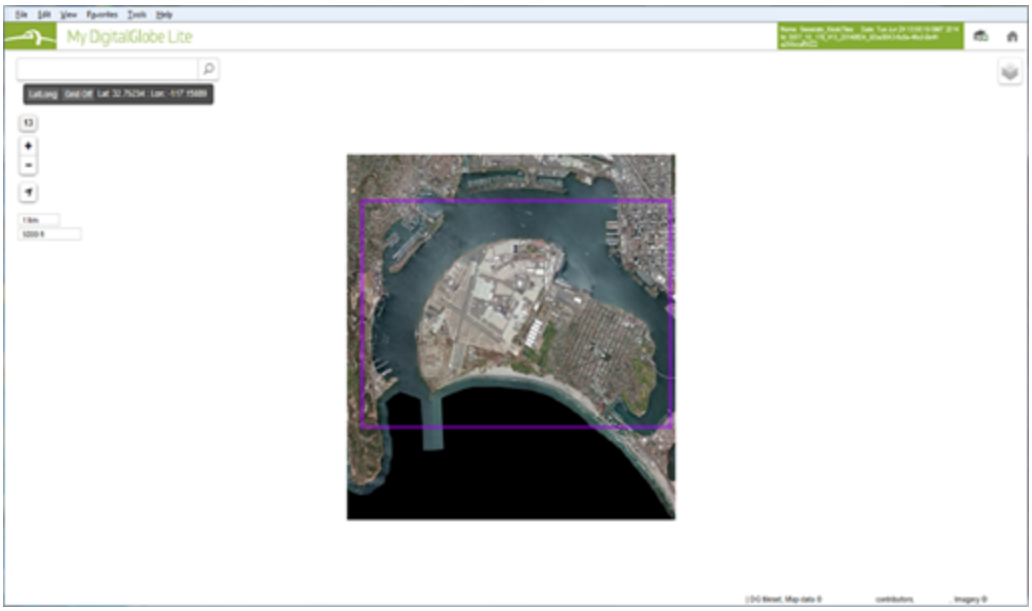

FIGURE 7.8 VIEWING A TILESET IN MY DIGITALGLOBE LITE

7.3 Sorting Images in the Library

By default, items in the library are sorted by creation date, with the most recent being first. To sort another way, click the column headings by which you want to sort: **Name**, **Created**, or **Size**. Click the column again to sort in the opposite order.

7.4 Determining Available Space in the Library

For planning purposes, it might be helpful to know how much available storage you have in your library. To view space data, from the **My Imagery** menu, select **Library**. The *<User's Name> Library* window opens (*Figure 7.9 Determining Available Space in Your Library*). The space information displays at the bottom of the window (shown highlighted in red). The storage size is determined based on your account's configuration.

> NOTE: You cannot add an image to your Library if it exceeds your available storage capacity.

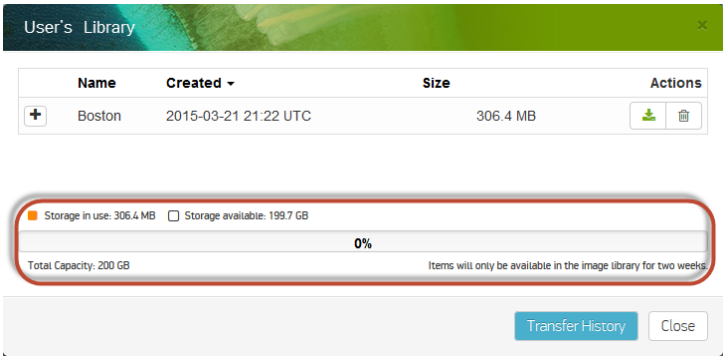

FIGURE 7.9 DETERMINING AVAILABLE SPACE IN YOUR LIBRARY

7.5 Deleting Images from the Library

1. To delete images from the library, click the ("delete") button next to the entry you want to delete. A confirmation window opens (*Figure 7.10 Confirm File Delete Window*).

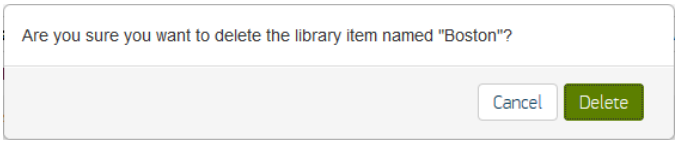

FIGURE 7.10 CONFIRM FILE DELETE WINDOW

2. Click **Delete**. The file is removed from the library.

8 Working with Supplemental Layers

You can add two types of supplemental layers: WMS and ESRI. WMS layers follow OGC standards whereas ESRI layers fit the ESRI standards.

8.1 Adding a Custom WMS Layer

1. Click the **Supplemental Layers** menu option. The *Supplemental Layers* dialog box opens (*Figure 8.1 Supplemental Layers Dialog Box*).

   NOTE: Layers named "Sublayers: XX, YY, ZZ" are composite layers.

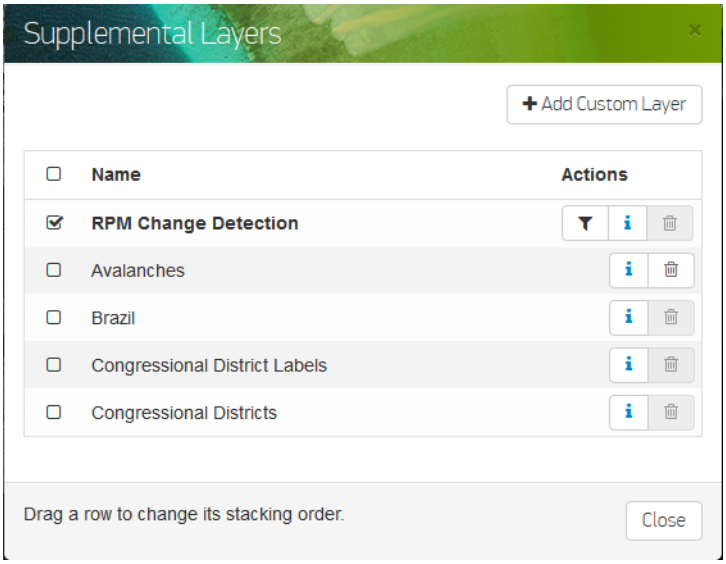

FIGURE 8.1 SUPPLEMENTAL LAYERS DIALOG BOX

2. Click **Add Custom Layer**. The *New Layer Settings* dialog box opens (*Figure 8.2 New Layer Settings Dialog Box*).

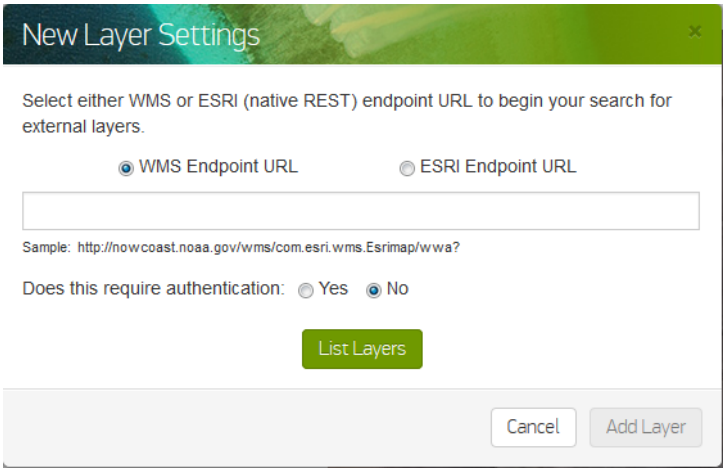

FIGURE 8.2 NEW LAYER SETTINGS DIALOG BOX

3. Ensure that the**WMS Endpoint URL** option is selected.
4. In the text field, enter a URL. If you'd like to use the sample provided, copy the URL, including the "?" into the field.
5. If authentication is required, select **Yes**. Otherwise, select **No**.
6. Click **List Layers**. An **Available Third Party Layers** dropdown opens (*Figure 8.3 New Layer Settings Dialog Box – With Available WMS Layers*).

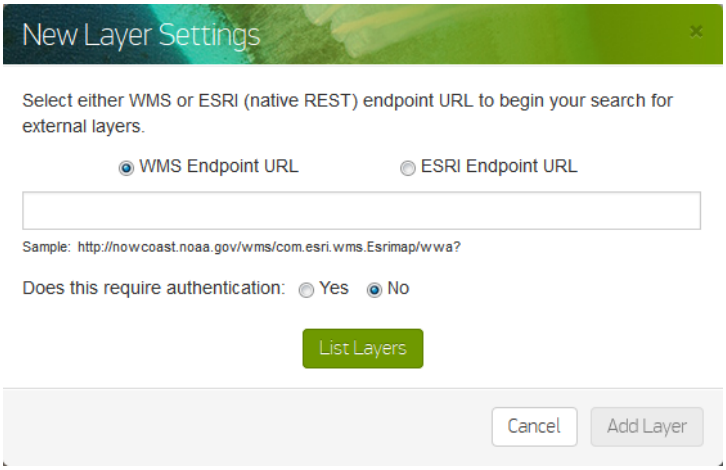

FIGURE 8.3 NEW LAYER SETTINGS DIALOG BOX – WITH AVAILABLE WMS LAYERS

7. Select one of the layers from the **Available Third Party Layers** dropdown.
8. In the **Name** field, enter a name for the layer.
9. In the **Description** field, enter a description for the layer.
10. Click **Add Layer**. The new layer is automatically selected and displayed as the top layer (*Figure 8.4 Supplemental Layers*).

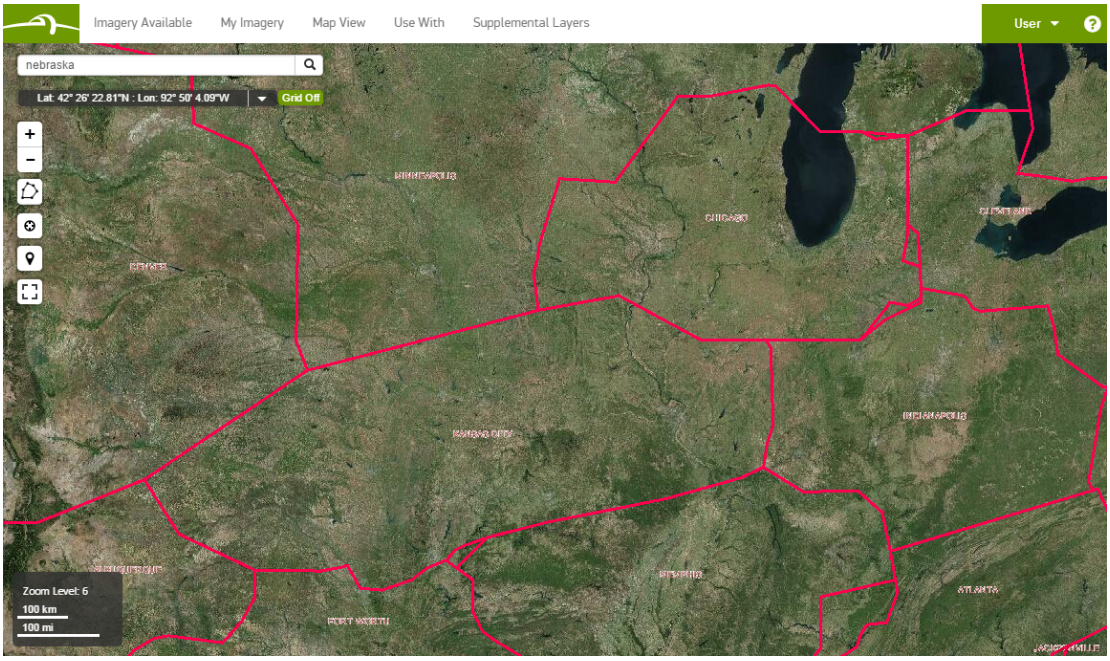

FIGURE 8.4 SUPPLEMENTAL LAYERS

8.2 Adding a Custom ESRI Layer

By adding an ESRI layer, you can see two types of data: imagery or vector data, such as metadata. If the ESRI endpoint layer you add includes metadata, click on the map view to see the related data. Some ESRI endpoints are publicly available and do not require authentication.

1. Click the **Supplemental Layers** menu option. The *Supplemental Layers* dialog box opens (*Figure 8.1 Supplemental Layers Dialog Box*).
2. Click **Add Custom Layer**. The *New Layer Settings* dialog box opens (*Figure 8.2 New Layer Settings Dialog Box*).
3. Select the **ESRI Endpoint URL** option.

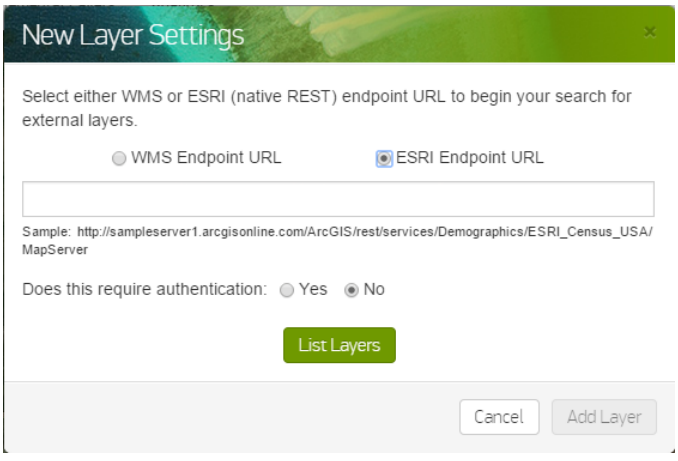

FIGURE 8.5 NEW LAYER SETTINGS DIALOG BOX – WITH ESRI OPTION SELECTED

3. In the text field, enter the URL.
4. If authentication is required, select **Yes**; otherwise, select **No**.
5. Click **List Layers**. An **Available Third Party Layers** dropdown opens (*Figure 8.6 New Layer Settings Dialog Box – With Available ESRI Layers*).

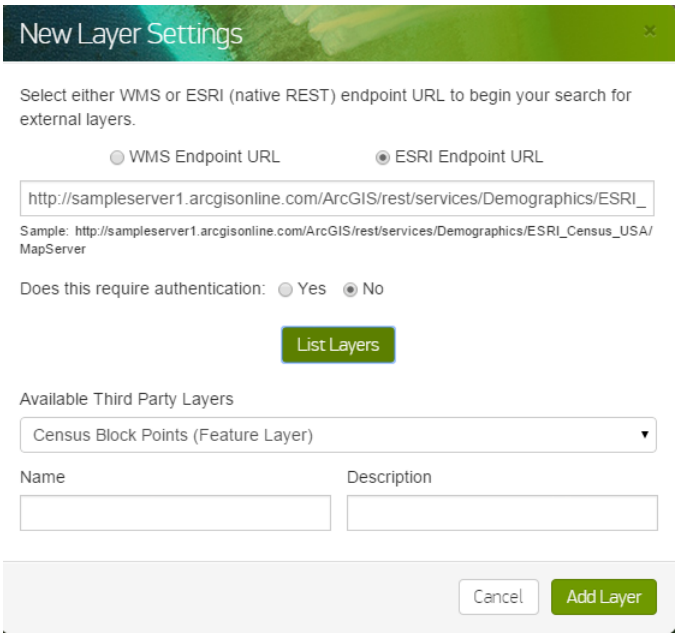

FIGURE 8.6 NEW LAYER SETTINGS DIALOG BOX – WITH AVAILABLE ESRI LAYERS

> NOTE: When adding an authenticated ESRI supplemental layer, My DigitalGlobe attempts to securely transmit your authentication credentials to the third-party server using Cross-Origin Resource Sharing (CORS), a mechanism that enables secure cross-site data transfers. If the third-party server does not allow access from DigitalGlobe domains (or if CORS fails for any other reason), a fallback mechanism is used to proxy the authentication request. If this fallback strategy fails, the layer cannot be viewed from within My DigitalGlobe.

6. Select one of the layers from the **Available Third Party Layers** dropdown.
7. In the **Name** field, enter a name for the layer.
8. In the **Description** field, enter a description for the layer.
9. Click **Add Layer**. The new layer is automatically selected and displayed as the top layer in the map view (*Figure 8.4 Supplemental Layers*).

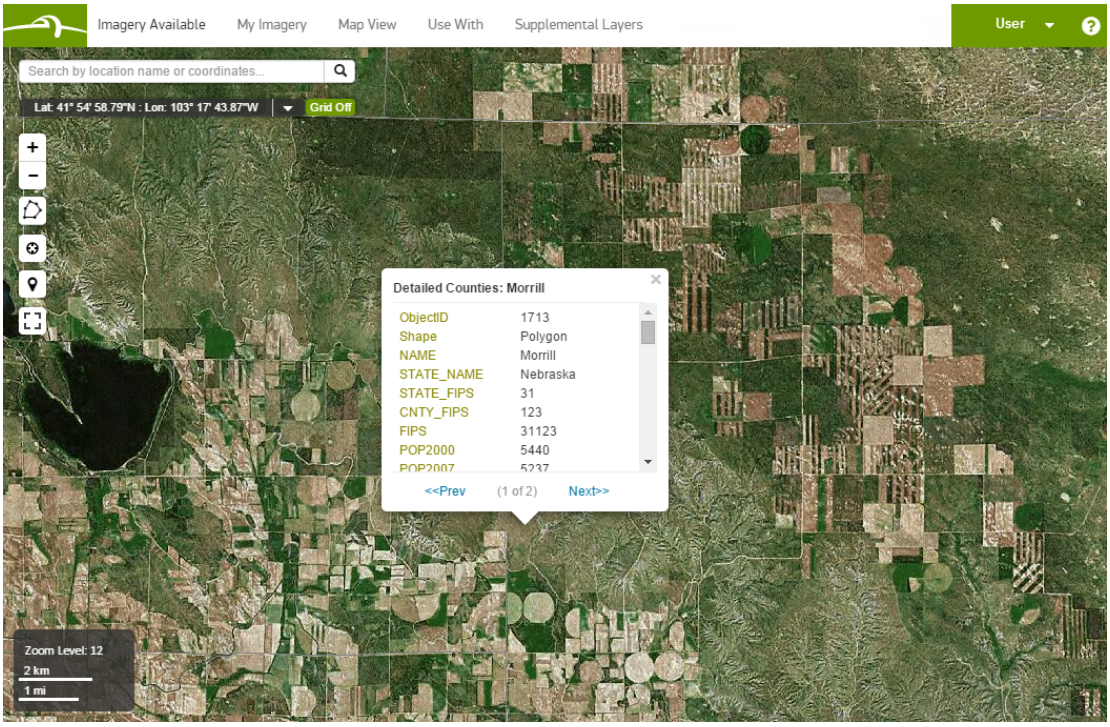

FIGURE 8.7 SUPPLEMENTAL LAYERS

8.3 Changing the Stacking Order of Supplemental Layers

1. Click the **Supplemental Layers** menu option. The *Supplemental Layers* dialog box opens (*Figure 8.1 Supplemental Layers Dialog Box*).
2. Click and drag the layers to change the order.
3. Click **Close**.

8.4 Working with the Refined Persistent Change Model (RPM)

Refined Persistent Change Model (RPM) is a vector dataset, produced by MDA under contract to the NGA, which depicts annual changes that were detected based on 30 meter Landsat imagery. DigitalGlobe hosts this dataset within EV-WHS and makes it available from within MyDigitalGlobe as well as directly through WMS and WFS services. You may toggle the RPM layer on/off or filter to restrict the range of years for which RPM information is shown.

MDA delivers the dataset to the NGA, and now DigitalGlobe, annually and divides those deliveries into six regions, or AOIs, which are produced and delivered at different points throughout the year. A map roughly defines the boundaries of each AOI (*Figure 8.8 Regional AOIs that DigitalGlobe Delivers Throughout the Year*).

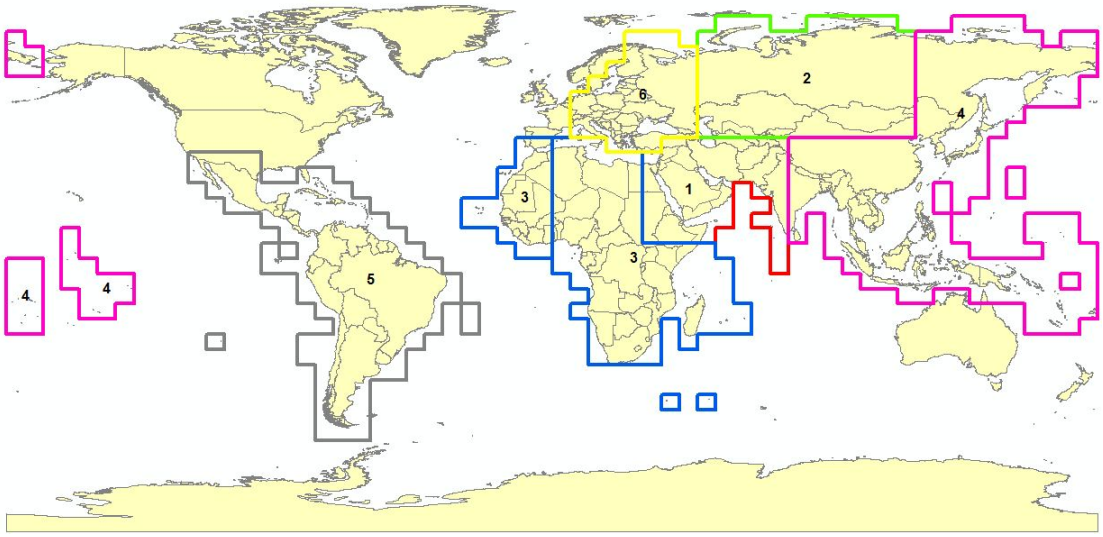

FIGURE 8.8 REGIONAL AOIS THAT DIGITALGLOBE DELIVERS THROUGHOUT THE YEAR

8.5 Viewing RPM on the Map View

NOTE: RPM layer information is only visible at zoom levels 13 through 20.

1. The “RPM Change Detection” layer can be visualized within MyDigitalGlobe similar to any other supplemental layer. Click the **Supplemental Layers** menu option. The *Supplemental Layers* dialog box displays a list of layers that you can add to the map to be rendered on top of DigitalGlobe’s imagery (*Figure 8.9 Supplemental Layers Dialog Box – with RPM Layer*).

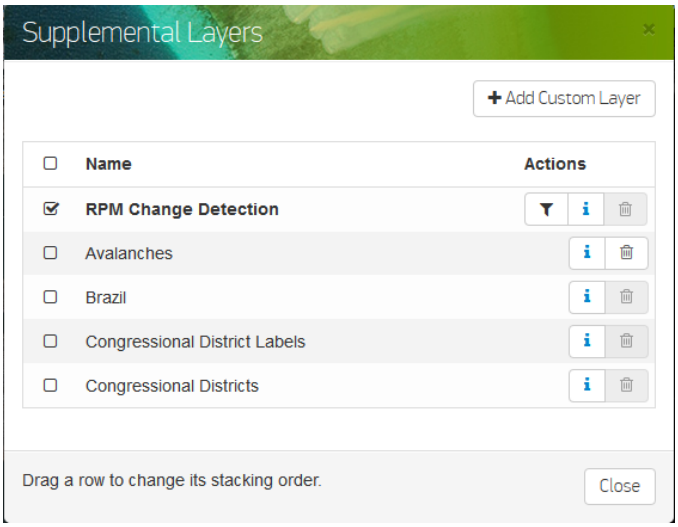

FIGURE 8.9 SUPPLEMENTAL LAYERS DIALOG BOX – WITH RPM LAYER

2. Select the **RPM Change Detection** checkbox.

8.6 Seeing RPM Change Detection Layer's Settings

To see the "RPM Change Detection" layer's settings:

1. Click the ("view layer settings") button. The *Layer Settings* window opens (*Figure 8.10 Layer Settings Window*).

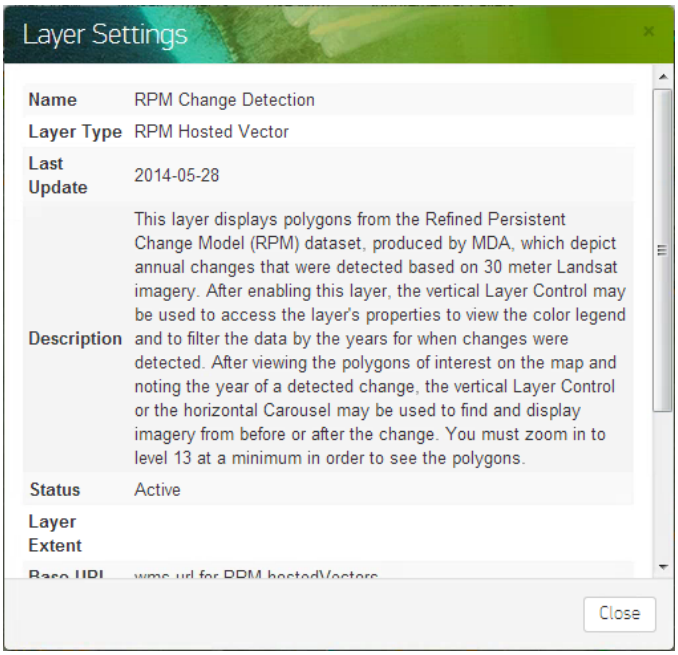

FIGURE 8.10 LAYER SETTINGS WINDOW

8.7 Setting Filters on the RPM Layer

If you want to set filters on the layer:

1. Click the ("filter") button. The *RPM Change Detection Properties* dialog box opens (*Figure 8.11 RPM Change Detection Properties Window*)

FIGURE 8.11 RPM CHANGE DETECTION PROPERTIES WINDOW

2. By looking at the legend, determine the color of the year for when changes were detected. Use the slider handles to filter the data by constraining the desired range of years to display.
3. Click **Apply**.
4. Click **Close**. The polygons that represent changes are rendered on the map. Note that you must zoom in to level 13 at a minimum in order to see the polygons. Distinct colors are used to represent the year for when the changes were detected (*Figure 8.12 RPM Polygons on the Map*)

FIGURE 8.12 RPM POLYGONS ON THE MAP

5. After viewing the polygons of interest on the map and noting the year of a detected change, the carousel may be used to find and display imagery from before or after the change. Refer to *Comparing Images on page 38* for more information.
6. RPM vector data can be exported by using the snapshot and library mechanisms. When the “RPM Change Detection” layer is enabled, snapshots include a zipped shapefile of those RPM polygons that are visible on the map.
7. The WMS and WFS services expose the “RPM Change Detection” layer for use within other OGC client applications. To maintain top performance, the WMS service limits the rendering of polygons to requests at level 13 and higher. Similarly, the WFS service limits requests to returning no more than 50,000 polygons regardless of the specified bounding box. Refer to *Using DigitalGlobe Web Services with Other Third-Party Tools on page 67*

9 Connecting to EV-WHS with a Third-Party Tool

You can use ArcMap, Google Earth, or ArcGIS Online to work with DigitalGlobe imagery, or connect to other applications using web services.

> NOTE: DigitalGlobe does not currently support CAC authentication when using EV-WHS with third-party tools. CAC users must create a password in My DigitalGlobe for connecting to EV-WHS with third-party tools; follow the instructions in *Your Password on page 15*.

9.1 Connecting via ArcMap (Desktop Version)

My DigitalGlobe creates a downloadable file containing all of the connection information for EV-WHS that you can open in ArcGIS to access DigitalGlobe imagery.

> NOTE: ArcGIS versions later than 10.1 do not support a connection to EV-WHS. Also, although the WMTS and the WMS layers function as expected in Arc 10.1, the feature service only displays feature polygons and not their metadata. DigitalGlobe is working with ESRI to fix these issues.

1. From the **Use With** menu, select **ArcGIS**. The file downloads.
2. Open ArcGIS.
3. Open the downloaded file.
4. Enter your EV-WHS credentials at the prompt.

9.2 Connecting via Google Earth

My DigitalGlobe creates a downloadable file containing all of the connection information for EV-WHS that you can open in Google Earth to access DigitalGlobe imagery.

1. From the **Use With** menu, select **Google Earth**. The KMZ file downloads.
2. Open Google Earth.
3. Open the downloaded KMZ file.
4. Enter your EV-WHS credentials at the prompt.

9.3 Connecting via ArcGIS Online

My DigitalGlobe creates a URL containing all of the connection information for EV-WHS that you can use in ArcGIS Online to access DigitalGlobe imagery.

1. From the **Use With** menu, select **ESRI REST Services**. The *ESRI REST Services* window opens (*Figure 9.1 ESRI REST Services Window*)

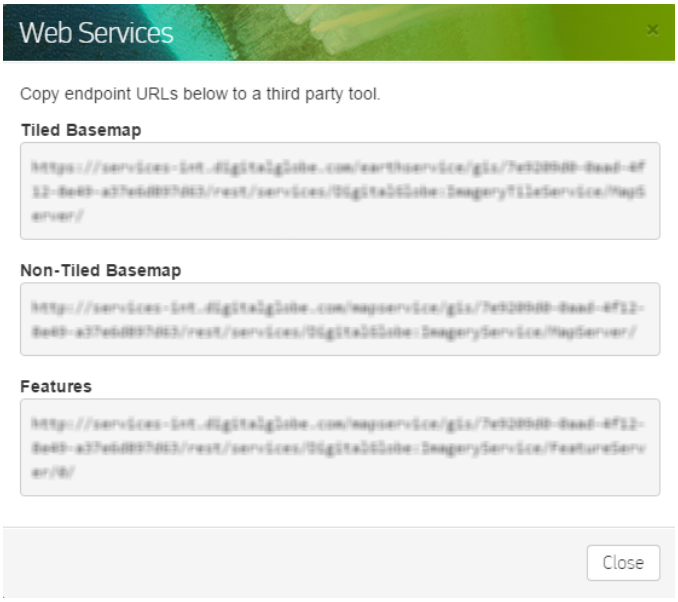

FIGURE 9.1 ESRI REST SERVICES WINDOW

2. Click the URL for the service you want. The entire URL is highlighted.
3. Right click the selected text and choose **Copy**.
4. Open the ArcGIS web map viewer (maps.arcgis.com/home/webmap/viewer.html) and log in to your account.
5. Click **Add**, then **Add Layer from Web**.
6. Paste the URL you copied and click **Add Layer**.
7. Enter your EV-WHS credentials at the prompt.

> NOTE: 3857 is the default projection.
> For the tiled basemap URL only, you have the option to use the 4326 projection instead. To do that, insert "/4326" between "services" and "/<layer name>" in the URL, for example:
> `https://evwhs.digitalglobe.com/earthservice/gis/<connect ID>/rest/services/`
> **`4326`**`/DigitalGlobe:ImageryTileService/MapServer/`

9.4 Using DigitalGlobe Web Services with Other Third-Party Tools

Use this feature to access the OGC URLs available to your selected account. These URLs can be added to geospatial applications that support the corresponding service. This enables on-demand integration of that service's content with the application. WMS (images), WMTS (tiled images), WFS (metadata), and WCS (downloads), if subscribed to your account, can be integrated into applications that utilize these standards. For more information, please refer to the appropriate user guide or application documentation.

1. From the **Use With** menu, select **Web Services**. The *Web Services* window displays (*Figure 9.2 Web Services Window*).

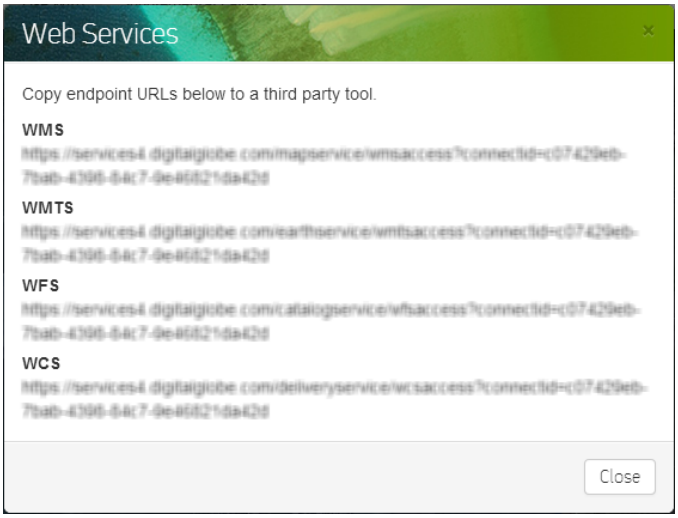

FIGURE 9.2 WEB SERVICES WINDOW

2. Click the URL for the service you want. The entire URL is highlighted.
3. Right click the selected text and choose **Copy** or **Go to…**.
4. Open a Web browser or compatible geospatial application and either paste the URL to the address bar or add it according to the application's instructions, often referred to as "adding a service, layer, data source", and so forth.
5. Enter your EV-WHS credentials in the appropriate fields or when prompted.

Glossary

AOI

Area of Interest. The area on the Earth that you want to view.

BE Number

Provides a mechanism to search for a location by a unique identifier within the NSG; only available in secure domains.

Bicubic Interpolation

Bicubic interpolation combines data points on a two-dimensional grid. This method outputs the smoothest surface of all interpolation methods.

Bilinear Interpolation

Bilinear interpolation uses the value of the four nearest cell centers to determine the value on the output raster. The new value is a weighted average of these four values, adjusted to account for their distance from the center of the output cell. The result is a smoother-looking surface than provided by "nearest neighbor".

Black and White

Single band, black-and-white imagery. Also referred to as panchromatic.

CAC

See Common Access Card.

Catalog ID

See Feature ID.

CATID

See Feature ID.

CE

Circular Error.

CE90

Circular Error at 90% confidence. Indicates that the actual location of an object is represented on the image within the stated accuracy for 90% of the points.

CIR

Color Infrared.

Common Access Card

The Common Access Card (CAC) is a smart card about the size of a credit card, and is the standard identification for active duty military personnel, Selected Reserve, United States Department of Defense civilian employees, and eligible contractors. The CAC is designed to provide two-factor authentication: what you have (the physical card) and what you know (the PIN).

COTS

Commercial-Off-The-Shelf.

DEM

See Digital Elevation Model.

Digital Elevation Model (DEM)

A digital model of terrain relief usually derived from stereo imagery. A DEM is used to remove terrain distortions from Orthorectified Imagery products.

DRA

Dynamic Range Adjustment. An optional post-processing feature that enhances the visual interpretability of the image.

DTED

Digital Terrain Elevation Data.

ECF

Earth Centered Fixed.

False Color

Viewing multispectral or color imagery in a specific combination of bands (near infrared, red, green). When viewing false color imagery, colors appear "abnormal" (e.g., healthy, green vegetation appears in red on a false color image). False color imagery is commonly used in vegetation analysis. Also known as Color Infrared.

Feature ID

The 30-digit unique identifier for images in the online catalog OR the 16-digit unique identifier for images in the DigitalGlobe archive that are not online; also known as the catalog ID or CATID. For online images, the CATID is reflected in the Legacy ID field.

FG

Foundation GEOINT.

FTP

File Transfer Protocol.

GCP

See Ground Control Point.

GE01

GeoEye-1 Satellite.

Geographic Projection

Maps longitudes as straight vertical lines and latitudes as straight horizontal lines all spaced out consistently for constant intervals.

GeoTIFF format

Georeferenced tagged image file format. A GeoTIFF file is a TIFF file that is embedded with geographic data tags.

GML

Geography Markup Language. GML is XML code used to express geographical features.

GPS

Global Positioning System.

Ground Control Point (GCP)

A known geographic coordinate location on the ground. A GCP can be collected from ground survey or maps (Primary GCP), or derived via triangulation of primary GCPs (Secondary GCP). GCPs can be planimetric (x, y; latitude, longitude) or vertical (x, y, z; latitude, longitude, elevation).

Ground Sample Distance (GSD)

The size of a single pixel as measured on the ground. This is also referred to as “resolution”.

GSD

See Ground Sample Distance.

Image Support Data (ISD)

A set of files which contain all the necessary data necessary to use and process Imagery Products. These files can be viewed as a collection point for all ancillary data that is expected to be useful to a customer.

ISD

See Image Support Data.

JPEG2000 format

The JPEG2000 format is a JPEG format that was introduced in the year 2000. It has considerable advantages over basic JPEG format including error resilience and progressive transmission.

LE

Linear Error.

LE90

Linear Error at 90 percent confidence. Indicates that the actual elevation of an object is represented within the stated accuracy for at least 90% of elevation posts.

Legacy ID

See Feature ID.

MBR

Minimum-bounding rectangle.

Metadata
Ancillary data that describes and defines the imagery product. DigitalGlobe provides metadata in a set of Image Support Data files.

Monoscopic
The collection of a single image, as opposed to a stereo collection.

Mosaic
The process of digitally-assembling images to create contiguous large-area coverage.

MrSid format
Multi-Resolution Seamless Image Database. This format compresses large raster images while maintaining the image quality.

MS
See Multispectral.

Multispectral
Imagery with data recorded in multiple discrete spectral bands. Imagery collected in four or eight ranges of wavelengths in the electromagnetic spectrum.

Nadir
The point on the ground vertically beneath the sensor.

National Imagery Transmission Format
See NITF format.

Nearest Neighbor Interpolation
Uses the value of the closest point and disregards all other values, yielding a piecewise-constant interpolant.

NED
National Elevation Dataset DEM. NED DEM is available in the United States. Accuracy in Alaska is not as high as in the contiguous United States.

NIIRS
National Image Interpretability Rating Scale.

NIR1
Near Infrared 1.

NIR2
Near Infrared 2.

NITF format
National Imagery Transmission Format. A United States Department of Defense standard for transmitting and storing digital imagery.

NMAS

United States National Map Accuracy Standards.

NRG

Near-Infrared, Red, Green.

Off-Nadir Angle

The angle between nadir and the point on the ground that the sensor is pointing. Off-nadir angle can be measured in the along-track (forward) direction or across-track (sideways) direction.

OGC

Open Geospatial Consortium. An international standards organization comprised of commercial, governmental, nonprofit and research organizations. They support geospatial content development as well as data processing and sharing.

Orthorectification

The process of removing image distortions introduced by the collection geometry and variable terrain, and re-sampling the imagery to a specified map projection. Also referred to as ortho-correction or terrain correction.

OWS

OGC Web Service Common.

Pan/Panchromatic

A wide spectral band which is comprised of reflected light in the visible spectrum (blue, green, red and NIR). It is displayed as a black and white image.

Pan-Sharpened

rocessed used to colorize imagery by fusing multispectral and panchromatic bands.

Partition

The unit of measure based on the tile zoom level grid for tar file creation for imagery tiles. All tiles and associated metadata for a partition will be tar-compressed into a single file.

PD

Principal Distance.

Photogrammetry

The art, science, and technology of obtaining reliable information about physical objects and the environment through the process of recording, measuring, and interpreting photographic images and patterns of electromagnetic radiant imagery.

Pixel

Picture element. The smallest element comprising a digital image.

PNIIRS

Predicted National Image Interpretability Rating Scale.

Product Framing

The manner in which Imagery Products are delivered. Products are either Scene-based or Area-based.

PVL

Physical Volume Library.

QB02

QuickBird satellite.

Radiometric Correction

The correction of variations in data that are not caused by the object or scene being scanned, such as non-responsive detectors, scanner inconsistencies, and atmospheric interference.

Remote Sensing

The measurement or acquisition of data about an object by an instrument not in contact with the object. Satellite imagery, aerial photography, and radar are all types of remote sensing.

Resolution

The resampled image pixel size derived from GSD.

RGB

Red, Green, Blue.

RMSE

Root Mean Square Error.

RPC

Rational Polynomial Coefficient camera model. RPCs provide the camera geometry obtained at the time of the image collection.

RRO

Rapid Response Orthomosaic.

Scale

The ratio of distance on a map as related to the true distance on the ground. Products with a larger scale have higher geometric accuracies than products with a smaller scale.

Seamlines

Seamlines are the lines at which two separate images overlap. These overlapping images can be blended along the seamline to show a more uniform image.

Sensor Correction

The correction of variations in data that are caused by variations in sensor geometry, attitude, and ephemeris.

Spatial Mosaic

The assembly of multiple scenes, each of which shows a portion of the order polygon, into a single image. Usually involves edge matching adjacent scenes.

SRTM

Shuttle Radar Topography Mission digital elevation models.

Stereo

The collection of two or more images of the same Area of Interest (AOI) from different viewing angles.

Sun Azimuth

The azimuth of the sun as seen by an observer sitting on the target measured in a clockwise direction from north.

Sun Elevation

The angle of the sun above the horizon.

Sun-Synchronous

An orbit which rotates around the Earth at the same rate as the Earth rotates on its axis.

Swath Width

The width of an image.

Target Azimuth

The azimuth of the target as seen by an observer sitting on the spacecraft measured in a clockwise direction from north.

TDI

Time Delay Integration.

Terrain Correction

The correction for variations in data caused by terrain displacement due to off-nadir viewing.

TLC

Time-lagged Line Count.

True color

Viewing multispectral or color imagery in a specific band combination (red, green, blue). When viewing true color imagery, colors appear “normal” (e.g., vegetation is green). Also known as Natural Color.

Universal Transverse Mercator Geographic Coordinate System (UTM)

See UTM.

UTM

Universal Transverse Mercator Geographic Coordinate System. UTM utilizes a two-dimensional Cartesian system to specify locations on the Earth’s surface.

WCS
Web Coverage Service.

WebCGM
Web Computer Graphics Metafile.

WFS
Web Feature Service.

WMS
Web Map Service.

WMTS
Web Map Tile Service.

WV01
WorldView-1 satellite.

WV02
WorldView-2 satellite.

WV03
WorldView-3 satellite.

Index

G

H

I

L

M

O

P

R

S

T

U

V

Z