



THE PLANET EXPLORER LAB QUICK-START USER GUIDE

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1. PURPOSE

This document provides an overview of the interface and quick description of commonly used functionality available in the Planet Explorer Lab graphical user interface (GUI) application. This application is used specifically to search and access PlanetScope and RapidEye ortho tiles, which includes the new PlanetScope NIR imagery product.

Disclaimer

This document is designed as a general guideline for customers interested in acquiring Planet Explorer Lab products and services. Planet takes an agile and iterative approach to its technology, and therefore may make changes to the product(s) described in this document.

2. USER INTERFACE OVERVIEW

The image shows a composite view of the Planet Labs user interface. On the left, a search results panel for 'San Francisco' is displayed, featuring a header with a user profile, a search bar, and a save button. Below this are sections for date ranges and filters, followed by a list of 272 results. Each result item includes a thumbnail, capture date, coverage percentage, availability status, and a download icon. On the right, a map of the San Francisco Bay Area is shown, with a yellow box highlighting the city of San Francisco. To the right of the map is a vertical toolbar with various icons, and at the bottom right is a zoom control.

- 12
- 9
- 1
- 8
- 7
- 11
- 10
- 1
- 2
- 3
- 4
- 5
- 6

12. Welcome, explorer! / Log out
9. San Francisco / Not saved
1. Save / X
8. Viewing imagery from all time / Edit date ranges
7. 272 results found / Hide 271 unselected / Sort / Provider
11. July 4, 2016 / 37.13% coverage / 3 items Available
June 23, 2016 / 100% coverage / 4 items Available
This result has 4 items
Captured at 12:42:24 PM
Captured at 12:42:23 PM
Captured at 12:42:20 PM
Captured at 12:42:20 PM
June 21, 2016 / 73.44% coverage / 4 items Available
June 13, 2016 / 99.65% coverage / 4 items Available
June 7, 2016 / 100% coverage / 4 items Available

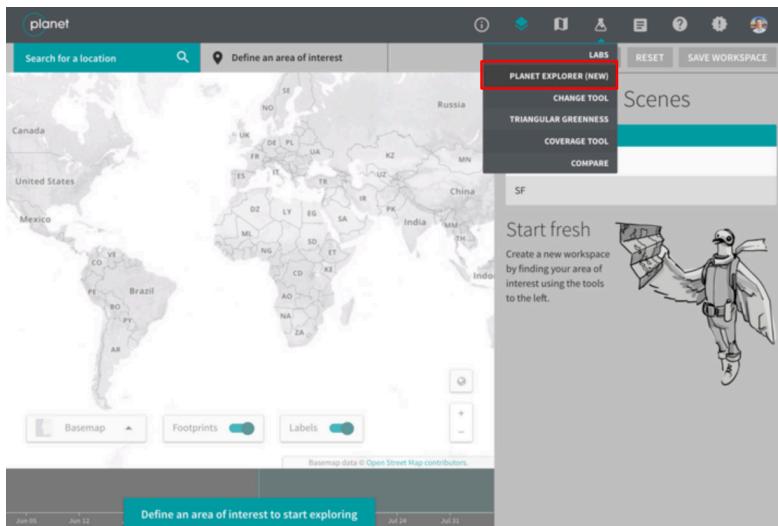
- 1. Search:** Search for any location or a specific area of interest by entering into the input box OR by uploading a geometry file (Shapefile, GeoJSON, KML, or WKT).
- 2. Imagery Window:** This area displays the visual Ortho Tile imagery results.
- 3. Settings:** The Settings icon is located at the top right corner of the application. You can select specific Basemaps, Overlays, and Mosaics.
- 4. Draw Tools:** These tools allow you to specify an area to see imagery results. The draw tool capabilities available are drawing a circle, drawing a rectangle, drawing a polygon, and/or limiting the size of the drawing to the size of loadable imagery.
- 5. Compare Tool:** The Compare Tool allows you to compare sets of Planet imagery from different dates.
- 6. Zoom:** Allows you to zoom in or out of the selected area. Zoom-in capabilities allow you to zoom in to [zoom level 15](#) for imagery available under your subscription and zoom level 13 for everywhere else.
- 7. Results Panel:** Lists all imagery available, organized by the date it was captured, for your selected area. By default, the results are listed by most recent captured.
- 8. Filters:** You can filter by specifying a specific date range and/or customizing metadata.
- 9. Save Search:** The Save functionality allows you to save your search criteria based on area of interest, dates, and filters.
- 10. Imagery Details:** You can review metadata details about each imagery product.
- 11. Download:** The Download icon allows you to download imagery based on your subscription.
- 12. Orders:** The Orders icon keeps track of your order history and status of pending orders.

3. COMMONLY USED FUNCTIONALITY

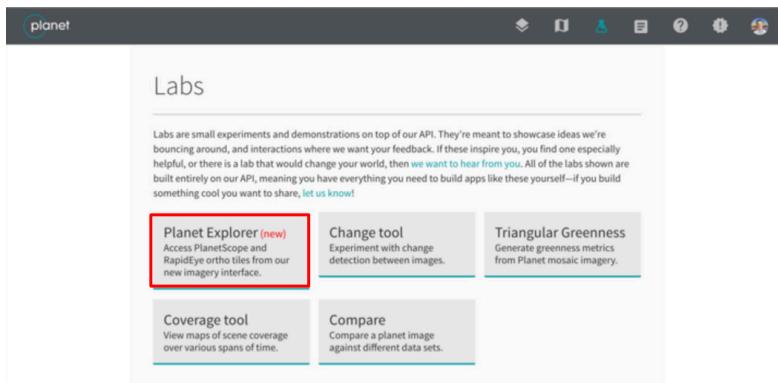
3.1 Navigating to the Planet Explorer Lab

From Scenes Explorer to Planet Explorer Lab

1. Go to the Scenes Explorer at www.planet.com/scenes.
2. Hover over the Labs icon in the top right menu.



3. Select the Planet Explorer lab from the dropdown menu OR the Labs landing page.



From Planet Explorer Lab to Scenes Explorer

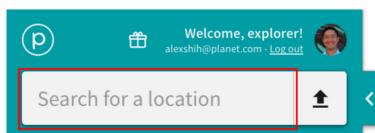
1. In the Planet Explorer Lab, click on the top left Planet logo. You will be directed to the Labs landing page.
2. In the Labs landing page, click on the Scenes Explorer icon in the top right menu.

3.2 Search for Area of Interest

There are different methods you can search for an Area of Interest or any location. The following outlines each method.

Method 1: Entering a Location

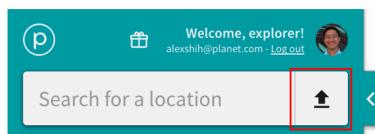
1. In the Search box, enter the name of a location. Suggestions will appear in the dropdown.



2. Type "enter" after entering your location OR click on one of the suggestions.
3. The resulting imagery of your search will then appear in the Results Panel on the left side.

Method 2: Uploading a Geometry File

1. Click on the upload button to the right of the Search box.



2. Select the file you want to upload. File types supported are: Shapefile, GeoJSON, KML, or WKT.

3.3 Filtering By Time

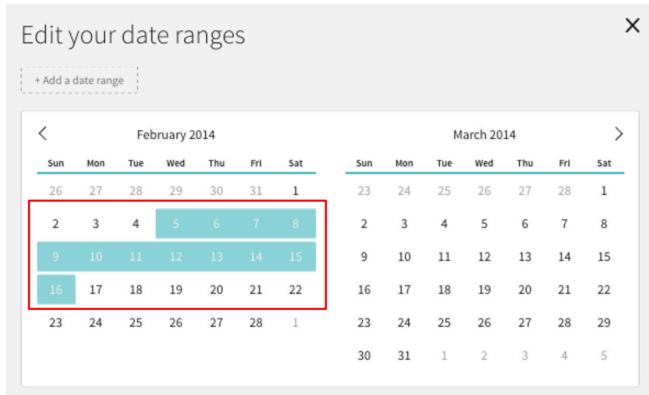
1. After you search for an Area of Interest, the results are loaded for all time by default.
2. You can adjust the date range by clicking on "Edit date ranges" above the Results Panel on the left side.

A screenshot of the Planet Labs results panel. At the top, it says 'Viewing imagery from all time' and has a red box around the 'Edit date ranges' button. Below that, it says 'No metadata filters enabled' and has a red box around the 'Edit filters' button. It then displays a list of results:

	Date	Coverage	Items Available	Action
	August 3, 2016	88.13% coverage	4 items Available	
	July 31, 2016	100% coverage	4 items Available	
	July 27, 2016	100% coverage	4 items Available	

The results panel also includes a 'Sort' dropdown, a 'Provider' dropdown, and buttons for '271 results found' and 'Hide 270 unselected'.

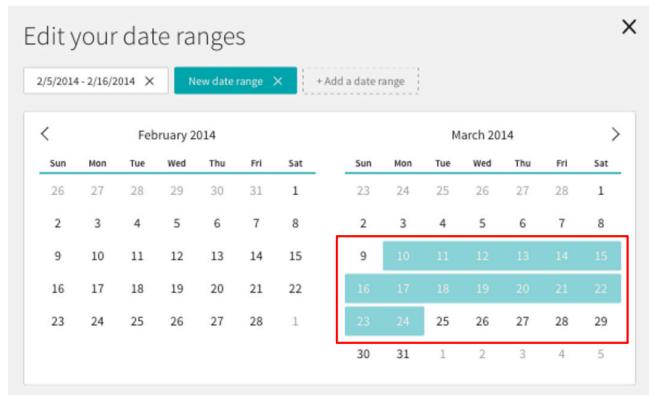
3. For a single date range, you can select the start date and end date by clicking on the calendar.



4. For multiple date ranges, click on the “+ Add a date range” and then select the start date and end dates for each date range.



5. After you added a new date range, repeat Step 3 by selecting the start and end date for the new date range.



3.4 Using Draw Tools

You can customize your Area of Interest by using the Draw Tools. These tools allow you to specify a specific area to see imagery results. The draw tool capabilities available are drawing a circle, drawing a rectangle, drawing a polygon, and/or limiting the size of the drawing to the size of loadable imagery.

Draw a Circle

1. Click on the “Draw a Circle” icon.
2. In the Imagery Window, click to select the location of the center of the circle.
3. Move the cursor to change the radius of the circle.
4. Click again to set the radius of the circle.



Draw a Rectangle

1. Click on the “Draw a Rectangle” icon.
2. In the Imagery Window, click to select the location of the first corner of the rectangle.
3. Move the cursor to expand the size of the rectangle.
4. Click again to set the size of the rectangle.



Draw a Polygon

1. Click on the “Draw a Polygon” icon.
2. In the Imagery Window, click to select the location of the first corner of the polygon.
3. Click and then move the cursor to select the location of another corner of the polygon.
4. To set the shape of the polygon, double click.



Limiting the Draw Tool Size

1. In some cases, a certain Area of Interest may be too large to load (e.g., searching for California). You can click on “Limit draw tool size” to automatically select size that will guarantee imagery results.



3.5 Viewing Metadata

Each image results has associated metadata, such as acquisition time, cloud cover, etc. which you can view in the Planet Explorer Lab. Full metadata details can be found in Planet Documentation planet.com/docs/v1.

1. In the Results Panel that displays after you search for an area of interest or location, the imagery is organized by the date it was captured.
2. Click on the image thumbnail to select imagery for a specific date.
3. After you click on the image thumbnail, you will notice a dropdown of all single imagery captures that were acquired on that specific date.
4. To view the metadata associated with a single imagery capture, click on the “i” icon.

This result has 4 items

Captured at 12:42:24 PM	i

5. The Metadata Panel will appear to the right of the Imagery Window.

Welcome, explorer! alexishh@planet.com Local

San Francisco Not saved

Viewing Imagery from all time Edit date ranges

No metadata filters enabled Edit filters

268 results found Hide 267 unselected Sort Provider

July 11, 2016 100% coverage Available

July 6, 2016 100% coverage Available

June 23, 2016 100% coverage Available

This result has 4 items

Captured at 12:42:24 PM

Captured at 12:42:23 PM

Captured at 12:42:20 PM

Captured at 12:42:20 PM

June 21, 2016 73.44% coverage Available

June 13, 2016 99.69% coverage Available

Image Details

Image ID: 20160623_144223_1056417_RapidEye-2 Acquired on June 23, 2016

Acquired	Oakland	June 23, 2016
Black Fill	0 %	
Cloud Cover	0 %	
Grid Cell	1056417	
Provider	rapideye	
Resolution	5	
Satellite ID	RapidEye-2	
Sun Azimuth	153.8°	
Sun Altitude	74.6°	
Off-Nadir	0.2°	

3.6 Compare Tool

The Compare Tool allows you to compare sets of Planet imagery from one capture date with another capture date.

1. The Compare Tool is disabled by default until it is available to use.



2. Search for an Area of Interest with the Search box or draw one with the Draw Tools.

3. In the Results Panel, use Shift-Click to select two capture dates (hold Shift and press Click on two days).



4. Now the Compare Tool button is enabled. Click the Compare Tool button in the upper right of the Imagery Window.



5. Move the Compare Slider to see how imagery from the two days differ.

The screenshot shows the Planet Labs software interface. On the left, there's a sidebar with a user profile, a search bar set to "San Francisco", and a list of 272 results found. The results are sorted by date, with the most recent ones at the top. Each result entry includes a thumbnail, the date, coverage percentage, the number of items available, and a download button. The main area displays a map of San Francisco and surrounding areas, divided into two vertical sections: "June 23, 2016" on the left and "July 11, 2016" on the right. A circular cursor is positioned in the center where the two sections meet. To the right of the map are various control buttons for zooming and saving.

Date	Coverage (%)	Items Available
July 11, 2016	100% coverage	4 items
July 10, 2016	24.91% coverage	3 items
July 6, 2016	100% coverage	5 items
July 4, 2016	37.13% coverage	3 items
June 23, 2016	100% coverage	4 items
June 21, 2016	73.44% coverage	4 items
June 13, 2016	-	4 items

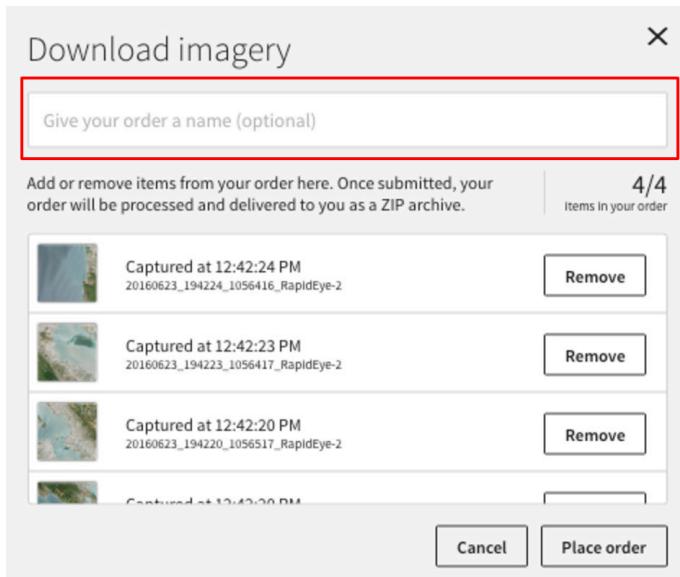
3.7 Download Imagery

The Download feature allows you to download imagery and data based on your subscription.

1. Click on the Download icon to the right of the capture date.

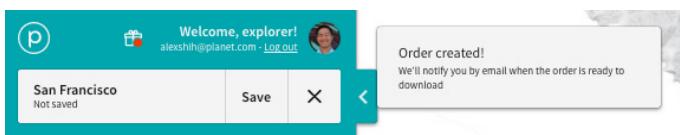


2. In the pop up window, enter the name of your order. You also have the option of removing individual captures from the capture date you selected to download.



3. After entering the name of your order, click "Place order."

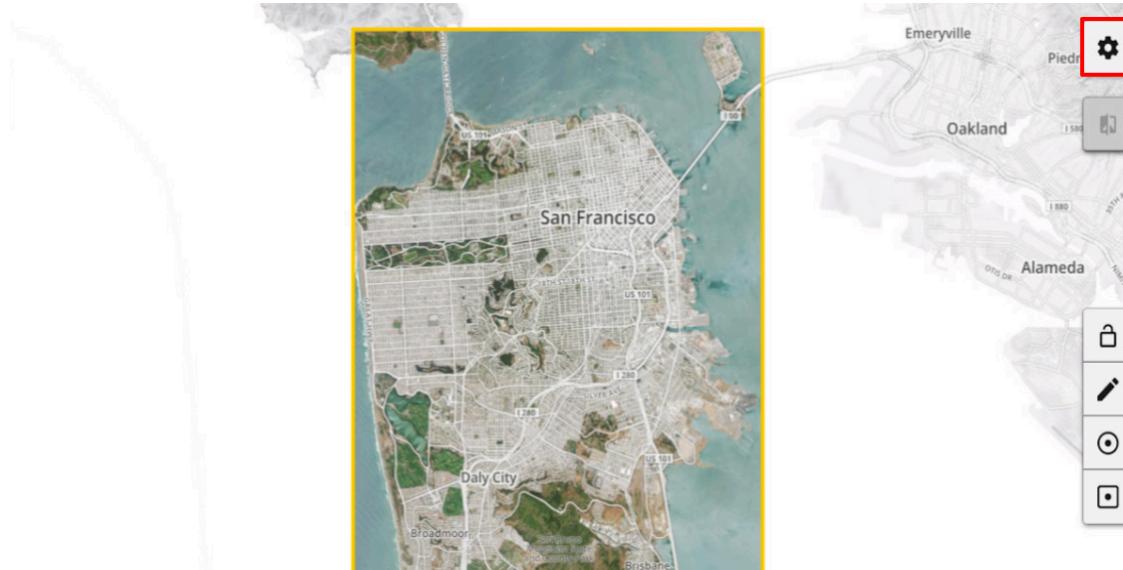
4. When you place the order, you will see a notification confirming that your order has been created and is being processed.



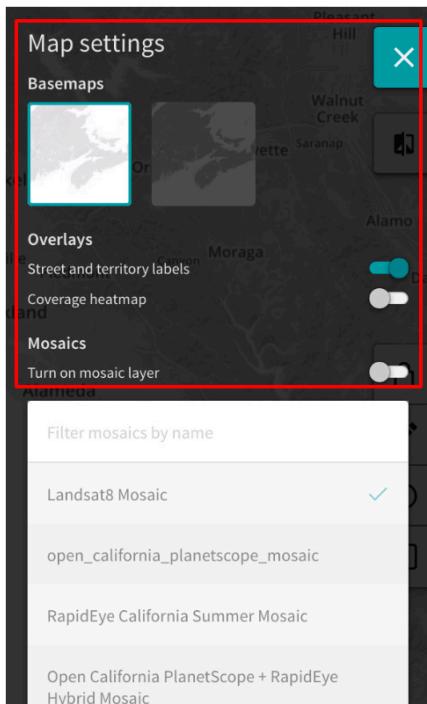
3.8 Settings

The Settings icon is located at the top right corner of the application. You can select specific Basemaps, Overlays, and Mosaics.

1. Click on the Settings icon at the top right of the Imagery Window. This will open up the Settings panel.



2. In the Settings panel, you can select specific Basemaps, Overlays, and Mosaics.



4. RELEASE TIMELINE

The table below outlines the feature roadmap for the Planet Explorer Lab application.

Features	August 15th	September 15th
	Assets: Analytic assets will be available for download through the application. Notifications: Enable notifications on your Saved Search (Workspace).	Assets: Basic and Scene (PlanetScope) assets will be available for download through the application.