NEXT | Technical Workshop 1 | 10:45 AM

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# Search Planet's Data Catalog with the Data API


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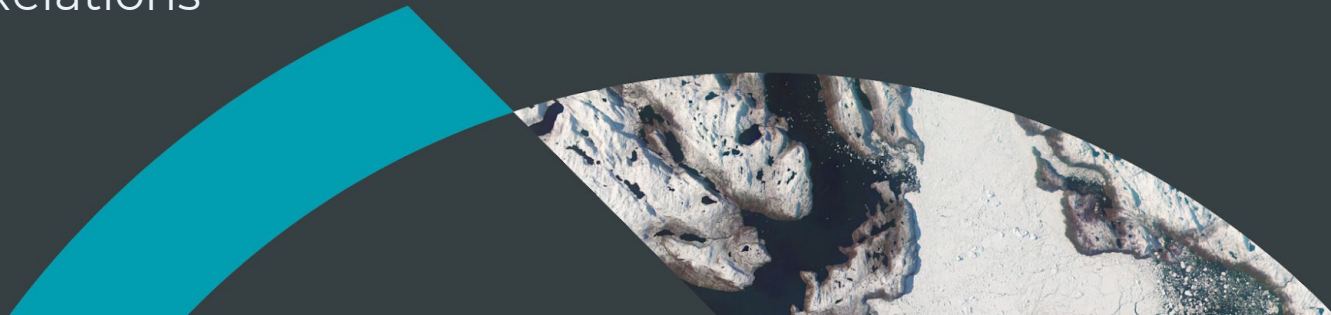
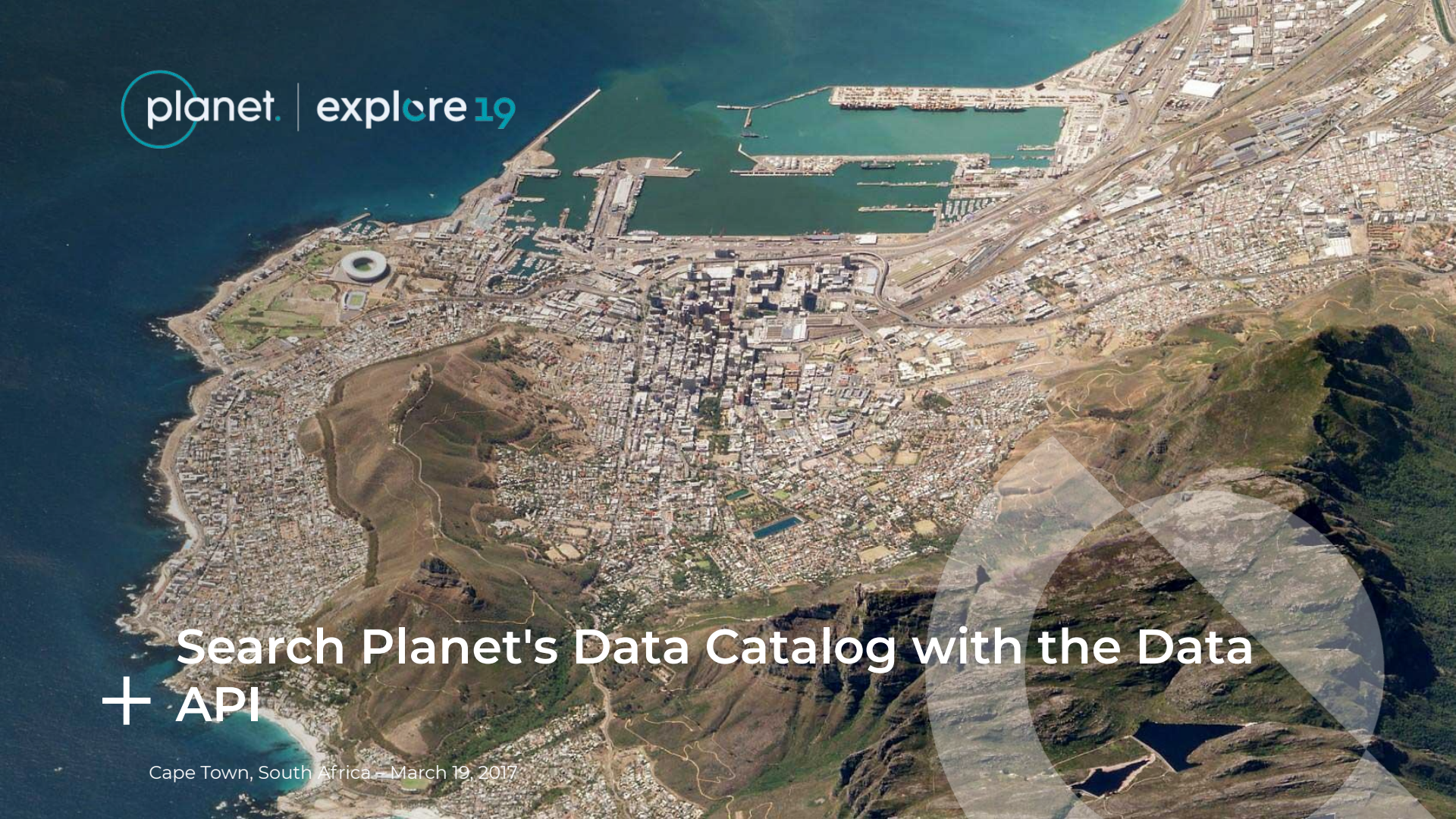
**What will you discover?**

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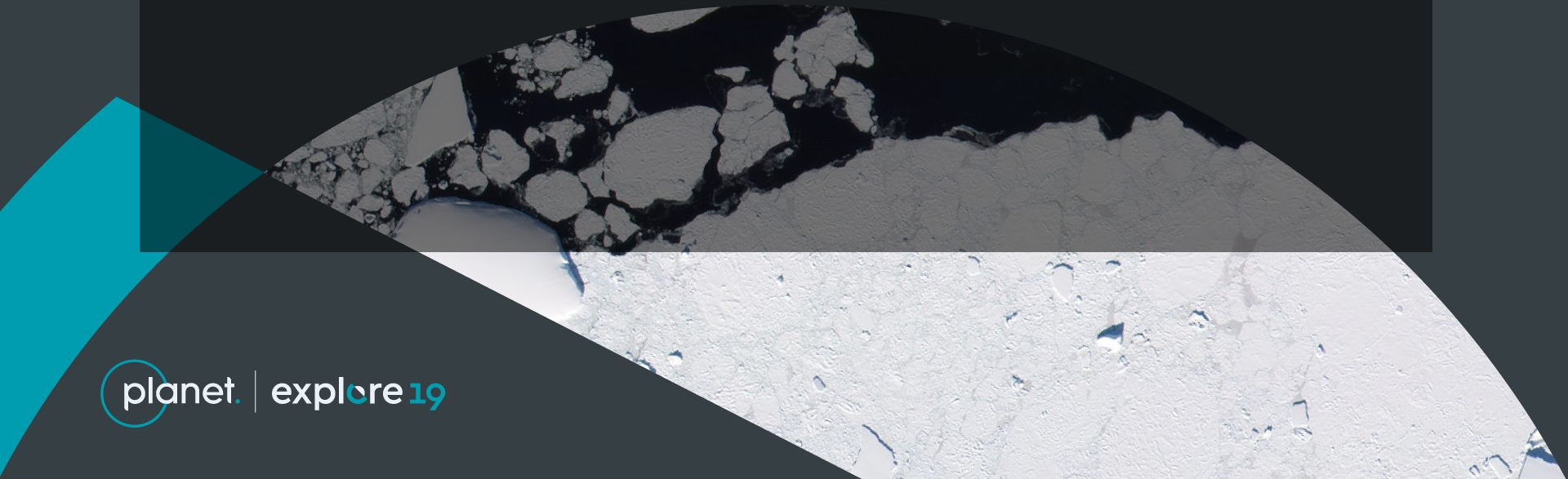
Search Planet's Data Catalog with the Data + API
Cape Town, South Africa – March 19, 2017

# Workshop Goals

1. Understand Planet's data api
2. Retrieve scene counts/statistics
3. Query the api for scenes
4. Activate/download scenes



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# When Should I Use Planet's Data API?

(and when not to)

**When to use the API:**

You're building tools to work with our data
You're integrating Planet data in large-scale data processing
You need to make complex searches that existing tools don't handle

**When _not_ to use the API:**

When you "just want the data" (Use https://planet.com/explorer)
When you want to interactively explore the data (See link above)
When you want to batch download data (Use the CLI tools)

# Planet API Resources

## Where are the docs?

Planet Developer Center: developers.planet.com

Data API Documentation: developers.planet.com/docs/api/

# Workshop Setup

To simplify hands-on participation, this workshop uses an interactive, pre-configured Jupyter environment.

We'll work in Python, but stay mostly language agnostic

- i.e. we'll make requests to the API directly

Access your own sandboxed instance of this Jupyter env at:

- https://go.planet.com/explore19-searchdata

If you'd like to browse the code repo directly, visit:

- https://github.com/joferkington/planet_api_workshop

# Data API Mechanics and Setup

## What is it and how do I use it?

We'll dive in with an interactive notebook:

notebooks/1_BasicMechanics.ipynb



# Item Types, Metadata, and Assets

## What kinds of data and metadata are there?

Two core concepts of our data are item types and assets.  A single image can have multiple representations, and our platform provides access to more than just Planetscope data.  We'll explore what we mean by "item type" a bit and learn how to retrieve metadata for a specific item.

Remember that opaque-looking URL in the last exercise?  Let's dig into it more.

notebooks/2_ItemTypes.ipynb

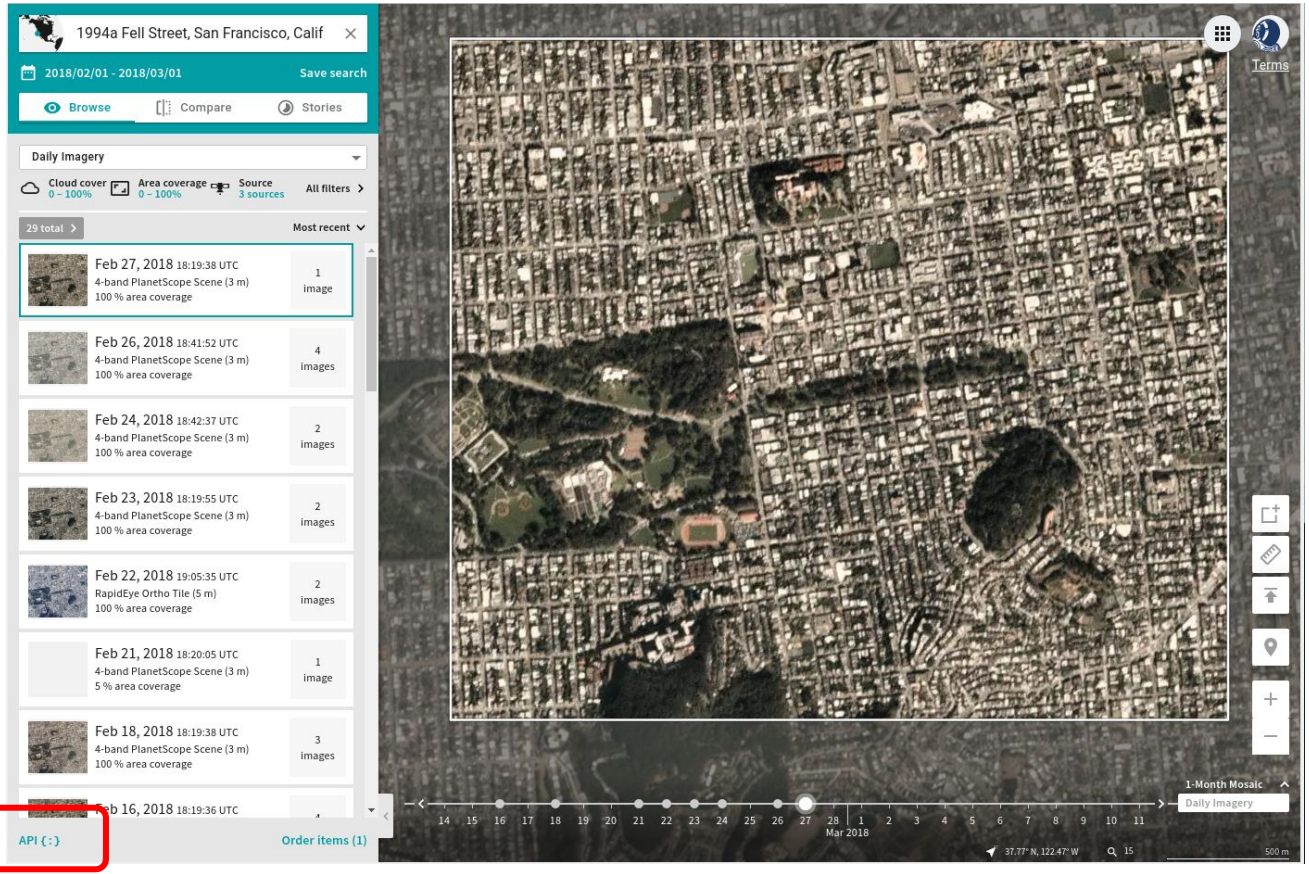
# Filters and Statistics

## How do queries work?

Now that we know a bit more about the metadata, let's learn how Planet's query language works by requesting statistics on how many scenes match a search.

notebooks/3_FiltersAndStatsEndpoint.ipynb

# Hint: Construct Filters in Planet Explorer

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# Searching for Data

Now that we understand how to define filters (i.e. what to search for), let's go over two types of searches: Quick Searches and Saved Searches.

notebooks/4_Search.ipynb



# Activating and Downloading Data

Everything's in place!  Let's finally get our hands on some data... Not so fast though -- it's a two-step process.  We need to activate items before we can download them.

notebooks/5_ActivationAndDownload.ipynb

# Reminder: API Resources

Where are the docs again?

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Data API Documentation: developers.planet.com/docs/api/

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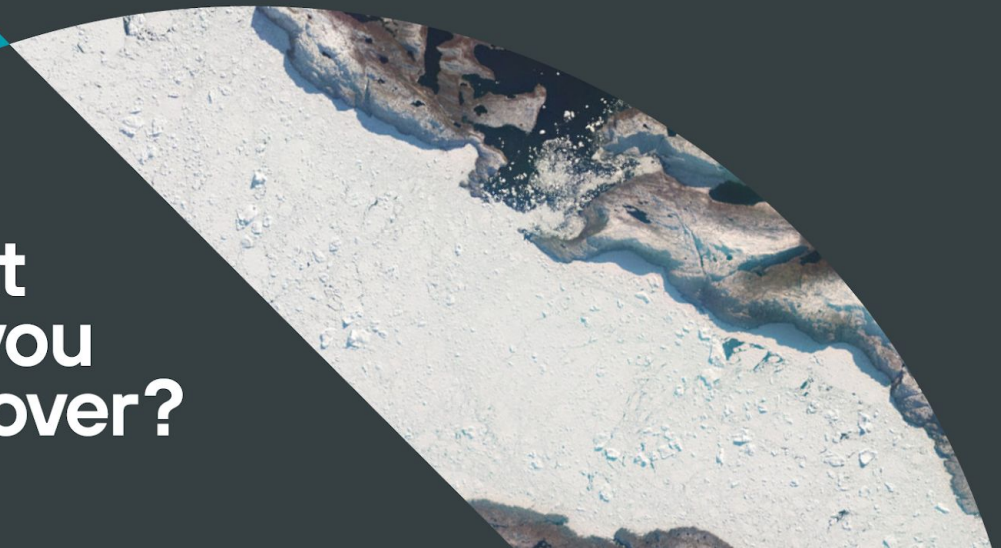
# Thank You

What will you discover?

# Questions?



**What will you discover?**

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# Let's talk!

## Contact Us

Learn how Planet can turn your data into actionable results
**contact@planet.com**

## Visit our Dev Center

Find documentation, API reference guides, guides and tutorials
**developers.planet.com**

## Join the Conversation

Explore Planet's platform and see what others are doing in Planet community
**planet.com/community**

**What will you discover?**