

Exercise 0 - ArcGIS Pro

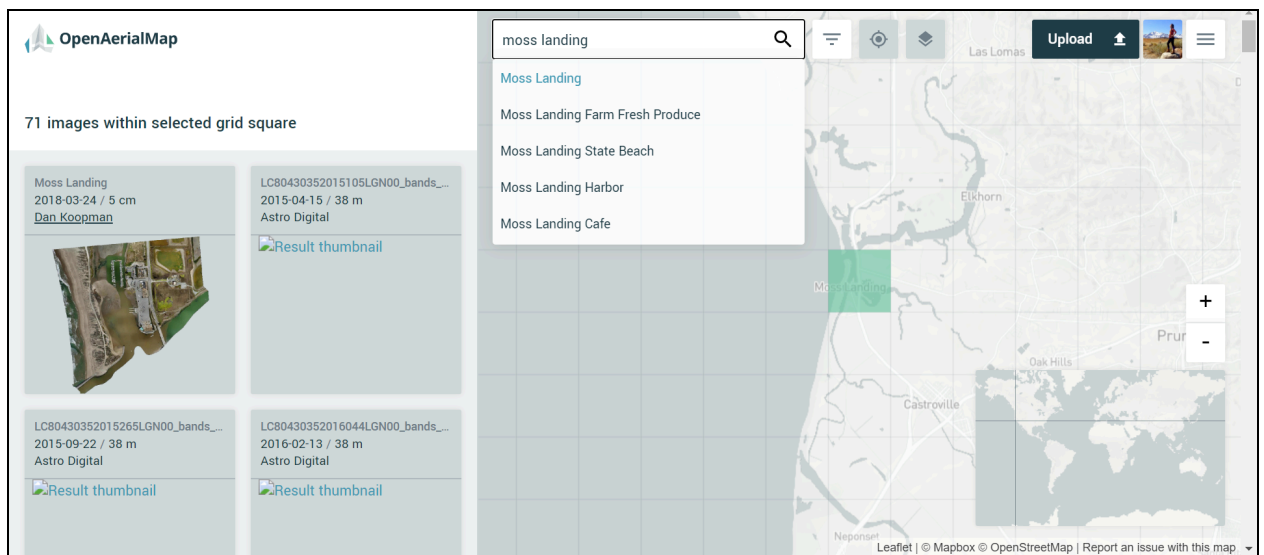
The following exercise is intended to familiarize those who are new to ArcGIS Pro with this software. This is helpful to complete before taking any DroneCamp ArcGIS Pro workshops. *Tip:* If you run into problems in this exercise, sometimes saving and restarting ArcGIS Pro does the trick. *Let's begin!*

Questions?

Please contact [Chippie Kislik](#) or [Shane Feier](#).

1. Download the Drone Data

Navigate to OpenAerialMap online (<https://openaerialmap.org/>) → Start Exploring → in the Search bar, type in: Moss Landing (click Enter) and select the first drop-down option → click on the Moss Landing label in your map on the right → Select the Moss Landing image by Dan Koopman that appears on the left.



Use the Download button  to download this raw geotiff file to your computer.

Along with this file, we will also be downloading a zipped folder containing an image from a Phantom 4 Pro UAV at Fort Ord Natural Reserve in Marina, CA, taken during DroneCamp 2019. Link [here](#).

Use the Download button  in the top right to download this zipped folder to your computer.

2. Save and Unzip the files to your Desktop Folder

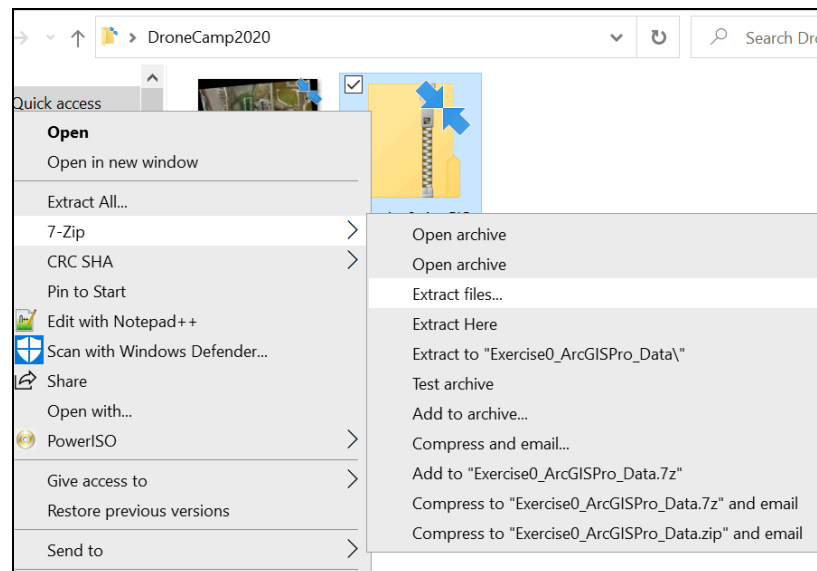
If you haven't already done so, create a folder on your desktop called DroneCamp2020 and drag (or cut and paste) your downloaded data into this folder. If you're not sure where your files are, search in your Downloads folder.

Once all files (the zipped folder and the geotiff file) are in your DroneCamp2020 folder, you will need to extract the files.

If you do not already have decompression software installed on your PC, we recommend 7-Zip. To download and install 7-Zip, go to the following linked address, select the appropriate download option for your machine (most likely for Windows, 64-bit x64):

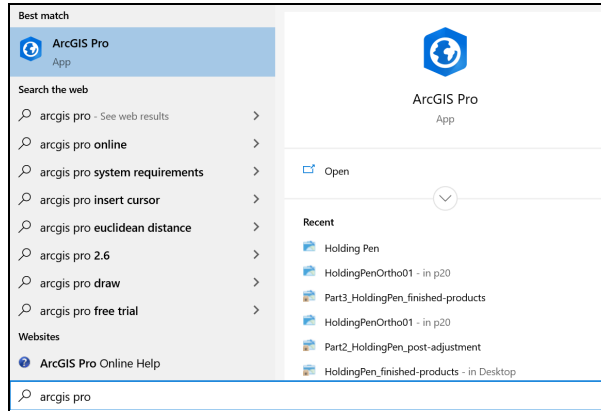
<https://www.7-zip.org/download.html>

Find your zipped folder and right click → 7-Zip → Extract Here → OK.



3. Open ArcGIS Pro

Open the Start menu of your computer → search for ArcGIS Pro → click Enter.



Note: If you are prompted to sign in with ArcGIS Online, and are not sure how to do this, please see the ArcGIS Online (AGOL) Sign In Instructions [here](#).

4. Start a New Map

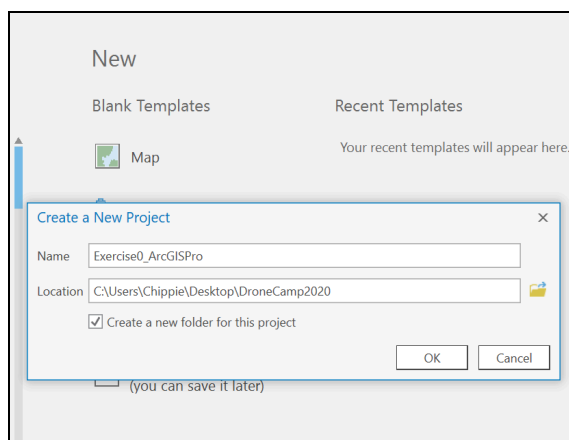
Click on New: Blank Templates → Map.

Edit the Name and Location parameters within Create a New Project.

Name: Exercise0_ArcGISPro

Location: Select your DroneCamp2020 folder on the Desktop using the Browse folder button on the right. When this folder is highlighted, click OK.

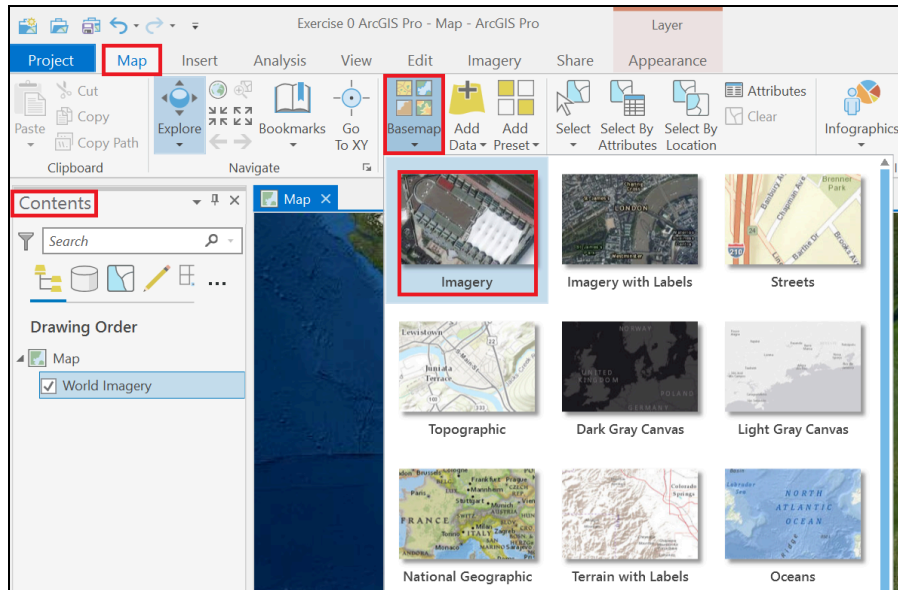
When you are ready to open your new project, click OK.



5. Add a Basemap

Let's add a new background map.

In the top ribbon, navigate to Map → Basemap → Imagery.

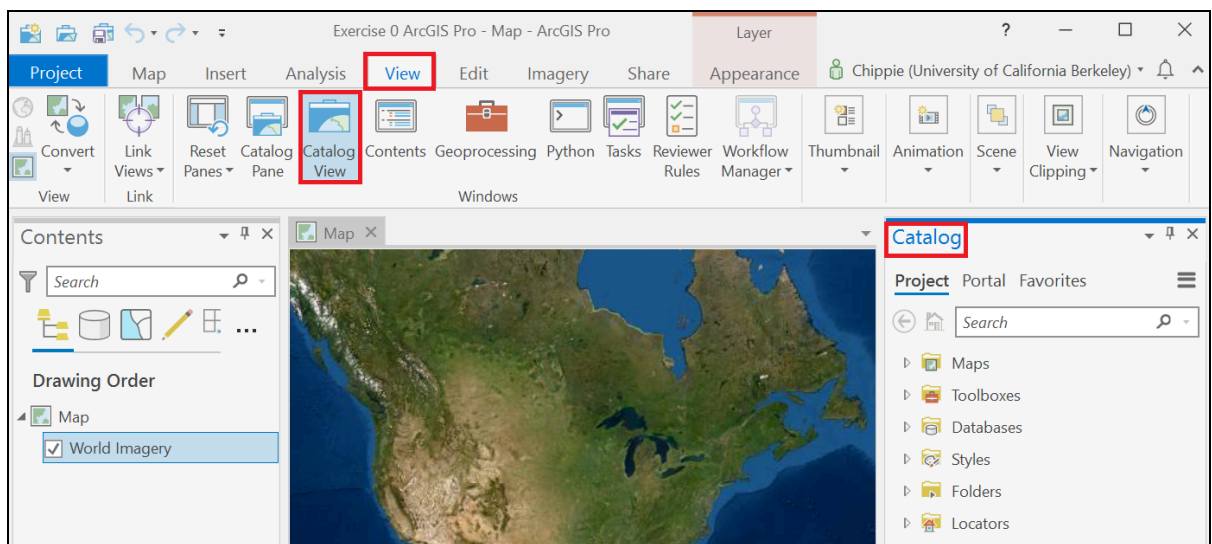


You should now see a new map ('World Imagery') in your Contents pane on the left.

6. Create a Folder Connection to your files

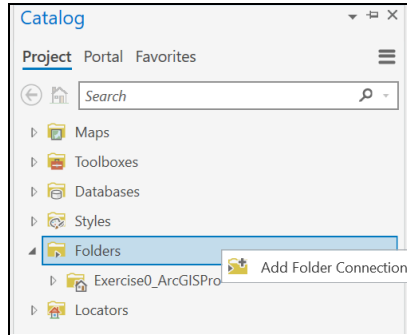
Let's create a shortcut so that it's easy to find our files.

In the top ribbon, navigate to View → Catalog Pane.



You should now see your Catalog pane appear on the right.

In your Catalog, under Project → right click Folders → Add Folder Connection.

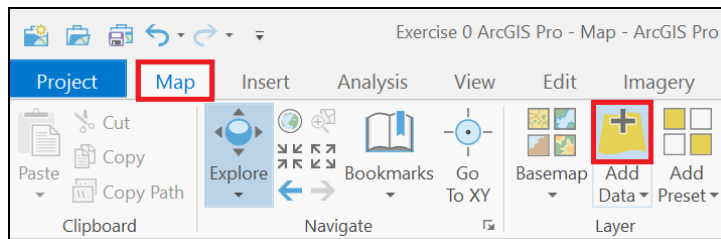


Connect to your files: find your Desktop and highlight your DroneCamp2020 folder. Click OK.

7. Add Data to your map

Let's add the Moss Landing geotiff to our map.

In the top ribbon, navigate to Map → Add Data.

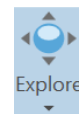


Double click Folders (the folder connection you just made) → double click DroneCamp2020 → single click on the Moss Landing geotiff ('95440be8-fc76-48f6-ae2b-1cbde40d4706.tif') → click OK.



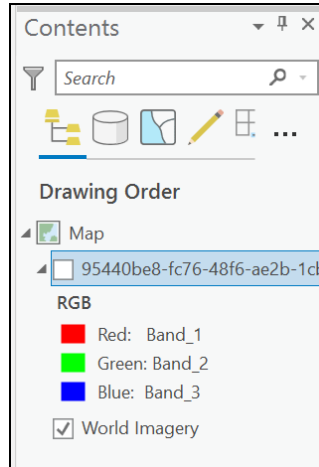
ArcGIS Pro may take a few moments to load this image.

In the top ribbon, make sure Map → Explore is highlighted.



Use your mouse to scroll (zoom in and out) on this image, and drag your mouse across the map to see where this geotiff file is located within your larger basemap.

You can toggle the image on and off by clicking the checkbox in your Contents pane.



Let's add in another drone image.

In the top ribbon, navigate to Map → Add Data.

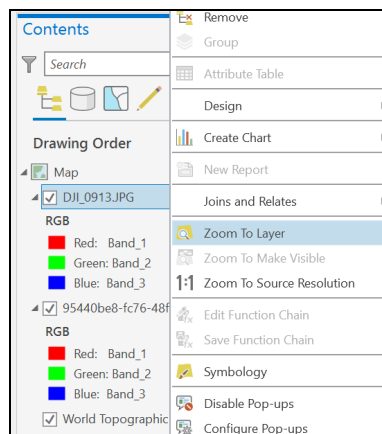
You should already be in your DroneCamp2020 folder.

Double click the unzipped folder ('Exercise0_ArcGISPro_Data') → double click it again → single click the DJI image ('DJI_0913.JPG') → click OK.

This should load your drone image into the map.

But wait - where's the image?

In your Contents pane on the left, right click on the DJI image → Zoom to Layer.



The DJI image should now appear in your map. Scroll and move around within your map to see where this image is.

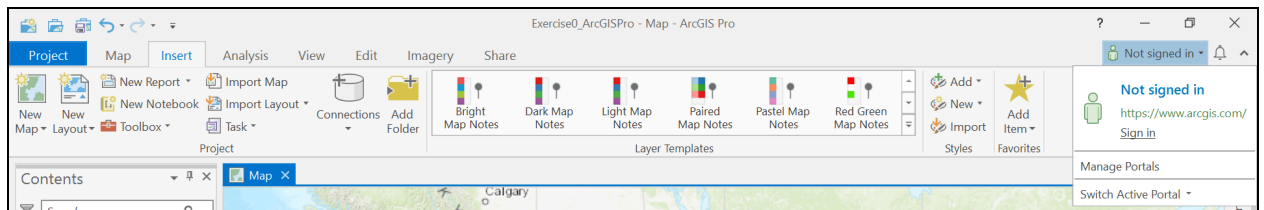
If you zoom out enough, can you find the Moss Landing image to the north?

If you ever get lost, right click the image in your Contents pane → Zoom to Layer.



8. Make sure you are Logged In to ArcGIS Online

In the top right corner, login to ArcGIS Online if you aren't already logged in.




If you are unsure how to do this, please see the ArcGIS Online (AGOL) Sign In Instructions [here](#).

9. Open a layer in Living Atlas

Let's add another layer to our map from a huge online database called ArcGIS Living Atlas of the World that has maps, apps, and data layers for us to explore.

In your Catalog pane (View → Catalog Pane), click on Portal (to the right of Project).

Click the Living Atlas button on the far right  and in the search bar, type: USA Protected Areas - Fee Managers → right click the top option → Add to Current Map.

Congratulations! You now know how to add basemaps, data, and Living Atlas files to your ArcGIS Pro project. See you in upcoming DroneCamp workshops soon!

10. Additional resources

- ArcGIS Pro Resources
 - [Get Started With ArcGIS Pro website](https://learn.arcgis.com/en/projects/get-started-with-arcgis-pro/)
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- Tutorial Video
 - If you would like an introductory tutorial, see [Getting Started with ArcGIS Pro](#) video from Jarlath O'Neil-Dunne.
 - *Note:* The version of ArcGIS Pro featured in the video may differ from yours, but the general features are the same.