In Part 3 of the NASA ARSET Training on Satellite Data for Air Quality Environmental Justice and Equity Applications, we will be using Google Colab to show a demonstration of how to use Python code to analyze satellite and demographic information together. Google Colab is a free online hosting service where Jupyter Notebooks (an interactive version of a Python code script) can be run, without you having to download and install Python or any associated packages yourself. Please follow the instructions below to enable Google Colab within your Google Drive, and to prepare the materials for the exercise in Part 3. We will also include a short walkthrough of how to prepare the materials in Part 3, but if you want to do these steps ahead of time, please follow the instructions below.
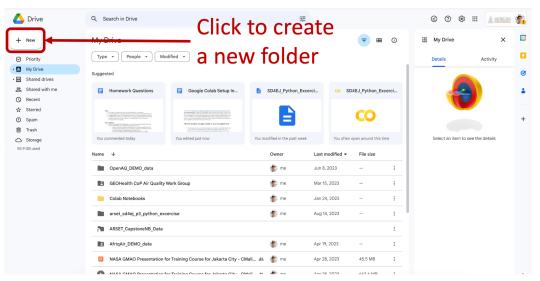
How to access Google Colab in your Google Drive

1. To use Google Colab, you will need a Google account, with an associated Google Drive for cloud storage. To learn more, and to create a free Google account if you don't already have one, please visit the Google Account webpage. Google accounts come with free cloud storage in Google Drive.
2. To enable Google Colab in your Google account, go to the Google Workspace Marketplace page for Colab and click the "Install" button (see image below), following the prompts and instructions. If Colab is already enabled, the button will say "uninstall" instead; you don't need to do anything else in that case.
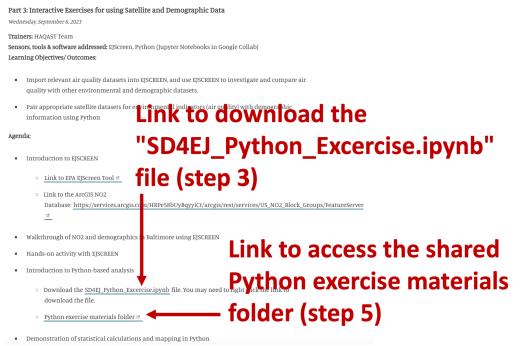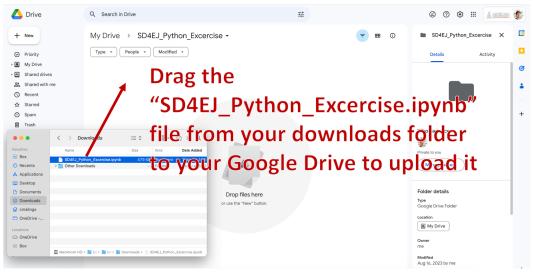
How to prepare materials for the Part 3 exercise

1. In your [Google Drive](#), create a folder called "SD4EJ_Python_Excercise" by clicking the "New" button in the upper-left corner, selecting "New Folder", then naming the folder and pressing "Create".
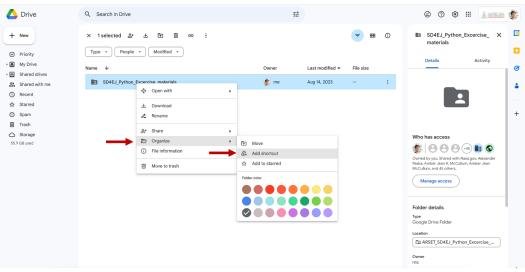

2. Go to the [ARSET web page for this training](#), and scroll down to Part 3 of the training.

3. Download the "SD4EJ_Python_Excercise.ipynb" file by [clicking on the link](#) and then extracting it from the downloaded ZIP file. You may need to right-click and choose "save as" to download the ZIP folder.

4. Upload the "SD4EJ_Python_Excercise.ipynb" file you just downloaded into the "SD4EJ_Python_Excercise" folder you just created on [your Google Drive](#) by dragging it from your download folder into the drive. **Make sure you unzip the downloaded ZIP file to extract the "SD4EJ_Python_Excercise.ipynb" file before uploading it**; do not upload the "SD4EJ_Python_Excercise.zip" file directly.
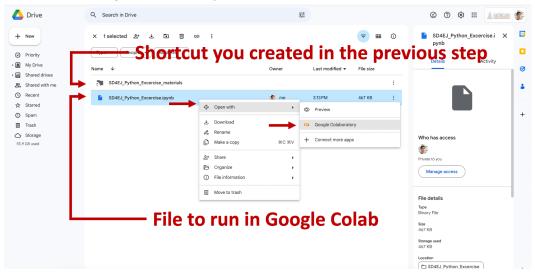

5. Go back to the [ARSET webpage for this training](#), scroll down to Part 3 of the training, and [click on the link to open the shared Python exercise materials folder](#) (see image under step 3 above).

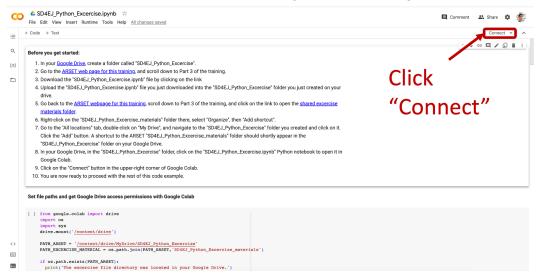6. Right-click on the "SD4EJ_Python_Excercise_materials" folder there, select "Organize", then "Add shortcut".

7. Go to the "All locations" tab, double-click on "My Drive", and navigate to the "SD4EJ_Python_Excercise" folder you created and click on it. Then click the "Add" button. A shortcut to the ARSET "SD4EJ_Python_Excercise_materials" folder should shortly appear in the "SD4EJ_Python_Excercise" folder on your Google Drive.

8. In your Google Drive, in the "SD4EJ_Python_Excercise" folder, click on the "SD4EJ_Python_Excercise.ipynb" Python notebook to open it in Google Colab. It should open automatically in Google Colab. If it does not, right-click on the file, choose "Open with", and then "Google Colaboratory".

9. Click on the "Connect" button in the upper-right corner of Google Colab.

10. You will now be ready to proceed with the Part 3 Python exercise.