ClimateSERV Module 3.1

Introduction to Google Colaboratory

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Table of Contents

Prerequisites & Requirements 3

Learning Objectives 4

Installing Google Colaboratory 5

Introduction to Google Colab 7

Opening a Google Colaboratory File 7

Prerequisites & Requirements

For this module you will need...

- A computer
- Access to the internet
- A Google account

Learning Objectives

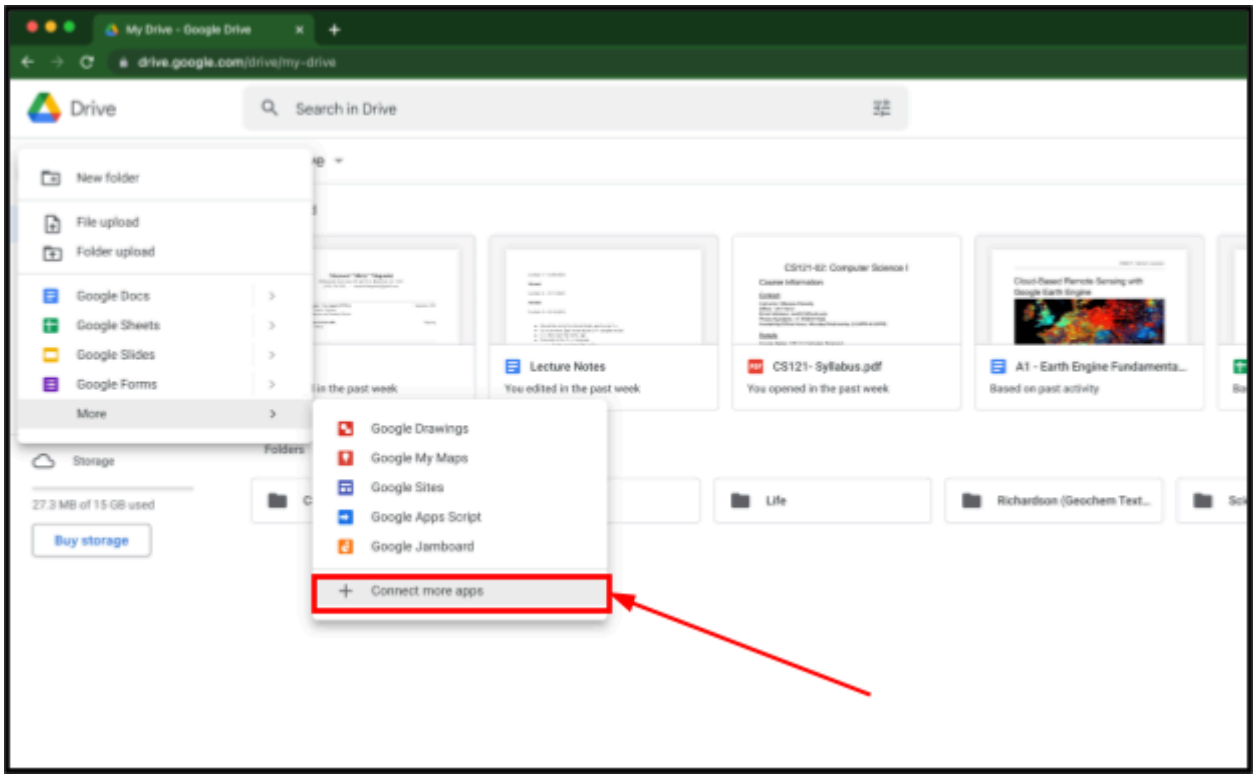
By the end of this module you will...

- Have Google Colab installed on your computer
- Be able to open a “Google Colab” Notebook

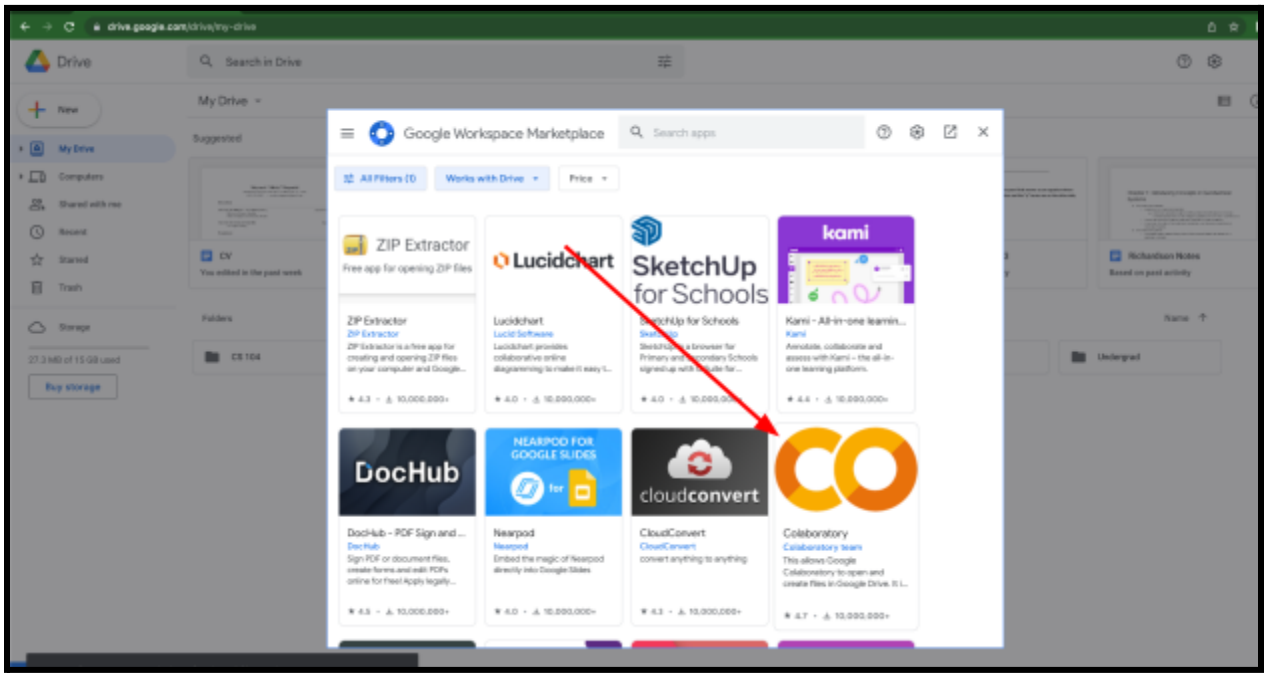
Installing Google Colaboratory

We will use HYDRAFloods through Google Colaboratory Notebooks. Google Colaboratory (often called Google Colab) allows you to write in execute Python (a programming language) code in your browser with access to free GPUs and the ability to share your notebooks with others. You can find more information about Google Colab [by clicking here.]

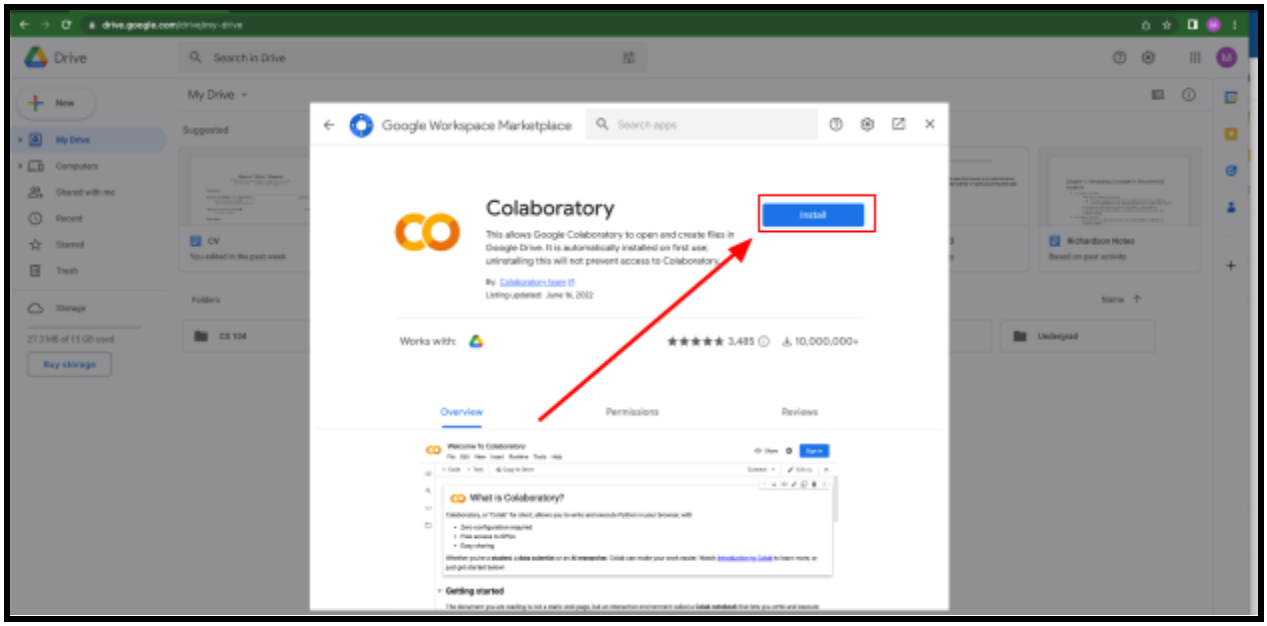
To install Google Colab, navigate to drive.google.com and log into your account. Note that this must be the same account you used to



Click Google Colaboratory (should be on the bottom right, but if not you can search for it using the search bar in the upper right).



This will bring up the screen shown below. Click the blue **“Install”** button to install Google Colaboratory to your Google Drive account. Follow the prompts to complete the installation process.

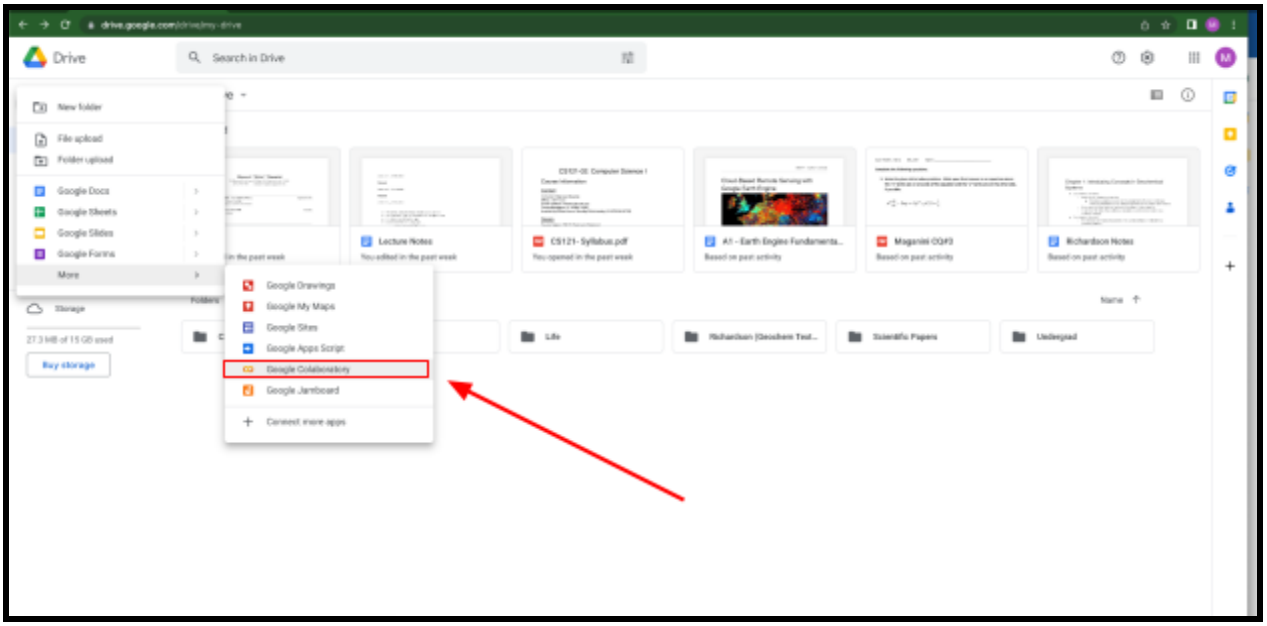

Drive
Search in Drive
My Drive
New
Google Workspace Marketplace
Search apps
Colaboratory
Install
This allows Google Colaboratory to open and create files in Google Drive. It is automatically installed on first use; uninstalling this will not prevent access to Colaboratory.
Works with:
3,485
10,000,000+
Overview
Permissions
Reviews
What is Colaboratory?
Getting started

Introduction to Google Colab

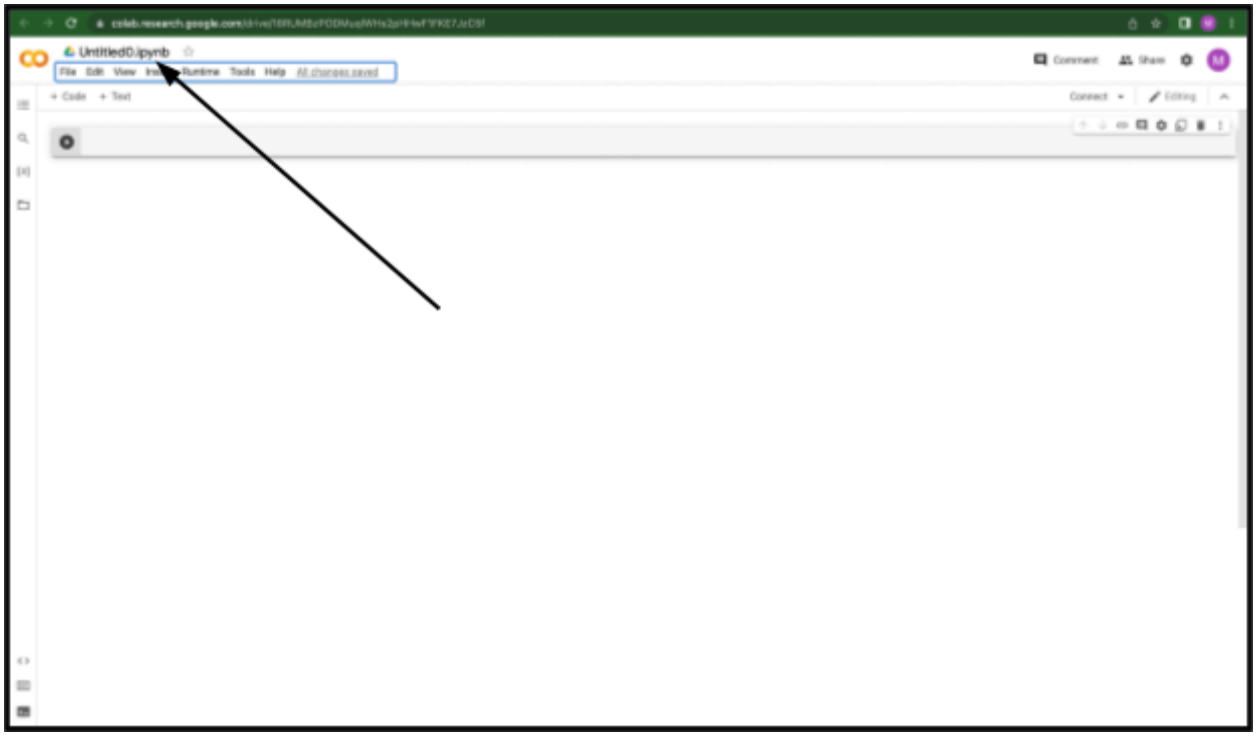
Let's get familiar with how Google Colab works, as we can use it to access the ClimateSERV Application Programming Interface, or API.

Opening a Google Colaboratory File

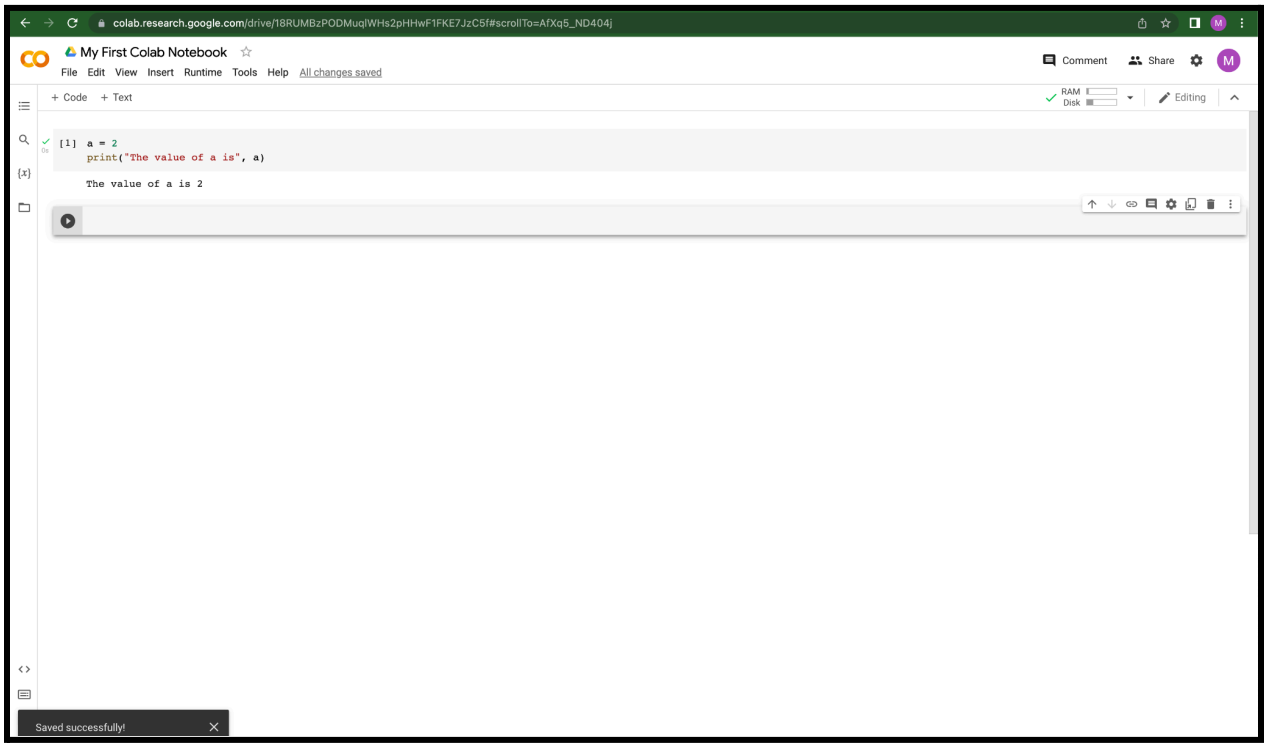
To open a Google Colaboratory file, click the **"New"** button in the upper left, then click **"More"** from the dropdown menu. This will bring up a separate dropdown menu. Click **"Google Colaboratory"**, as shown by the red arrow below. This will open a Google Colaboratory File.



Give your Colab file a title by clicking in the top left corner, and typing in a new name, as shown by the image below.

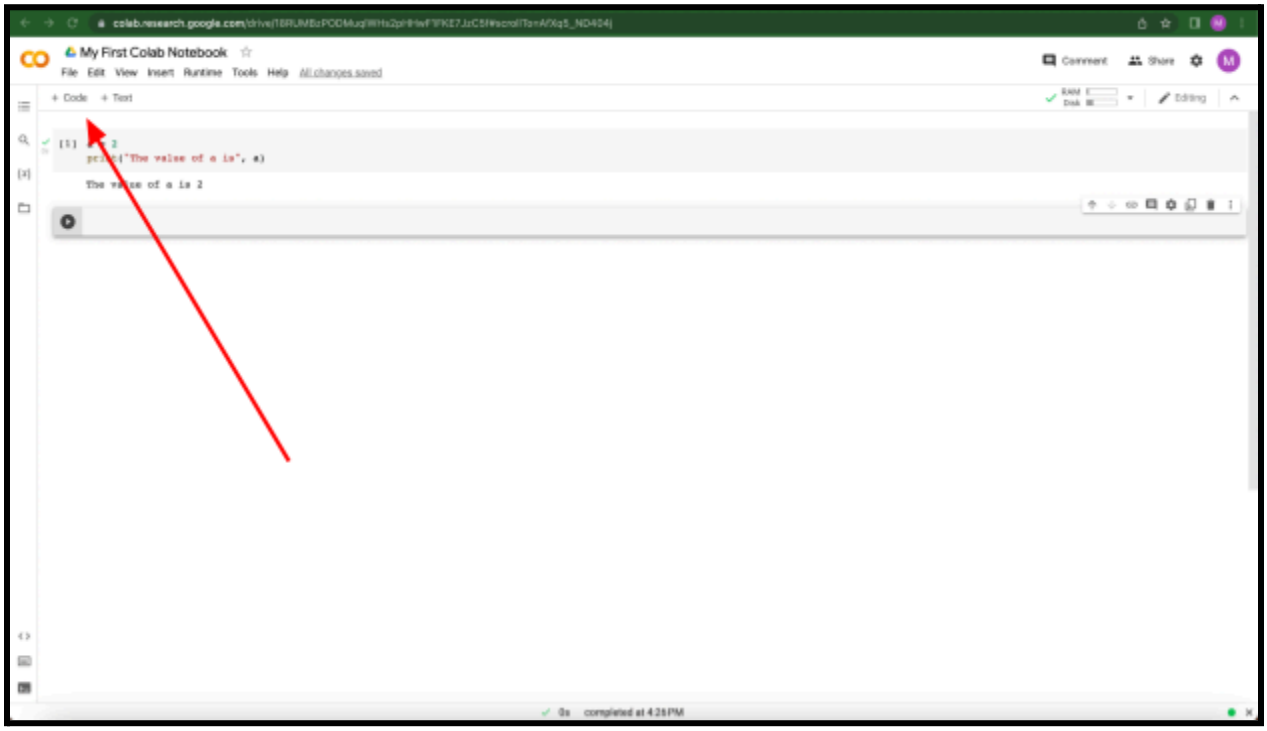


There are two types of cells in Google Colab, code cells and text cells. Code cells are cells where we can type and run Python code, where text cells are where we can type descriptive information about our code.



Google Colab will open with a code cell already present, so let's type in and run some code using Shift + Enter (or clicking the play button to the left of the cell). We can see that running the cell will return an output (if our code tells it to).

We can add more code cells to our notebook by clicking the "+Code" button (shown by the arrow in the image below).



To add a text cell, click the button just to the right of the "+Code" button, that says "+Text". This will add a text cell below where we can write some simple text to describe what our code does.

Congrats! You know the basics of Google Colaboratory and are ready to start working with the ClimateSERV API! For a more in-depth introduction to Google Colab click here.

Acknowledgements

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Source: https://sams.servirglobal.net/detail/1