Supplementary Material for HYDRAFloods Module 2

Generating a Google Earth Engine Authorization Token

SERVIR Science Coordination Office Curriculum Development Team Micky Maganini

Contact: mrm0065@uah.edu

Prepared for "Observing and Modelling Surface Water in a Changing World" at ITC Quartile 3 2022-2023







Step 1: Run the cell that says ee.Authenticate()

Step 2: Click the blue link as shown in the image below

4	0	<pre># Trigger the authentication flow. bee.Authenticate()</pre>
		# Initialize the library. ee.Initialize()
	•••	To authorize access needed by Earth Engine, open the following URL in a web browser and follow the instructions. If the web browser does not start aut
		https://code.earthengine.google.com/client-auth?scopes=https%3A//www.googleapis.com/auth/earthengine%20https%3A//www.googleapis.com/auth/devstorag
		The authorization workflow will generate a code, which you should paste in the box below. Enter verification code:

Step 3: Select the google account (the same google account you are using with Google Earth Engine), then select "Continue".

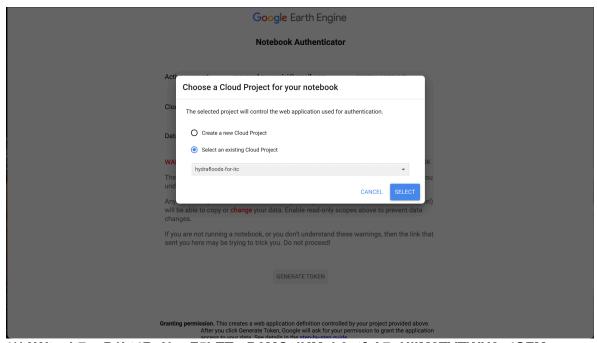


Step 4: Click the "Choose Project" Text as shown below



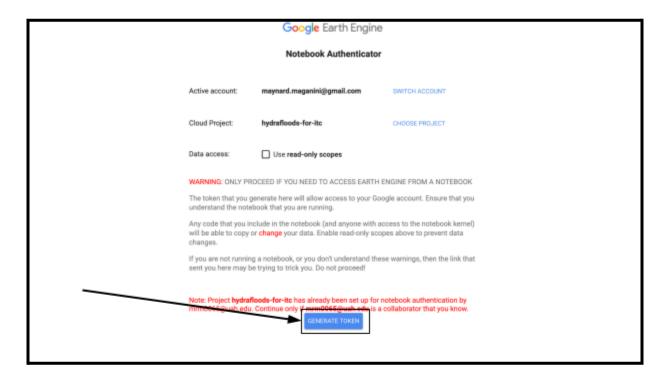
Step 5: Select the "hydrafloods-for-itc" project as shown below

- A. Click the circle next to "Select an existing Cloud Project"
- B. Click "Select a Cloud Project"
- C. Type in "hydrafloods"
- D. Click on "hydrafloods-for-itc"
- E. Click the blue "Select" button towards the bottom right of the popup panel

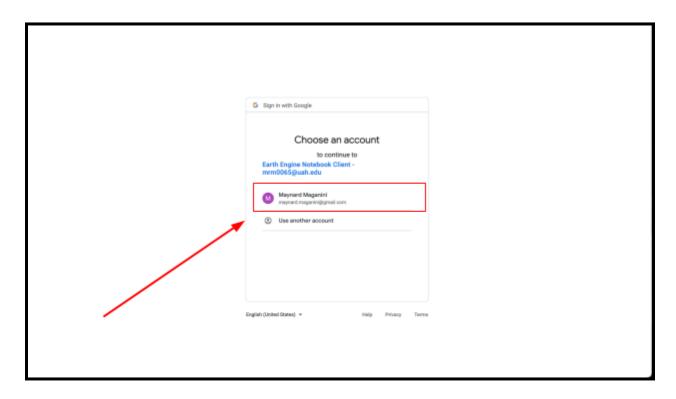


4/1AWtgzh7ypP1kt4RsNpgF5hTTmD0MCajKMeb9etfrA7gUiIM2TVTWH8c4SFM

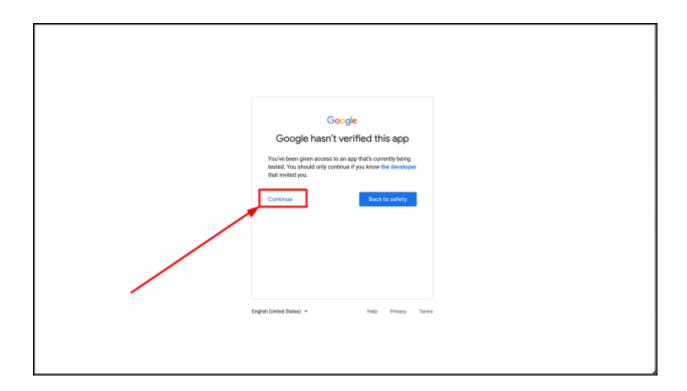
Step 6: Click the blue "Generate Token" button shown by the black arrow in the image below.



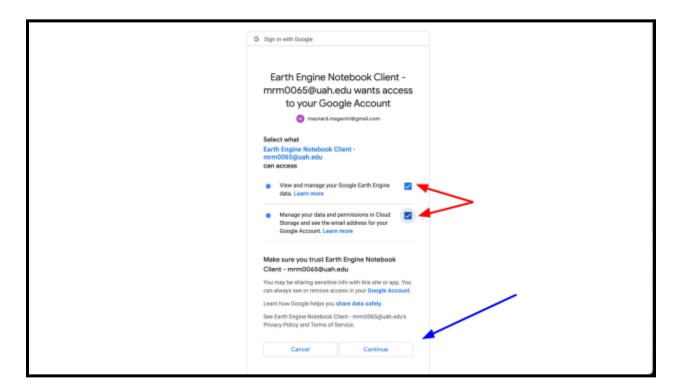
Step 7: Click the Google Account that you have registered in Google Earth Engine, as shown by the red arrow in the image below.



Step 8: Click the blue continue button, as shown by the red arrow below.



Step 9: Click the two boxes shown by the red arrows in the image below. They will now appear with check marks inside them as shown by the image. Then click the "Continue" button shown by the blue arrow in the image below.



Step 10: Copy the Authorization Code by clicking the button indicated by the red arrow in the image below.



Step 11: Paste the authorization code (using Command + V on Mac or Ctrl + V on PC) into the code cell we ran in step 1. IMPORTANT: Click Shift + Enter to run the cell and complete the authorization process. The code cell will now say "successfully saved authorization token" as shown in the image below.

```
[33] # Trigger the authentication flow.
ee.Authenticate()

# Initialize the library.
ee.Initialize()

To authorize access needed by Earth Engine, open the following URL in a web browser and follow the instructions. If the web browser d

https://code.earthengine.google.com/client-auth?scopes=https%3A//www.googleapis.com/auth/earthengine%2Ohttps%3A//www.googleapis.c

The authorization workflow will generate a code, which you should paste in the box below.
Enter verification code: 4/lAWgavdcOXUGQ7_eehhV4bZMAB6qYo%ZU_%ZT14rpdv3uR4vlIONjOF2ETzw

Successfully saved authorization token.
```

Congrats! You have successfully authenticated Earth Engine. You may return to your Google Colab notebook!

Acknowledgements

HYDRAFloods was developed by SERVIR-Southeast Asia (formerly known as SERVIR-Mekong). The development team includes Kel Markert, Amanda Markert, Ate Poortinga, Nyein Soe Thwal, Arjen Haag, Farrukh Christie, Tim Mayer, Khun San Aung, Peeranan Towashiraporn, David Saah, Chinaporn Meechaiya, Biplov Bhandari, and Kamal Hosen.

The HYDRAFloods Curriculum was organized by SERVIR's Science Coordination Office. The modules were influenced by a training developed by Kel Markert, Tim Mayer, Biplov Bhandari, and Lauren Carey and the HYDRAFloods Documentation authored by Kel Markert. Review of the curriculum was conducted by Roelof Rietbroek, Kelsey Herndon, Emil Cherrington, Diana West, Katie Walker, Lauren Carey, Jacob Abramowitz, Jake Ramthun, Natalia Bermudez, Stefanie Mehlich, Emily Adams, Stephanie Jimenez, Vanesa Martin, Alex Goberna, Francisco Delgado, Biplov Bhandari, and Amanda Markert.

Sources:

SERVIR Application Management System – HYDRAFloods Entry: https://sams.servirglobal.net/detail/19

HYDRAFloods Documentation: https://servir-mekong.github.io/hydra-floods/