



# Soil Survey Geographic Database (SSURGO) Portal Quick Start Guide

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# 1. Overview

The following sections detail the instructions for downloading and installing Python and SSURGO Portal as well as using SSURGO Portal.

This guide assumes the following:

- Your operating system is Windows 10 or greater.<sup>1</sup>
- You have the correct permissions to install software.
- You have not already installed Python on your computer.<sup>2</sup>

# 2. Python Installation

To install Python, complete the following steps:

1. Go to the [Python.org website](https://www.python.org) and download **Python 3.10.2** to anywhere on your computer.<sup>3</sup>
2. From the webpage under the **Files** section, click **Windows Installer (64 bit)**.

Files					
Version	Operating System	Description	MD5 Sum	File Size	GPG
<a href="#">Gzipped source tarball</a>	Source release		67c92270be6701f4a6fed57c4530139b	25067363	<a href="#">SIG</a>
<a href="#">XZ compressed source tarball</a>	Source release		14e8c22458ed7779a1957b26cde01db9	18780936	<a href="#">SIG</a>
<a href="#">macOS 64-bit universal2 installer</a>	macOS	for macOS 10.9 and later	edced8c45edc72768f03f66cf4b4fa27	39805121	<a href="#">SIG</a>
<a href="#">Windows embeddable package (32-bit)</a>	Windows		44875e70945bf45f655f61bb82dba211	7541211	<a href="#">SIG</a>
<a href="#">Windows embeddable package (64-bit)</a>	Windows		f98f8d7dfa952224fca313ed8e9923d8	8509629	<a href="#">SIG</a>
<a href="#">Windows help file</a>	Windows		342cabb615e5672e38c9906a3816d727	9575352	<a href="#">SIG</a>
<a href="#">Windows installer (32-bit)</a>	Windows		ef91f4e873280d37eb5bc26e7b18d3d1	27072760	<a href="#">SIG</a>
<a href="#">Windows installer (64-bit)</a>	Windows	Recommended	2b4fd1ed6e736f0e65572da64c17e020	28239176	<a href="#">SIG</a>

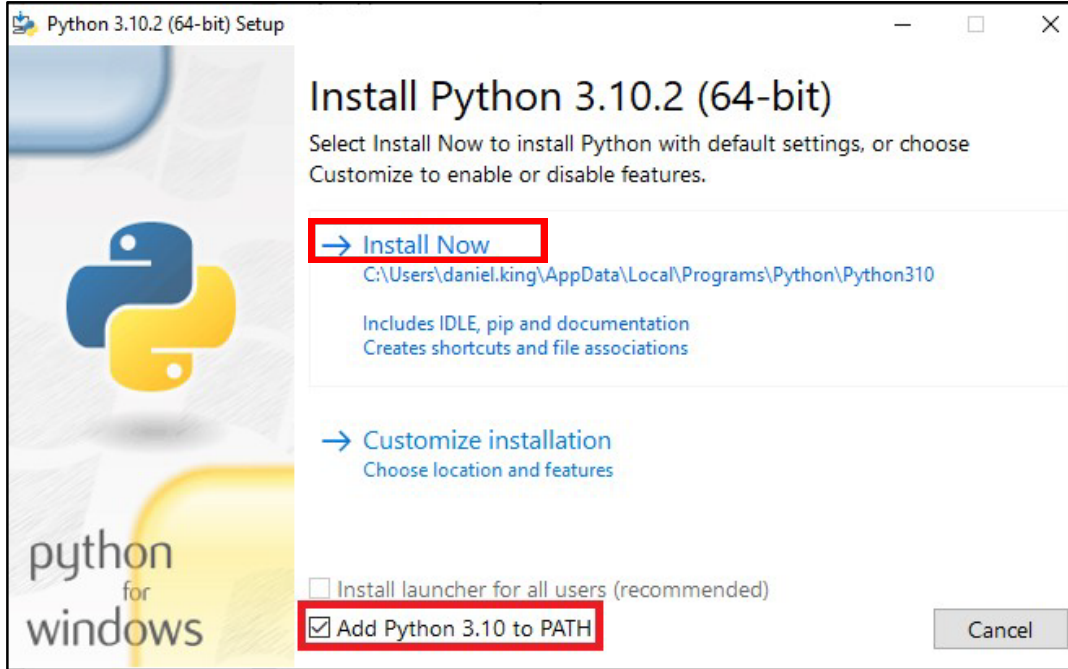
3. After the download is complete, navigate to where you downloaded Python and double-click on **Python-3.10.2-amd64**.

<sup>1</sup> While SSURGO Portal is designed to work with Windows 10; it should work with Windows 11 and Ubuntu.

<sup>2</sup> Python is included with ArcGIS, ArcGIS Pro, ArcGIS Desktop, and QGIS. SSURGO Portal should still function even if one or more of these versions of Python is already installed.

<sup>3</sup> SSURGO Portal was tested on Python 3.10 but should also work with Python 3.9 and 3.11.

- Click the checkbox next to **Add Python 3.10 to PATH** and click **Install Now**.



**Note:** *Advanced Python users can use **Customize installation**, but most people will want to select **Install Now**.*

- Once the installation is complete, the **Install** button should change to **Uninstall**, which indicates that the installation was successful. You can now close the window.

### 3. SSURGO Portal Installation

To install SSURGO Portal, complete the following steps:

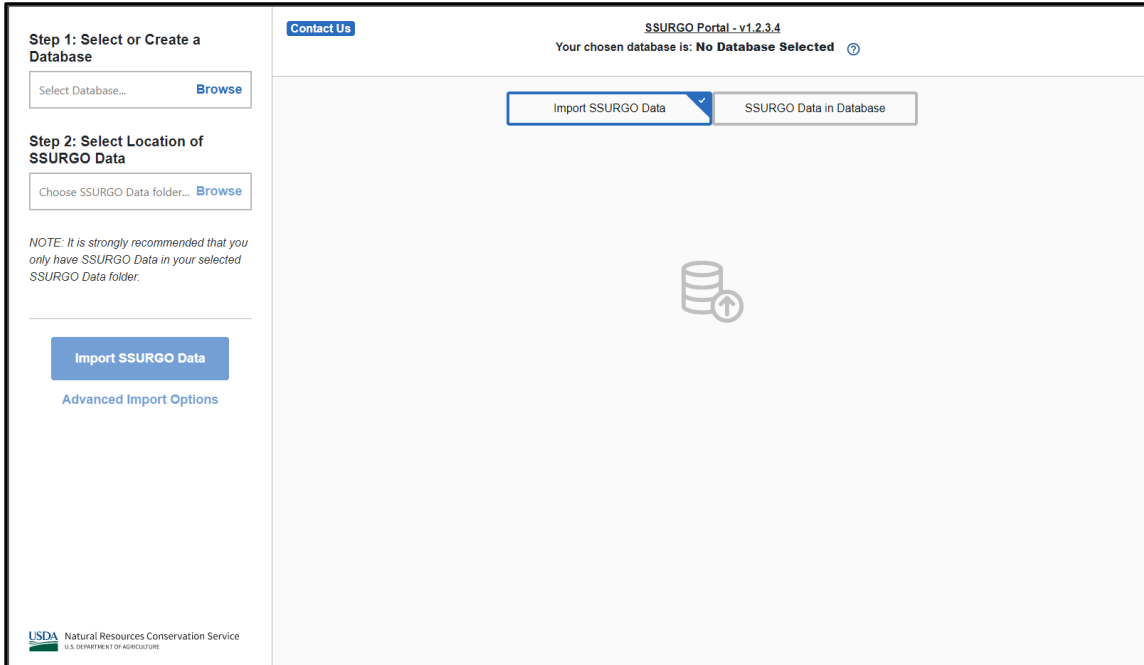
- Create a folder on your **C drive** and name it **SSURGO Portal**.
- [Click this link](#) and download the **SSURGO Portal.zip** file to the folder you just created.
- Unzip the SSURGO Portal.zip file to the **SSURGO Portal** folder you created.
- Double-click the **SSURGO\_Portal.pyz** file to open.
- Enter **p** in the CMD prompt.
- When prompted, press **Enter** to complete initialization.

**Note:** *You only need to enter **p** in CMD the first time you run SSURGO Portal.*



7. Double-click on the **SSURGO\_Portal.pyz** a second time to open and begin using SSURGO Portal.

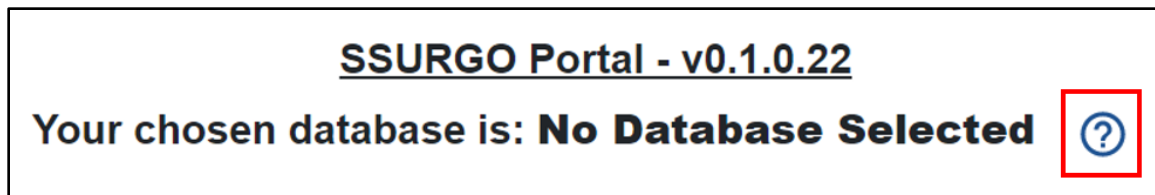
You should see the following screen, which indicates a successful installation:



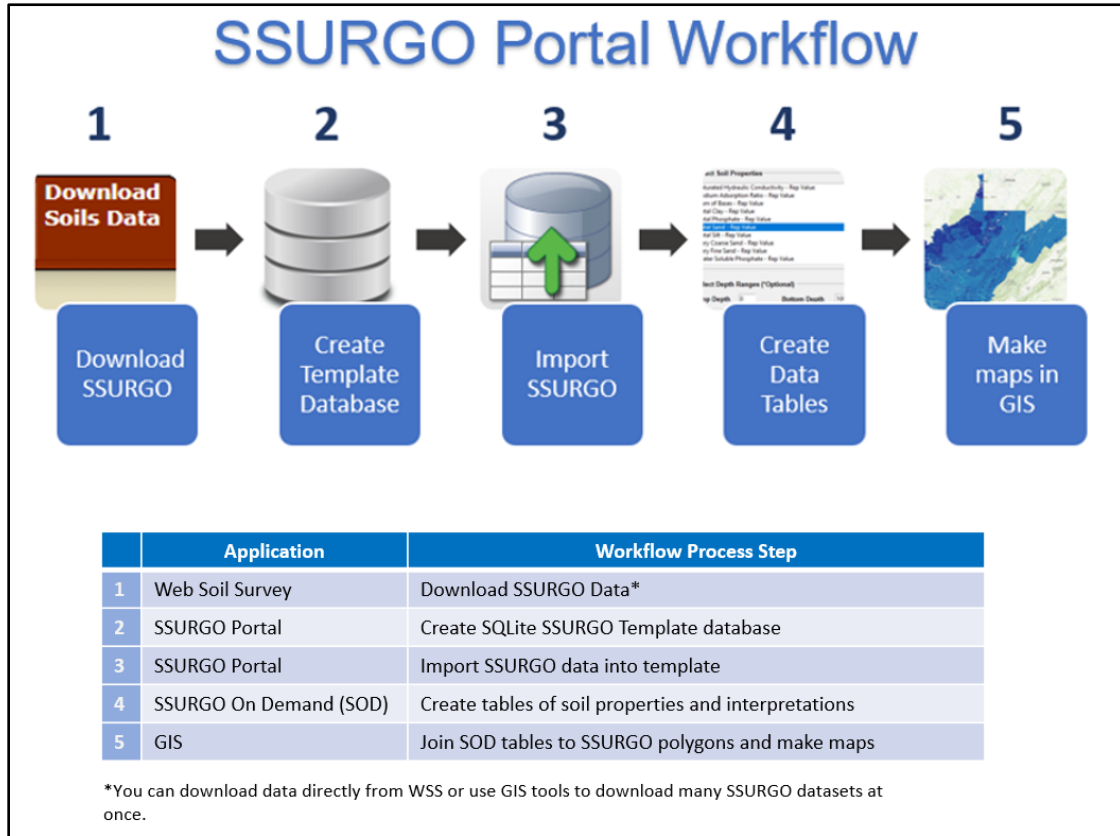
## 4. Using SSURGO Portal

Refer to the *SSURGO Portal User Guide* on the [SSURGO Portal webpage](#) for detailed user instructions.

You can also refer to the help menus within SSURGO Portal for additional information. Each window in SSURGO Portal has its own help page. You can access the help pages by clicking the question mark icons.

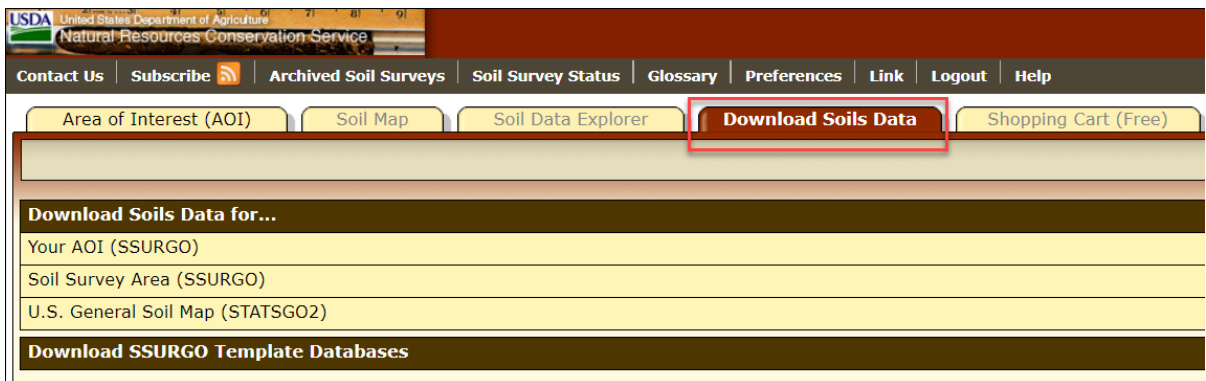


The general workflow for using SSURGO Portal is illustrated in the image below.



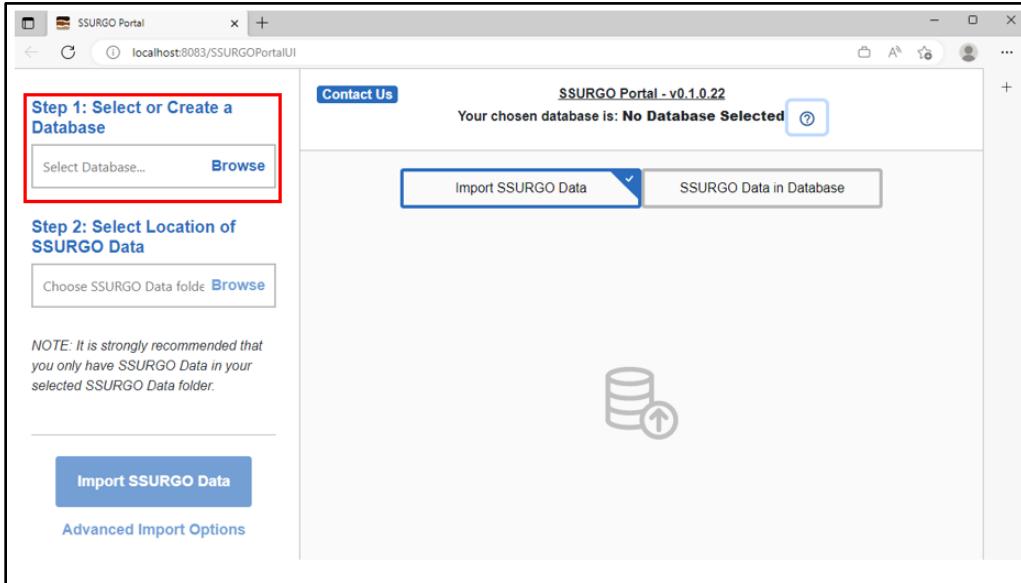
To begin using SSURGO Portal, complete the following steps:

1. Download SSURGO data from the [Web Soil Survey](#) webpage under the **Download Soils Data** tab.

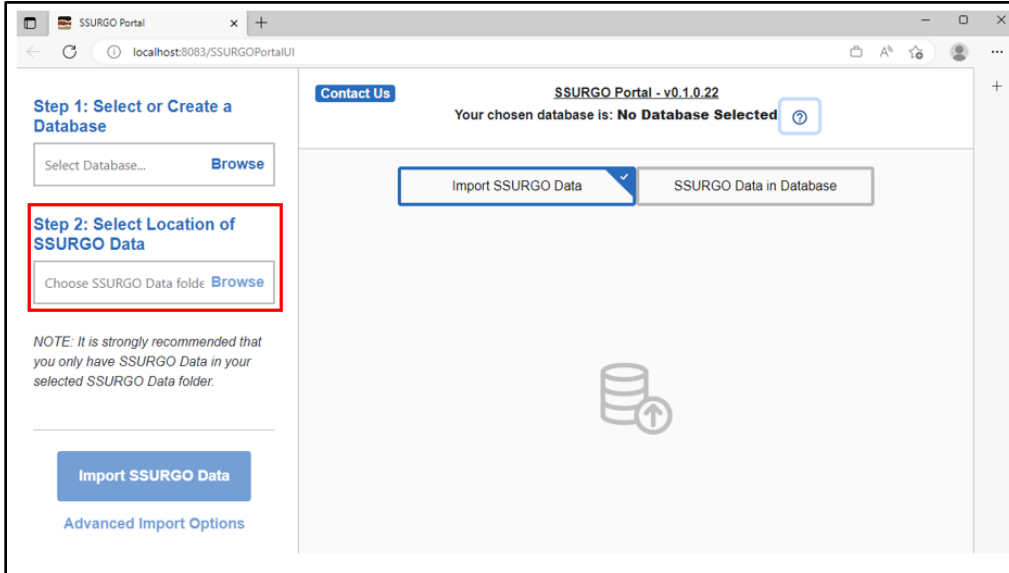


**Note:** You can also download data using the *SSURGO Bulk Downloader GIS tool for ArcGIS Pro or QGIS*. These tools rapidly batch download many SSURGO packages at one time. The tools and instructions are available on the [SSURGO Portal webpage](#).

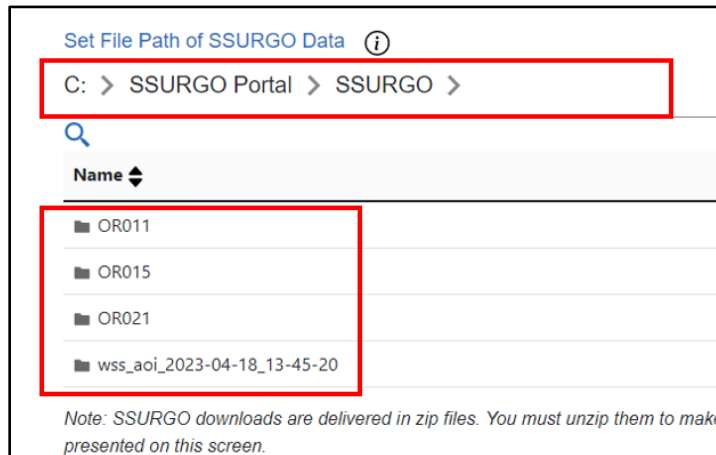
2. Open **SSURGO Portal**.
3. Click **Step 1: Select or Create a Database**.



4. Click **Step 2: Select Location of SSURGO Data**.

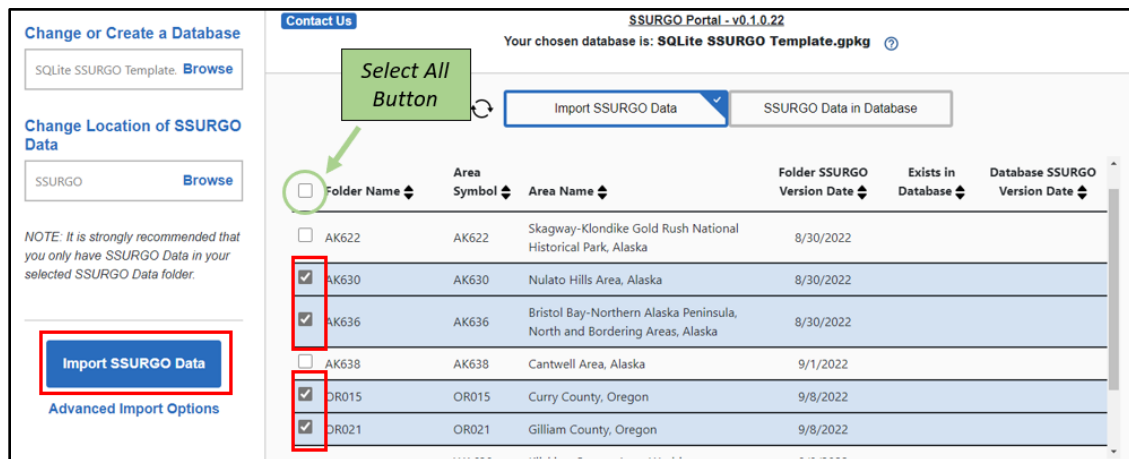


**Note:** *SSURGO data folders will typically either have a 5-character name, starting with two letters and followed by three numbers (e.g. OR021), or they will have names that start with wss\_aoi. Below is an example of a correct file path. Note, the folder names have the typical format for SSURGO data packages.*



*If you see folders named spatial and tabular in the table, you probably have gone too far in the file path and you need to go back one folder.*

5. Click **Import SSURGO Data**.



6. View and query contents of the populated SQLite SSURGO Template database by opening the database in any program that reads an SQLite file. GIS software and [DB Browser](#) are common choices.

- **DB Browser is recommend** because it is essentially a license free version of the Microsoft Access application. It allows you to view the contents of the database and submit SQL queries against the database. Refer to the *SSURGO Portal Installation Guide* and *SSURGO Portal User Guide* for more information about DB Browser. You can locate these guides on the [SSURGO Portal webpage](#).

7. Use SSURGO On Demand (SOD) to aggregate soils data and create tables of soil properties and interpretations. Subsequently, use these tables to make





thematic maps in GIS. The SOD tool and user guide are available on the SSURGO Portal webpage.