ERTAC EGU Projection Tool Installation

Byeong-Uk Kim, Ph.D., Georgia Environmental Protection Division
Joseph Jakuta, Ozone Transport Commission
John Welch, Indiana Department of Environmental Management
Doris McLeod, Virginia Department of Environmental Quality

2015 International Emission Inventory Conference
April 13, 2014 – San Diego, CA

Requirement/Recommendation

Hardware

4 GB of RAM and 1TB HDD for CONUS runs

Software

Python Version 2.6 or higher

https://www.python.org/downloads/release/python-279

* You might already have Python installed if you have ArcGIS or other applications using it.

ERTAC EGU Projection Code Version 1.01

http://www.marama.org/images/stories/documents/ertac_egu_tool.v1.01.zip

ERTAC EGU Projection Tool Tutorial Data

ftp://thomas-mifflin.dreamhost.com/MANE-VU/ERTAC/EGU/Training201504/Installation Package/REG3-2018.zip

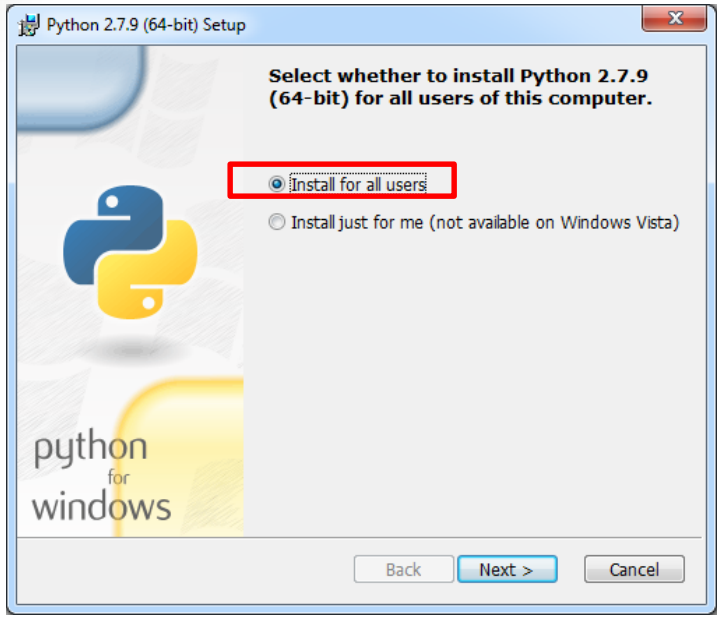
Username: newmanevu1

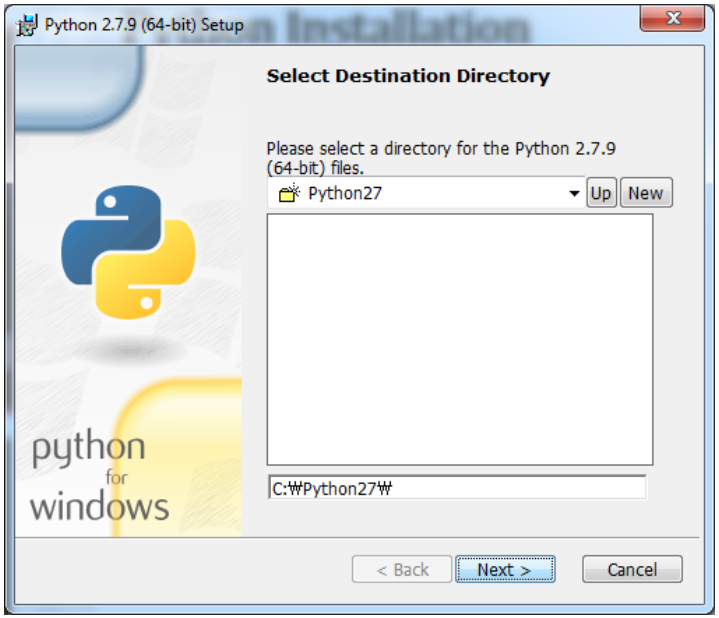
Password: exchange

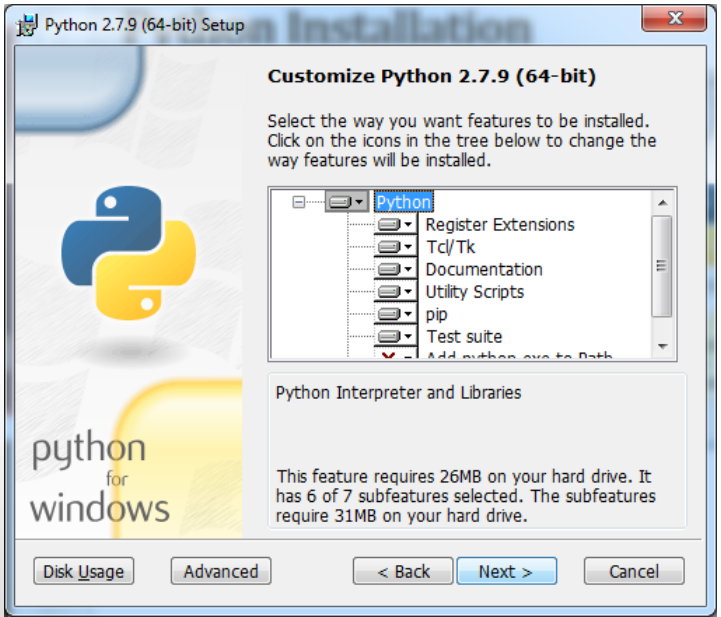
Show of Hands

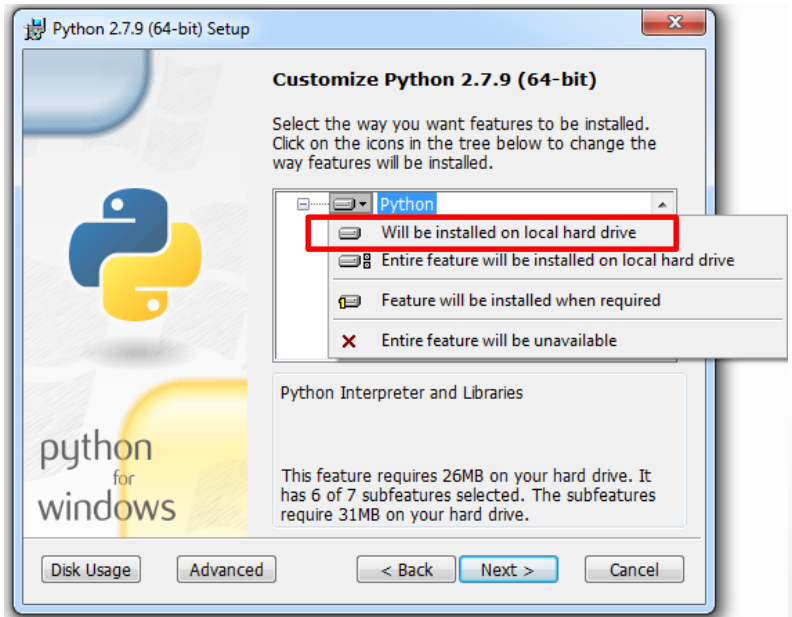
- Who has already installed
  - Python?
  - ERTAC EGU Source Code?

Python Installation

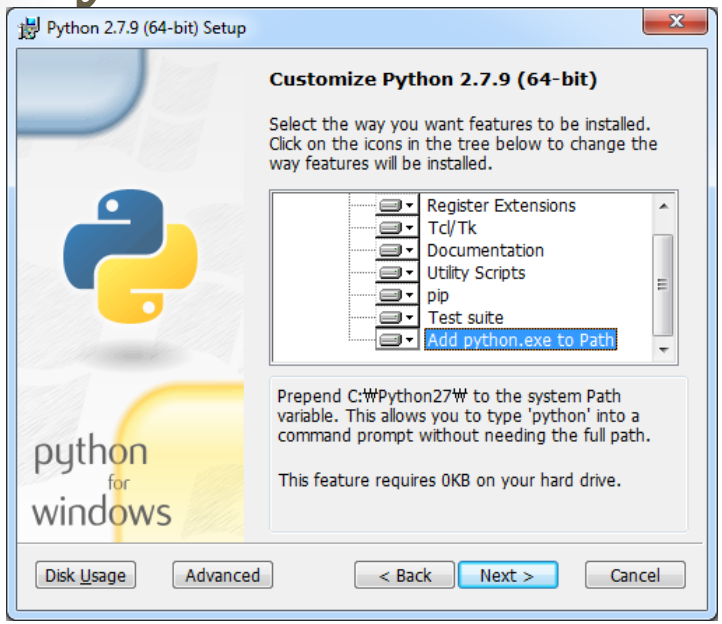


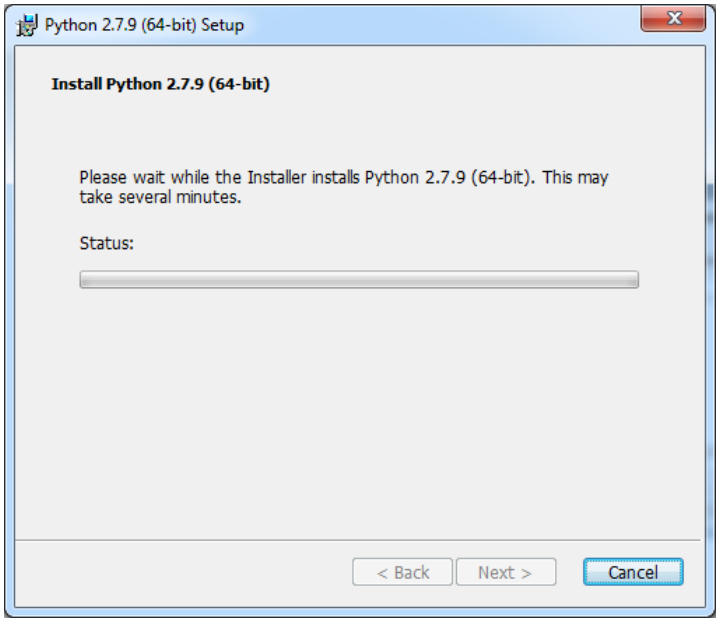


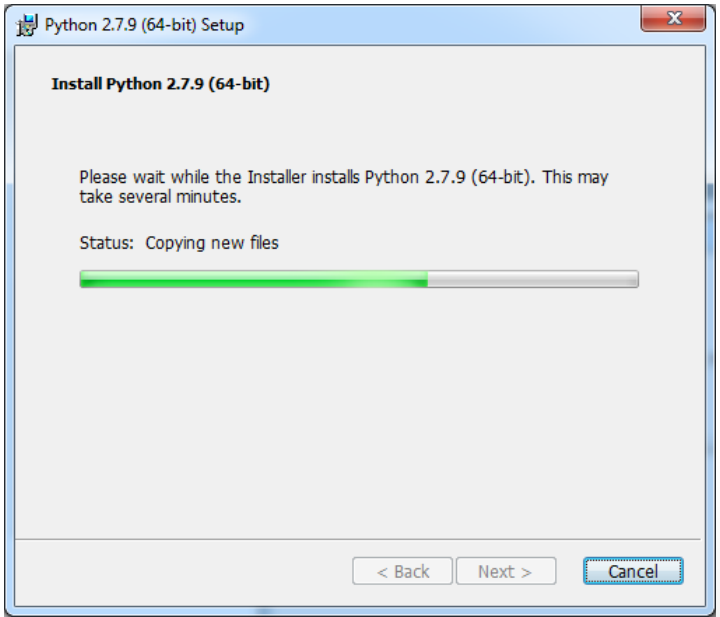




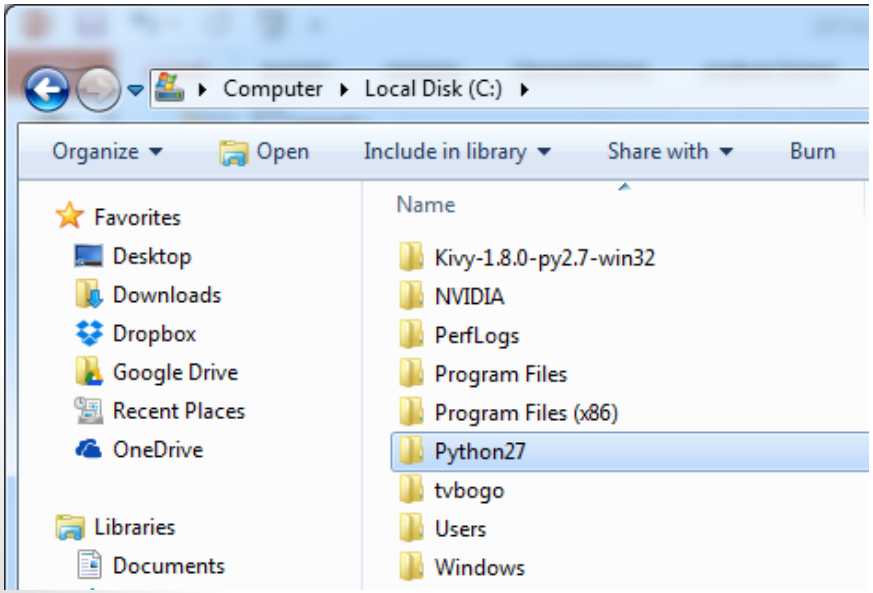
Python Installation

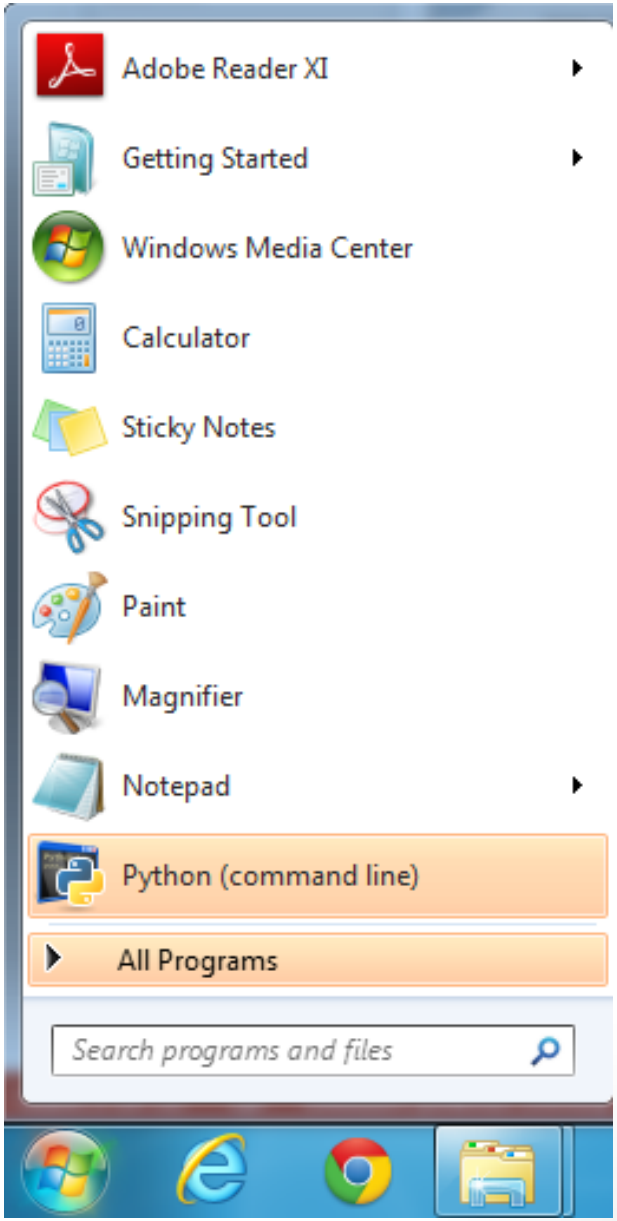






Python Installation





ERTAC EGU Projection Code and Tutorial Data

Copy source codes and tutorial dataset

Copy ERTAC EGU code v1.01 into the following directory:

`C:\ertac_egu\1.01`

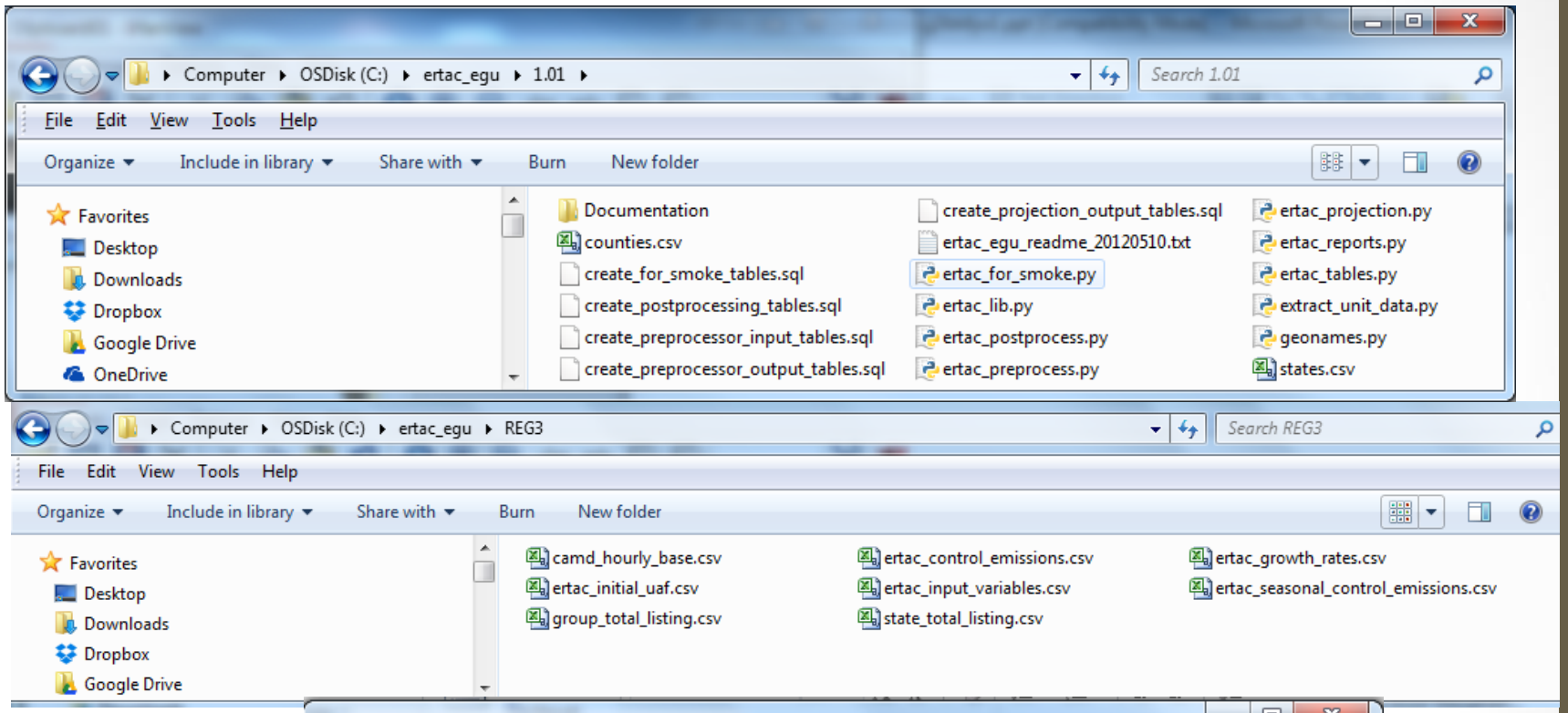
Copy the tutorial dataset into the following:

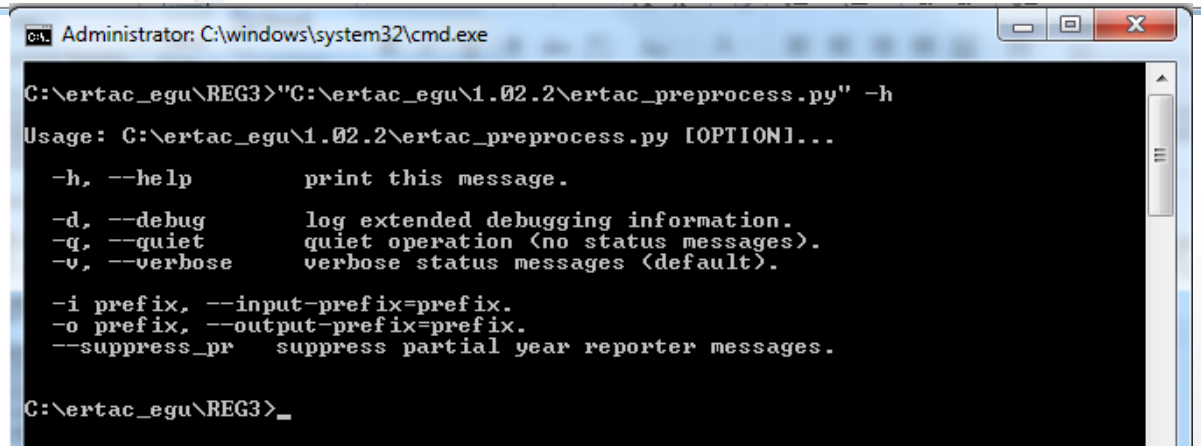
`C:\ertac_egu\REG3`

Test if the installation is done correctly:

- Open the command window
  - "Start" => type `cmd`
  - Type `cd C:\ertac_egu\REG3`
  - Type `C:\ertac_egu\1.01\ertac_preprocess.py -h`
  - This should return the "help" menu of the code.

Successful Installation





Tutorial Case - Preprocessing

- In the command line window, type
  - **C:\ertac_egu\1.01\ertac_preprocess.py**
- Wait until you see the command line prompt again.
- It may take about 2-3 minutes to finish.
- You should be able to see calc* files.
- Review the log file before running the projection code.

Tutorial Case - Projection

- In the command line window, type
  - **C:\ertac_egu\1.01\ertac_projection.py**
- Wait until you see the command line prompt again.
- It may take about 2-3 minutes to finish.
- You should be able to see “calc*” files.
- Review the log file before running the post-processing code.

Tutorial Case - Postprocessing

- In the command line window, type
  - **C:\ertac_egu\1.01\ertac_postprocess.py**
- Wait until you see the command line prompt again.
- It may take about 2-3 minutes to finish.
- You should be able to see calc* files .
- Review the log file carefully.
- Additional command line inputs are available for power users.

Options for Advanced Users

- Setting Up a Batch Run
  - If you want to do streamline run, you can create a batch file that contains the following lines:

```
C:\ertac_egu\1.01\ertac_preprocess.py
C:\ertac_egu\1.01\ertac_projection.py
C:\ertac_egu\1.01\ertac_postprocess.py
```

- Command Line Options (except postprocessor)
  - -i for prefix of input files
  - -o for prefix of output files
  - Note: post processor has additional command line options that are available by running --help

Got Problems?

- Join our technical support user group - ertac-egu-user@googlegroups.com and ask your question.