

Latte Art Double Shot: Mapping Results

Project Link: <https://www.pyswmm.org>

Date: December 8, 2022

Author: Bryant McDonnell

Version: 1.0

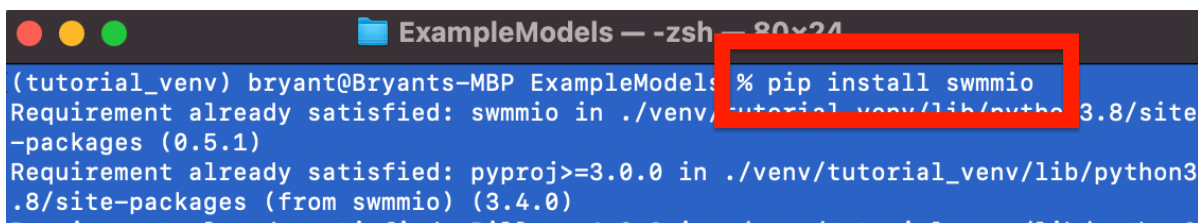
Files: `Latte_art_double_shot.py`, `Example1.inp`

Background

This example builds on top of the "Espresso" example and shows the user how to create map plots using another Python library called `swmmio` developed by Adam Erispaha. More information on `swmmio` can be found on the GitHub page: <https://github.com/aerispaha/swmmio>. The documentation can be found here: <http://swmmio.readthedocs.io/en/latest/>.

For this example you are going to need to install `swmmio` for your Python instance. When you installed `pyswmm` originally, you opened your command prompt (shell or terminal) and you used `pip` to install. To install `matplotlib` you will need to run the following command. And a quick note, if you are using a virtual environment, you need to activate that first (how to do this is described in a different lesson.)

Run: `pip install swmmio`



```
ExampleModels — -zsh — 80x24
(tutorial_venv) bryant@Bryants-MBP ExampleModels % pip install swmmio
Requirement already satisfied: swmmio in ./venv/tutorial_venv/lib/python3.8/site-packages (0.5.1)
Requirement already satisfied: pyproj>=3.0.0 in ./venv/tutorial_venv/lib/python3.8/site-packages (from swmmio) (3.4.0)
```

Code Example

This code builds off of the `Espresso` example. Write this code into a new Python module called `latte_art_double_shot.py`.

```
'''
PySWMM Latte Art Double Shot Code
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'''

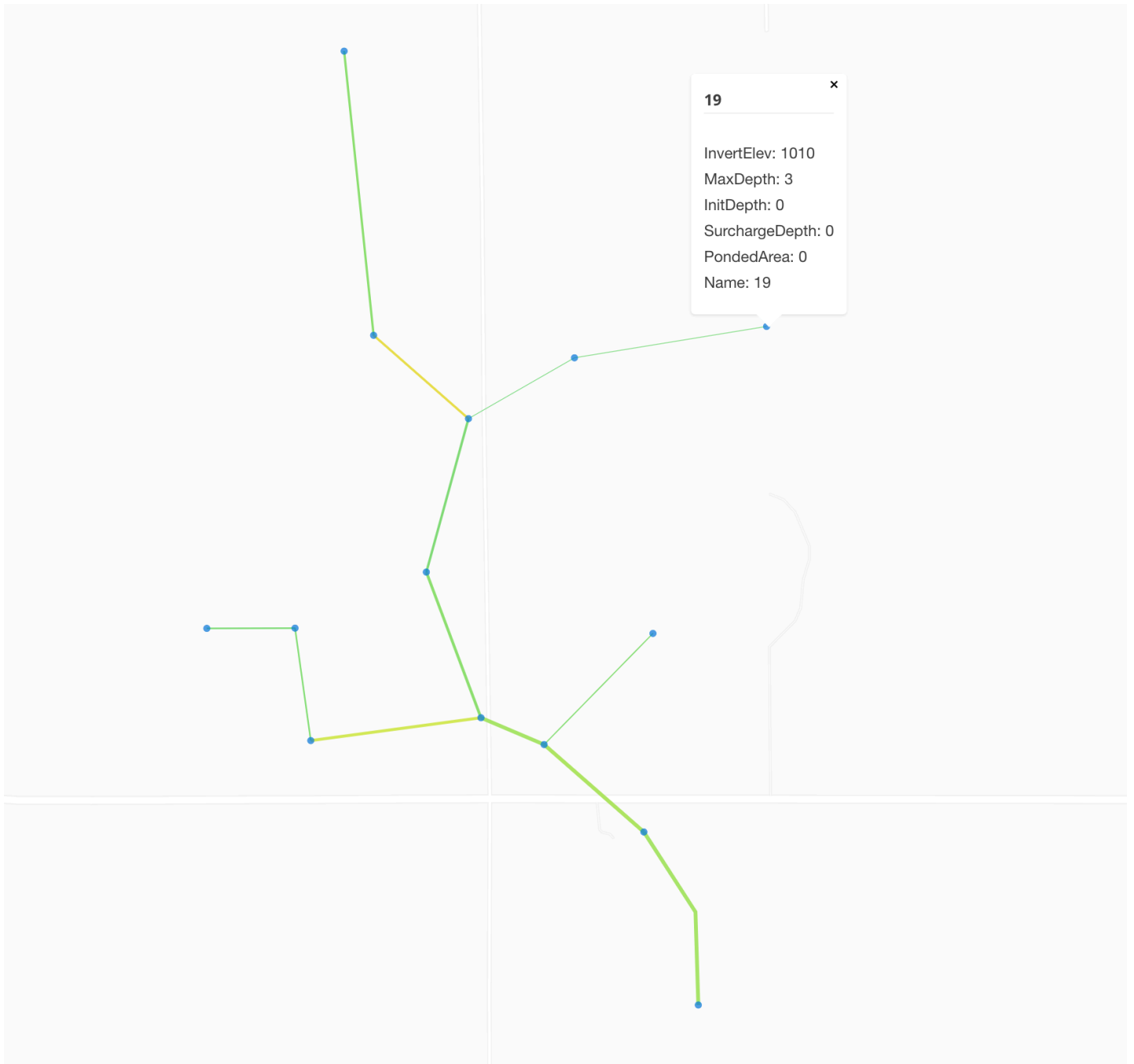
from pyswmm import Simulation
import swmmio
```

```
# Run Simulation PySWMM
with Simulation('./Example1.inp') as sim:
    for step in sim:
        pass

# Pass Give SWMM Simulation Artifacts to swmmio
# Check out swmmio https://github.com/aerispaha/swmmio
crs = 'epsg:3728' # Coordinate Reference System
simulation_info = swmmio.Model("./Example1.inp", crs=crs)
swmmio.create_map(simulation_info, filename="test.html")
```

To run this the you just have to hit `F5` if using `Idle`. If you are using Python on the command line or in a virtual environment, type `python latte_art_double_shot.py`

Output (test.html)



Follow up

If you have run into problems, try posting your questions on Stack Overflow and tag it with `pyswmm`. The development team is very active on there and will for sure follow up!