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rjleveque added instructions for starting notebooks to index.ipynb

a65e54c 21 hours ago

2 contributors



101 lines (100 sloc) 3.99 KB

Raw

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History



Index of notebooks for the visualization tutorial

Instructions to launch the notebooks:

Static view

If you reached this page from the [Geohackweek schedule \(http://geohackweek.github.io/\)](http://geohackweek.github.io/) then clicking on one of the notebooks below will take you to a static version rendered by Github. You can view the notebook and most of the output but it will not be interactive.

Run on your laptop

If you want to run the notebooks, then you should:

```
git clone https://github.com/geohackweek/visualization.git
```

start a Jupyter notebook server, and then navigate to the folder `visualization/docker/notebooks` and open the notebook `index.ipynb` to see an interactive version of this notebook. Then clicking on a notebook name below should open the notebook. They should run with either Python 2 or Python 3 provided you have all the required dependencies installed. If you don't, some of the `import` statements will give an error.

Run with docker

If you haven't already pulled the latest version from dockerhub:

```
docker pull geohackweek2016/vistutorial
```

Then follow the [docker tutorial instructions \(https://geohackweek.github.io/Introductory/01-docker-tutorial/\)](https://geohackweek.github.io/Introductory/01-docker-tutorial/) section titled "Docker Containers Work with Jupyter Notebooks".

Run on SageMathCloud

If you have a Geohackweek2016 project on [SMC \(https://cloud.sagemath.com\)](https://cloud.sagemath.com) then you can open the project, start a terminal, clone the repository (as described above), and navigate to the `visualization/docker/notebooks` directory and launch `index.ipynb`. For the notebooks to run properly, you need to run them with the "Anaconda (Python 3)" kernel, which can be selected from the "Kernel" -> "Change kernel" tab once the notebook is open.

Notebooks for this tutorial

- [Crescent City Inundation.ipynb \(Crescent City Inundation.ipynb\)](#)
 - Python code to read in a `.asc` file that contains data from a tsunami simulation.
 - Plotting the data using [matplotlib \(http://matplotlib.org/\)](http://matplotlib.org/), contour plots, filled contours, `pcolor` plots.
 - Using masked arrays to selectively plot part of the data.
 - Adjusting various plotting parameters and colormaps.
- [Map projection \(basemapProjections.ipynb\)](#)
 - Change basemaps
 - PSA for map projections - be aware of distortion
- [Chile2010 tsunami.ipynb \(Chile2010 tsunami.ipynb\)](#)
 - Plotting a time frame from a tsunami simulation on the sphere.
 - Creating an animation from several time frames.
- [Chile2010 kml.ipynb \(Chile2010 kml.ipynb\)](#)
 - Creating a plot in `matplotlib` that can overlaid on Google Earth, Cesium, etc.
 - Using `pykml` to create a kml wrapper for the image.
 - Viewing in a notebook with [cesiumpy \(https://pypi.python.org/pypi/cesiumpy\)](https://pypi.python.org/pypi/cesiumpy).
- [geoHackWeek DataShader Example.ipynb \(geoHackWeek DataShader Example.ipynb\)](#)
 - More about Cesium, and Data shader
 - Working with large amounts of points data.

