URSC 689

Research Log for replicating Juptyer Notebook Example

# April 27, 2020

Working in class to replicate Jupyter Notebook - Wayne is having problems reprojecting pandas dataframe

open anaconda prompt

change directory

g:

G:\Team Drives\URSC689\_S2020\WorkInClass\WorkNPR

My jupyter notebook launches in Internet Explorer need to switch to chrome

http://localhost:8888/?token=07cab6a7c4f353457ea8afe68e327d9ef5adfc4ca2c968b0

# 

Trying to map 1990 Block Group Data

G:\Team Drives\URSC689\_S2020\Projects\ANDRST\SourceData\data2.nhgis.org\florida\_1990\nhgis0006\_shapefile\_tl2000\_120\_blck\_grp\_1990\

trying to map FL\_12025\_blck\_grp\_1990.shp in python

source data file is not in the right projection

major headache trying to get NHGIS shapefile in the EPSG 3857 projection

Tried to use to\_crs in geopandas but this did not successfully change the geometry column

Tried to make the change in the projection in QGIS but still have the same issue….

Currently this is a fail. Not sure how to get geopandas to tranform the crs from

<https://www.nhgis.org/support/faq#projected_coordinate_system>

Esri's USA Contiguous Albers Equal Area Conic projection

to Open Street Map Lat Lon

<https://geopandas.readthedocs.io/en/latest/projections.html>

It looks like EPSG 3857 is not the right CRS, the documentation suggests that it is correct but the Geometry column is not in Lat Lon

When I convert to EPSG 4269 the Geometry column changes to Lat Lon and the folium map works.

<https://gis.stackexchange.com/questions/48949/epsg-3857-or-4326-for-googlemaps-openstreetmap-and-leaflet>

<https://gis.stackexchange.com/questions/27493/is-nad-83-the-same-as-epsg4326>

EPSG: 4269 uses a coordinate system (Lat, Lon) on the surface of a sphere with the NAD83 datum tracking with the north american plate.

EPSG: 4326 uses a coordinate system (Lat, Lon) on the surface of a sphere with the WGS84 datum tracking the center of mass of the earth. Open Street Map and Google Earth use 4326.

EPSG: 3857 uses a coordinate system PROJECTED from the surface of the sphere or ellipsoid to a flat surface.

success… map works with correct projection

URSC689\_MinimumStepstoMapShapefile\_2020-04-27T1130.html

# April 20, 2020

Replicating IN-CORE example for mapping using Jupyter Notebook

Copy folder

Posted\IN-CORE.JupyterNotebookExamples.RosenheimN.Students\_2020-03-02\

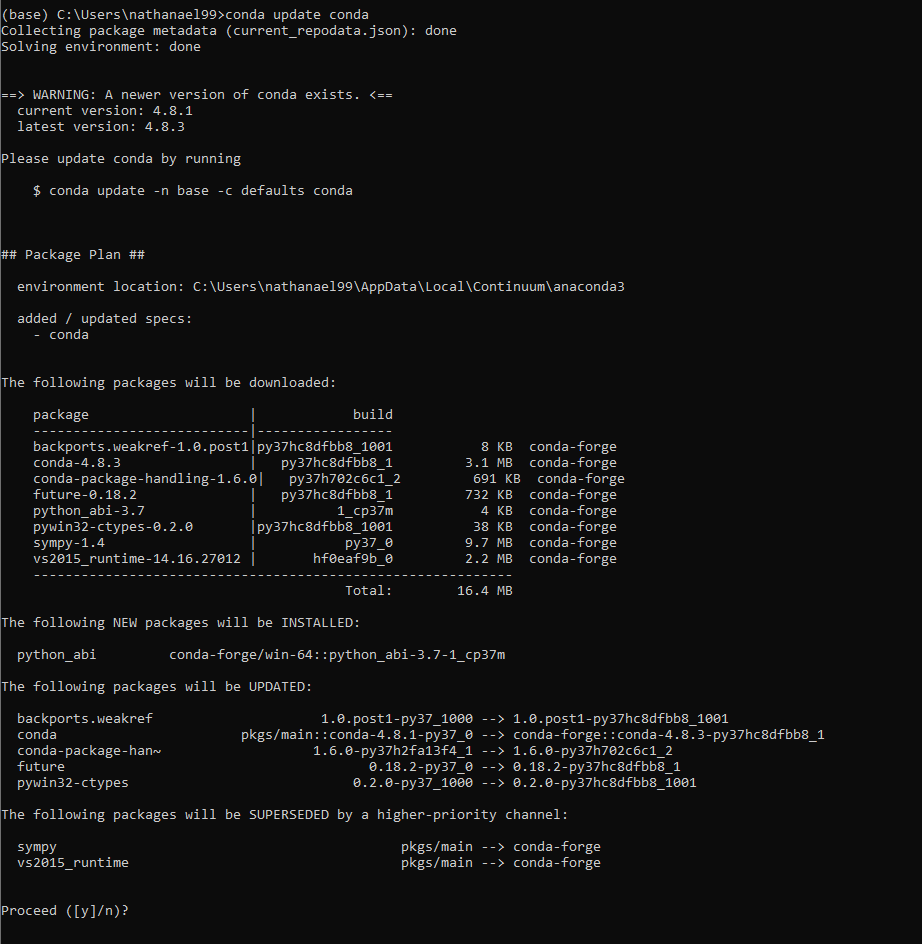
to

WorkInClass\WorkNPR\IN-CORE.JupyterNotebookExamples.RosenheimN.Students\_2020-03-02\

Open Anaconda Prompt

update conda

conda update conda



Need to activate environment but I forget the name of the last enviroment I made

Google search - conda list environments

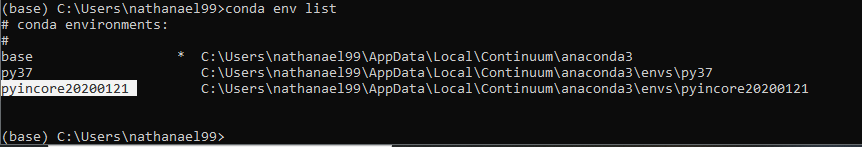
|  |
| --- |
| **conda info --envs conda info -e** |

Google search - conda list environments

wrong command try

<https://docs.conda.io/projects/conda/en/4.6.0/_downloads/52a95608c49671267e40c689e0bc00ca/conda-cheatsheet.pdf>

conda env list



activate environment

conda activate pyincore20200121

change directory

g:

cd G:\Team Drives\URSC689\_S2020\WorkInClass\WorkNPR\

launch jupyter notebook

switch to Google Chrome

## Students attempts to replicate jupyter notebook

Jin tried to launch jupyter notebook from his ananconda prompt.

His operating system uses korean language and he had to copy and paste the text from the file explorer in order to get the prompt to change directory.

# Notes for assignment 3

Make summary of assignment

* include example of using estimates out command in stata to make summary stats
* include example of creating a figure in stata
* example of spatial data exploration - either using jupyter notebook examples or GIS software with good research log

Workflow research log template {ctrl-alt-h}

# Heading level 1 {alt-1}

Normal text {ctrl-n}

## Heading level 2 {alt-2}

Normal text follows by default.

### Heading level 3 {alt-3}

Normal text follows by default.

#### Heading level 4 {alt-4}

Normal text follows by default.

##### Heading level 5 {alt-5}

Normal text follows by default.

Output in 10 point font {alt-0}

1 2 3 4 5 6 7 8

12345678901234567890123456789012345678901234567890123456789012345678901234567890

Output in 9 point font {alt-9}

1 2 3 4 5 6 7 8

12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789