We will emulate how you find code and try things out for your final project or your research. Work with your team.

Let’s say you’re interested in downloading HLS data for a region of interest and do not want to reinvent the wheel.

At a quick search, you will find the HLS tutorials page: <https://github.com/nasa/HLS-Data-Resources>

Download the Jupyter Notebook: (<https://github.com/nasa/HLS-Data-Resources/blob/main/python/tutorials/HLS_Tutorial.ipynb>) and add it to a subfolder called HLS.

Start reading it and running it.

First, you will see that additional packages currently not included in the GIS712 environment are needed. Those include rioxarray, hvplot, earth access, and desk.

Can you go back to your GIS712.yml, make a copy of it, save it as hls\_tutorial.yml, add the missing packages, and create an environment called hls\_tutorial? Try to challenge yourself to do this. Go back to Week1/Lecture2/Setup.doc to remind yourself how to do this.

If you absolutely must, use the yml file [here](https://drive.google.com/file/d/1pQ26Jx4h6rEtHhLhGkZRKYj4V3LG5_RR/view?usp=drive_link).

You will need to download the boundaries from here: <https://github.com/nasa/HLS-Data-Resources/blob/main/data/Field_Boundary.geojson>

Check if a geojson is valid here: <https://geojsonlint.com/>

Some of the plotting didn’t work for me, for example, this (and others): nir\_cropped.hvplot.image(cmap='viridis', frame\_width= 800, fontscale=1.6, crs='EPSG:32610', tiles='ESRI').opts(title='HLS Cropped NIR Band') # Quick visual to assure that it worked

But I could still process the EVI.