Geoinformatics Shout-Out

```
>>> var = “hello DEVELOP”
>>> print var
hello DEVELOP
>>> var = “We are the Geoinformatics Team!”
>>> print var
We are the Geoinformatics Team!
>>>|
```

Overview >>>

>>> DEVELOPedia

>>> Training Resources/Online Help

>>> Software Release

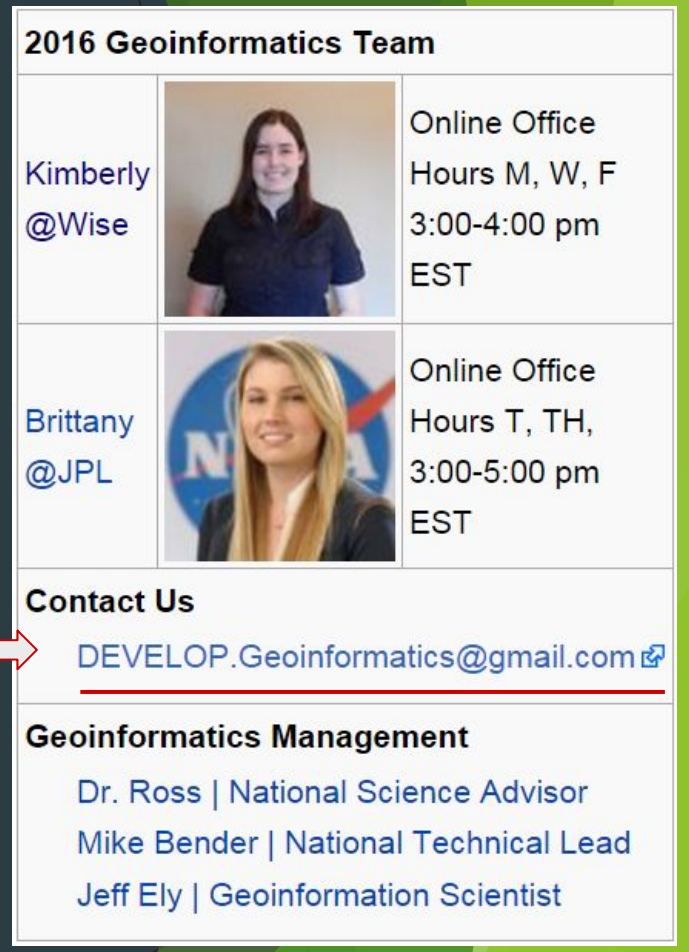
>>> dnppy / GEE / ArcGIS Earth

DEVELOPedia

>>> DEVELOPedia → Support → Geoinformatics

- Contact Information
- Software Release
- The DEVELOP National Program Python Package → dnppy

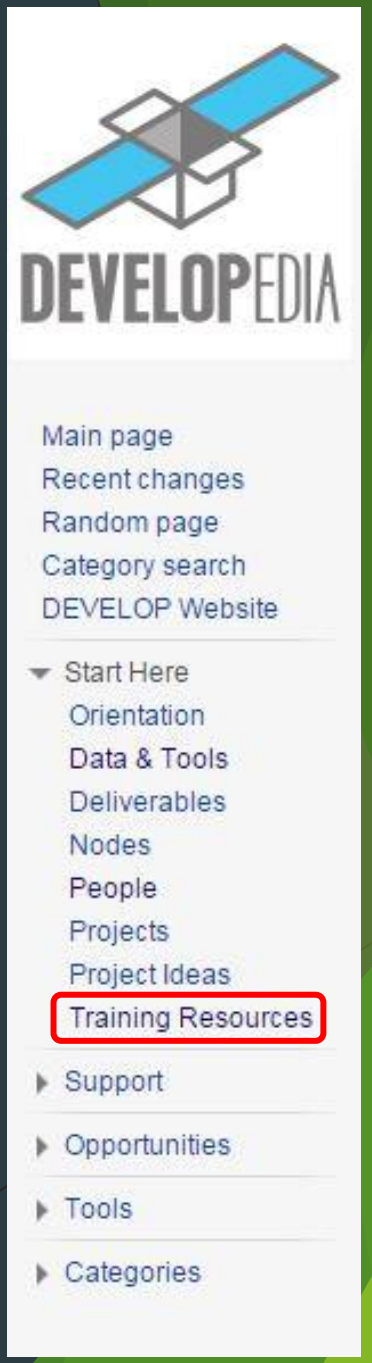
>>>



DEVELOPedia

>>> Start Here → Training Resources

- Seminars
  - NASA's Applied Remote Sensing Tutorials (ARSET)
  - MetEd
  - W3Schools
- Programing Classes, Tutorials, and Help
  - Python, JavaScript, HTML, CSS, SQL, XML, R, Matlab
- Geospatial software help
- Tutorials available Terrset, ERDAS, ArcGIS, and ENVI



>>>

Online Office Hours

Geoinformatics Open Door - Telecon Line

- Wednesdays at 3 pm (EST) 2 pm (CT) 1 pm (MT) 12 (PT)

Kimberly

- M, W, F 3:00-4:00 (EST)

Brittany

- T, Th 3:00-4:00 (EST)

DEVELOP.Geoinformatics@gmail.com

Software Release

```
>>> def Software_Release(Your_Project):
        if Requirements == “completed”:
            Handoff = “success”
        else:
            emotion = “sadness”
```

Timeline/Workflow

>>> Complete the last section of the project summary to the best of their ability when submitting a RD by Week 3 (Feb 11).

>>> project teams can work with Mike Bender and the Geoinformatics team to finalized the required information for software release.

>>> All software release information should be updated by the submission of the project summary FD - Week 7 (March 10)

>>> By week 10, provide all code, documentation, tutorials, and a final draft of the software release form in a zip file.

>>> Once the software release process is complete, the code will be posted on the NASA DEVELOP GitHub site

Software Release

Link

>>> Who needs to be involved?

- Projects who release software
- Center leads for these Projects
- Geoinformatics Team
- National Program Office (Mike Bender)

>>> What resources are available?

- Step by Step guide
- Easy access to blank forms
- Completed examples

Software Release:
>>> Pointers

- Start early!
- Do not promise your end-user(s) a quick release after the term.

  This process is lengthy and may takes awhile to get through the patent office.

Category	Description [Collapse]
N/A (not applicable)	Project goals do not include or require programming to meet objectives. Project team has no plans to perform any kind of coding.
Category I	Project creates simple, practical scripts with very limited re-usability. The code is created for internal use of the team.
Category II	Project uses non-generalized scripts to perform their analysis by making calls to existing code repositories on DEVELOP's GitHub website (i.e. dnppy). The code is intended to be provided to the partner or made available to future DEVELOP teams.
Category III	Project uses non-generalized scripts to perform their analysis by making calls to existing code repositories other than those from DEVELOP's GitHub site. The code is intended to be provided to the partner or other entity not funded by NASA.
Category IV	The Project goals are clearly defined to include creation of a new, standalone software tool.
Category V	These projects seek to expand the functionality of existing DEVELOP repositories that have already received open-source software release. Teams are allowed to continue development in the public domain.

DEVELOP National Program Python Package (dnppy)

```
>>> def dnppy():
        values = [“Capacity Building”,“Outreach”]
```

About [dnppy]]

>>> A python package, a collection of functions and classes that are useful for manipulation and analysis of geospatial data and NASA satellite data products

>>> A development environment modifier to help the users quickly gain access to a large host of third party libraries

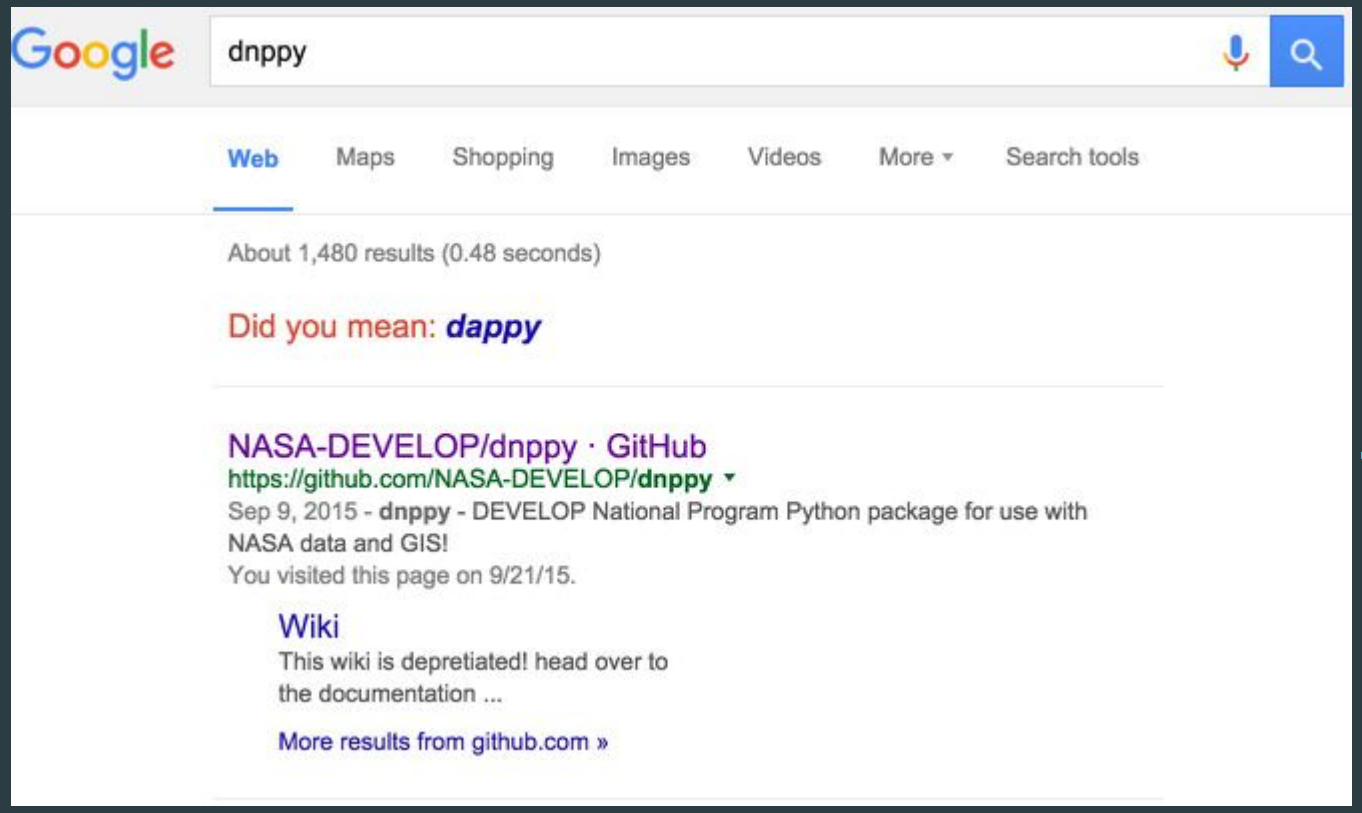
>>> A method for distributing DEVELOP project code that complies with NASA Software Release

Managed from GitHub at https://github.com/NASA-DEVELOP/dnppy

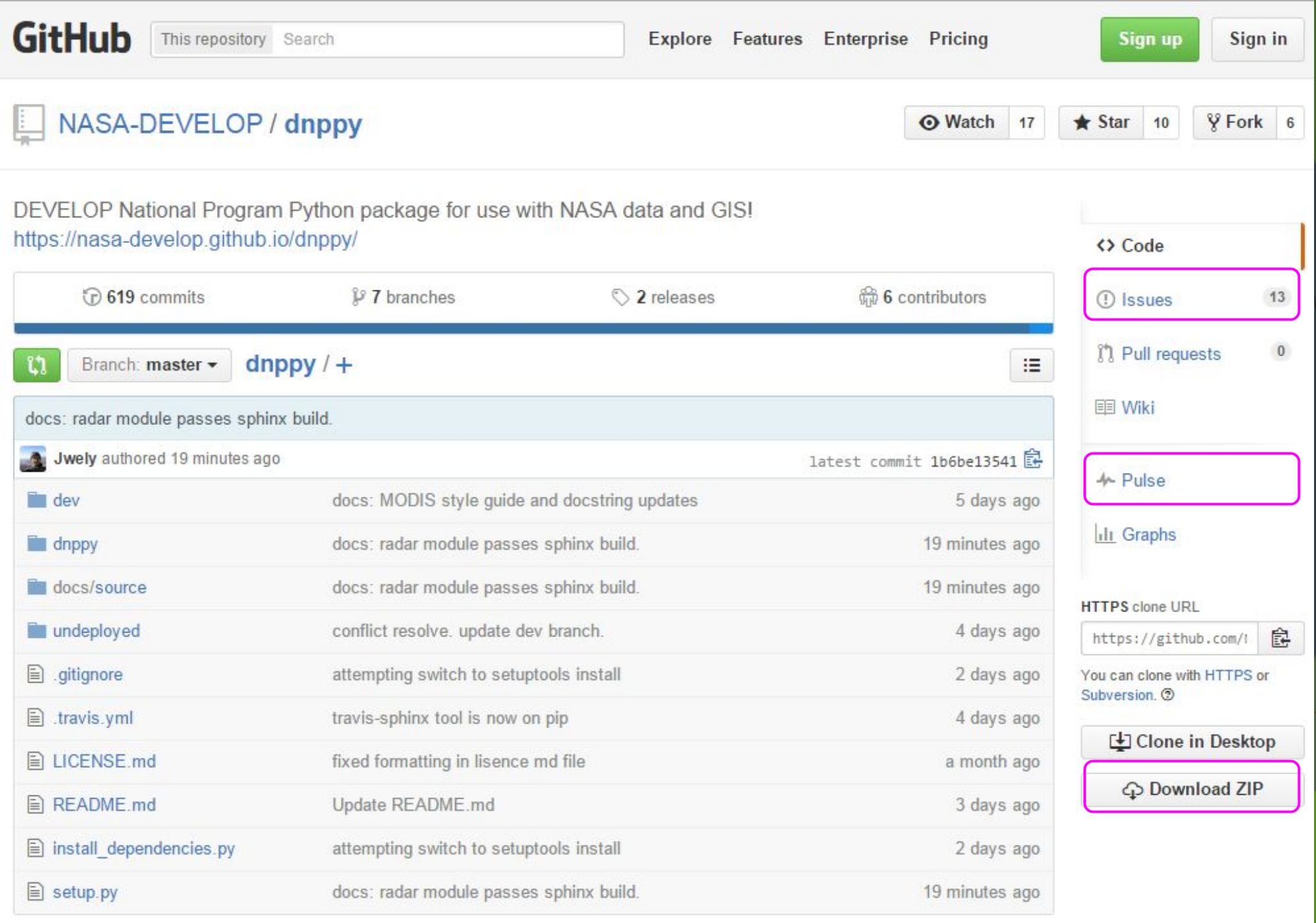
Continously updated documentation pages with much more info at https://nasa-develop.github.io/dnppy/

>>> Access to [dnppy]

- Extremely easy to find
- GitHub account is **not** required to download and use
- Installs itself and a host of python libraries without admin elevation



<<< This is us!

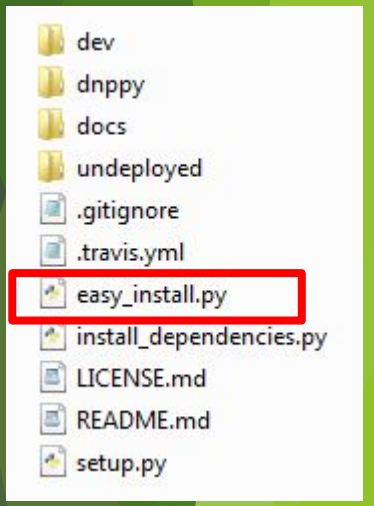

GitHub
This repository
Search
Explore
Features
Enterprise
Pricing
Sign up
Sign in
NASA-DEVELOP / dnppy
Watch 17
Star 10
Fork 6
DEVELOP National Program Python package for use with NASA data and GIS!
https://nasa-develop.github.io/dnppy/
619 commits
7 branches
2 releases
6 contributors
Branch: master
dnppy / +
docs: radar module passes sphinx build.
Jwely authored 19 minutes ago
latest commit 1b6be13541
dev docs: MODIS style guide and docstring updates 5 days ago
dnppy docs: radar module passes sphinx build. 19 minutes ago
docs/source docs: radar module passes sphinx build. 19 minutes ago
undeployed conflict resolve. update dev branch. 4 days ago
.gitignore attempting switch to setuptools install 2 days ago
.travis.yml travis-sphinx tool is now on pip 4 days ago
LICENSE.md fixed formatting in lisence md file a month ago
README.md Update README.md 3 days ago
install_dependencies.py attempting switch to setuptools install 2 days ago
setup.py docs: radar module passes sphinx build. 19 minutes ago
Code
Issues 13
Pull requests 0
Wiki
Pulse
Graphs
HTTPS clone URL
https://github.com/l
You can clone with HTTPS or Subversion.
Clone in Desktop
Download ZIP
Get Help
Stats
Download

>>> Installation

> Grab the master branch from our GitHub by clicking the "Download ZIP" button in the bottom right*

> Extract the contents then run "easy_install.py" by double clicking, or opening and executing in your prefered python interpreter

Click here



>If installation succeeds, you should delete this downloaded folder

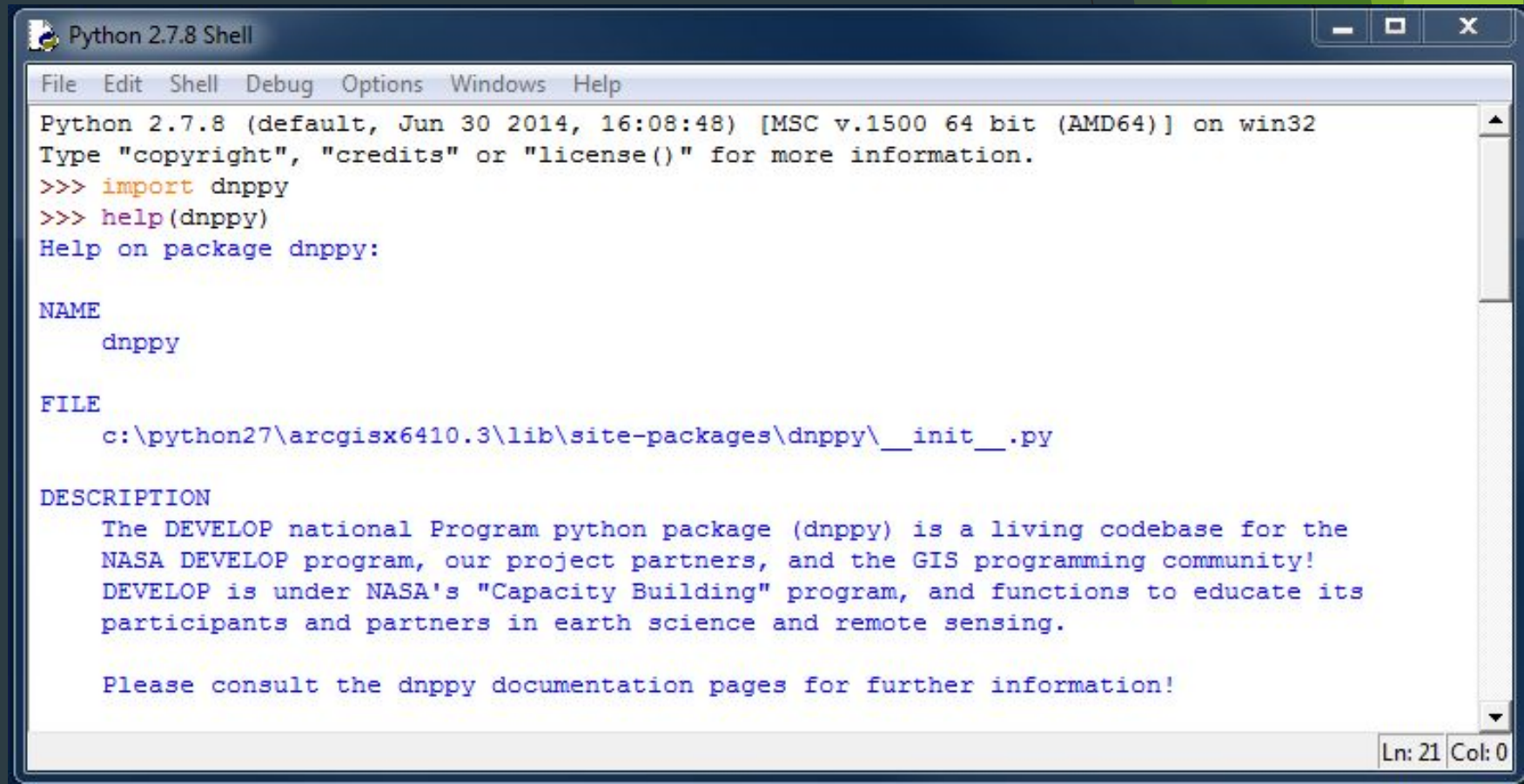
* On occasion, the downloaded zip file is empty and fails to extract. If this happens to you, just try downloading again.

>>> Start

- Run ‘import dnppy’
- You now have access to dnppy, gdal, scipy, and many more!

Modules:

-convert
-core
-download
-landsat
-modis
-radar
-raster
-solar
-textio
-tsa



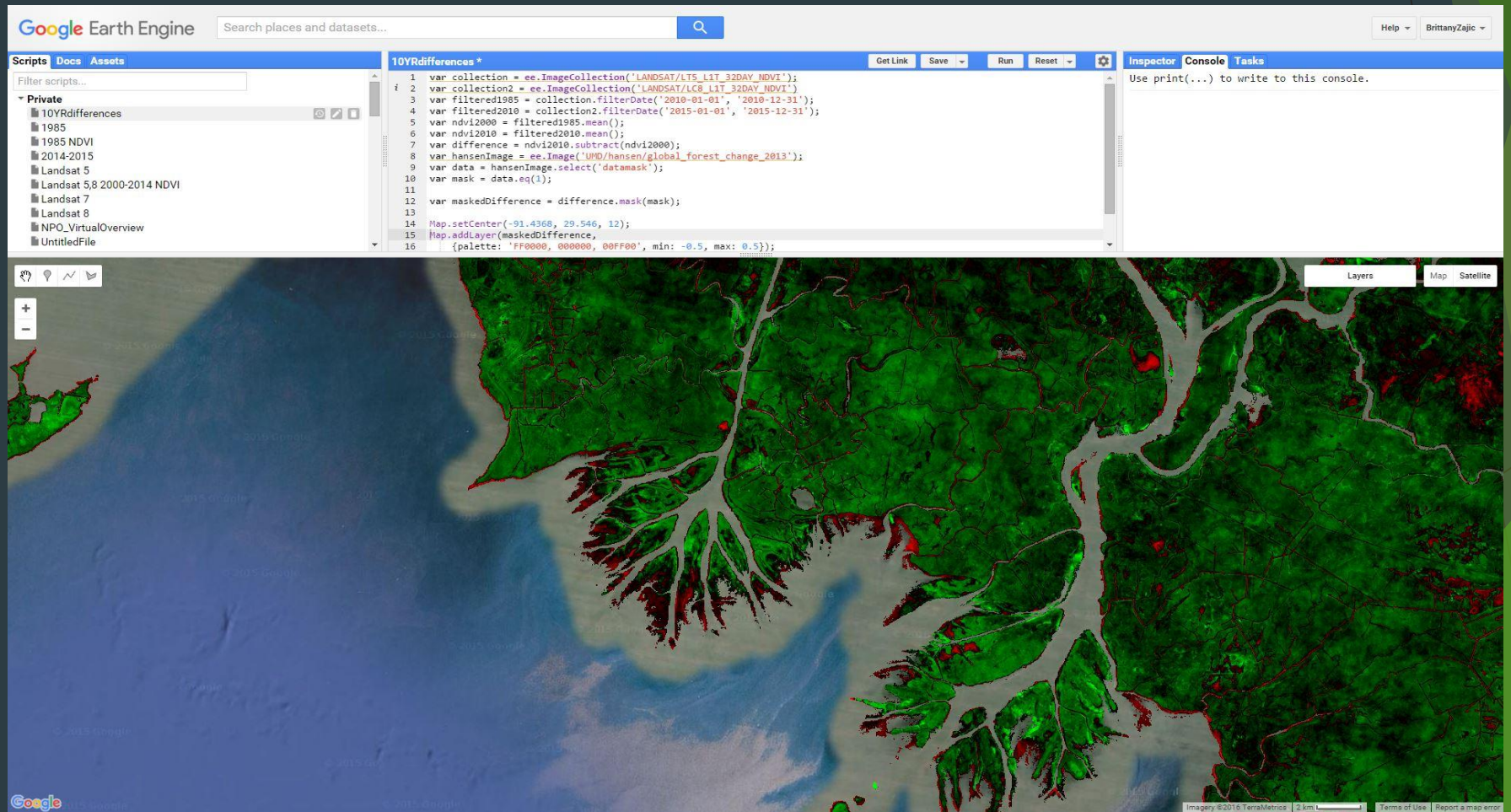
>>> Google Earth Engine

- More than 30+ years of historical imagery and scientific datasets
- Geospatial data instantly available for analysis

- **Landsat 5-8**: 32-Day, 8-Day, Annual; TOA Reflectance, EVI, BAI, NDVI, Raw Scenes (Orthorectified)
- **MODIS Aqua + Terra**: 16-Day, Daily Combined, 1+ Year NBAR Mosaic (8-Day); Global 500m, Global 250m, Vegetation, Snow Cover, EVI, BAI, NDVI, NDSI

>>> Google Earth Engine

- 1) Sign Up at: https://signup.earthengine.google.com/#/
- 2) Join Google Developers (GEE API Group) for access to Earth Engine Code Editor: https://code.earthengine.google.com/



ArcGIS Earth

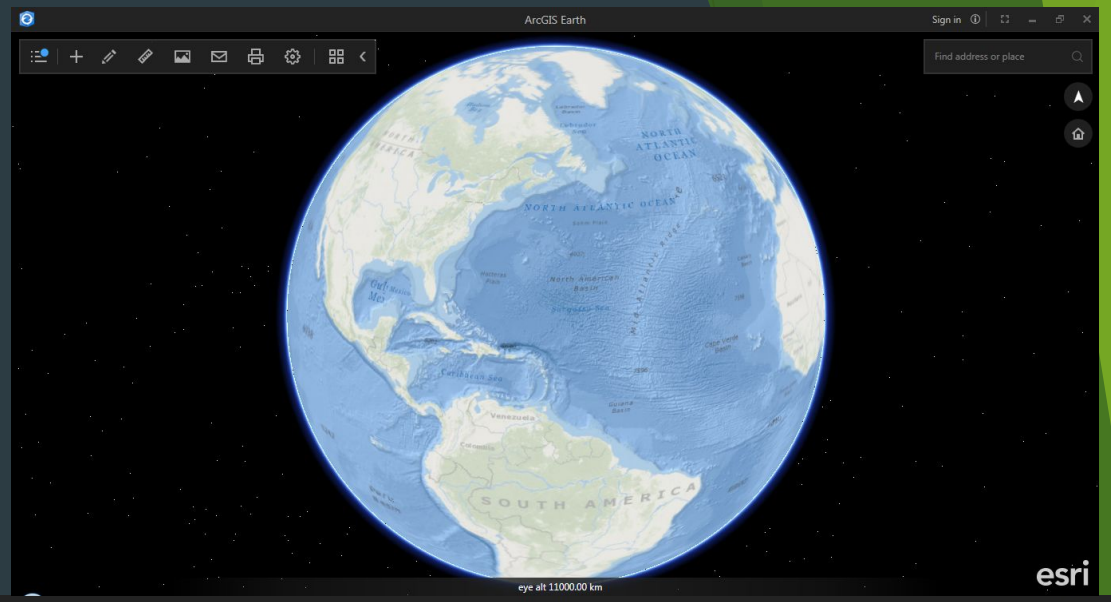
Free to download and easy to use

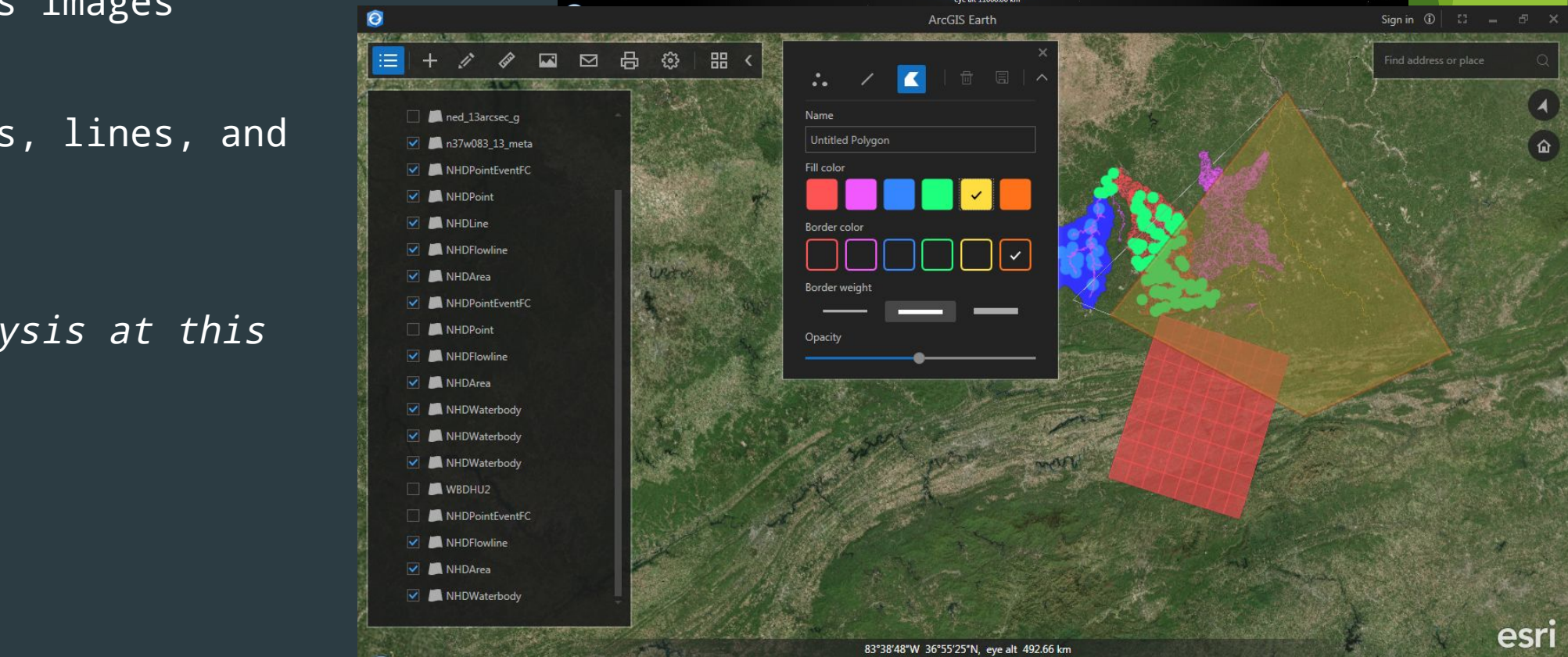
Great for displaying data

Easily prints images

Create points, lines, and polygons

No data analysis at this time





Questions?

```
>>> Questions = raw_input(“Any Questions? : ”)
```