ReadMe for JWST Rough Draft

About:

The objective of this tutorial is to promote JWST data and data accessibility as a whole. The Tutorial covers the techniques involved in opening and extracting the JWST data and converting to an image. Also demonstrating the method of determining the number of galaxies in the produced image.

Run the script:

Required Packages for use: tarfile, matplotlib, astropy , imutils , skimage, numpy , cv2.

(Make a requirements.txt file for easier install)

pip install -r requirements.txt

Expected Behavior:

Opening\_a\_tar\_file.py will extract and save the .fits files containing the JWST image data

Visualize\_2D\_fits.py will plot a single fits file and save it

Brightness\_test.py will create and filter pixels based off a brightness threshold.

The pixels that remain will be documented and circled, presenting the user with an estimate of the number of galaxies in the image.

* Total number of galaxies in image
* Each passible image being circled and numbered