Instructional Videos & Learning Materials: Data Exploration and Data Acquisition

WATCH

Watch this week's videos, download the working files so you can follow along and experiment with the platform we'll be using for the course.

**Data Exploration Video**

**Data Acquisition Video**

WORKING FILES

You will need the following files to get set up for this week. They include the following:

* Jupyterhub notebooks (download to a personal device then upload to your Jupyterhub). Also, download the image and place it in the same directory in your Jupyterhub notebook.
  + [Data Exploration Jupyter Notebook](https://elearning.mines.edu/courses/52392/files/5459246/download?wrap=1)[Download Data Exploration Jupyter Notebook](https://elearning.mines.edu/courses/52392/files/5459246/download?download_frd=1)
  + [Supporting Image](https://elearning.mines.edu/courses/52392/files/5459048/download?wrap=1)[Download Supporting Image](https://elearning.mines.edu/courses/52392/files/5459048/download?download_frd=1)
  + [Data Acquisition Jupyter Notebook](https://elearning.mines.edu/courses/52392/files/5459153/download?wrap=1)[Download Data Acquisition Jupyter Notebook](https://elearning.mines.edu/courses/52392/files/5459153/download?download_frd=1)
    - You also need the following files (create a directory called 11-acquisition-files and place it in the same directory in your Jupyterhub notebook, and place these files in that new directory):
      * [JSON 1](https://elearning.mines.edu/courses/52392/files/5459022/download?wrap=1)[Download JSON 1](https://elearning.mines.edu/courses/52392/files/5459022/download?download_frd=1)
      * [JSON 2](https://elearning.mines.edu/courses/52392/files/5459114/download?wrap=1)[Download JSON 2](https://elearning.mines.edu/courses/52392/files/5459114/download?download_frd=1)
      * [text no headers](https://elearning.mines.edu/courses/52392/files/5459001/download?wrap=1)[Download text no headers](https://elearning.mines.edu/courses/52392/files/5459001/download?download_frd=1)
      * [text as CSV](https://elearning.mines.edu/courses/52392/files/5459109/download?wrap=1)[Download text as CSV](https://elearning.mines.edu/courses/52392/files/5459109/download?download_frd=1)
      * [text](https://elearning.mines.edu/courses/52392/files/5459024/download?wrap=1)[Download text](https://elearning.mines.edu/courses/52392/files/5459024/download?download_frd=1)
* PDF files that contains the same information as the Jupyterhub notebooks, in case your Juypterhub is not yet working.
  + [Data Exploration PDF](https://elearning.mines.edu/courses/52392/files/5459245/download?wrap=1)[Download Data Exploration PDF](https://elearning.mines.edu/courses/52392/files/5459245/download?download_frd=1)
  + [Data Acquisition PDF](https://elearning.mines.edu/courses/52392/files/5459047/download?wrap=1)[Download Data Acquisition PDF](https://elearning.mines.edu/courses/52392/files/5459047/download?download_frd=1)

ADDITIONAL RESOURCES

The links below are supplementary resources to help you review or strengthen the topics we have discussed:

* [Ultra Detailed Data Exploration ExampleLinks to an external site.](https://www.kaggle.com/pmarcelino/comprehensive-data-exploration-with-python)
* [Reading in TXT with PandasLinks to an external site.](https://www.statology.org/pandas-read-text-file/)
* [Reading in CSV with PandasLinks to an external site.](https://www.geeksforgeeks.org/python-read-csv-using-pandas-read_csv/)
* [Reading in JSON with PandasLinks to an external site.](https://pythonbasics.org/pandas-json/)