

Description of scripts

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Download_scenes.py

Run in command line with `python3 download_scenes.py -id <fid> -s <satellite[Sentinel, Landsat]>` to download Sentinel or Landsat image by target fire id.

config.py

Python script to set download settings and user credentials for Landsat and Sentinel APIs. Used by download_scenes.py.

utils.py

Python script with some utility functions used in download_scenes.py.

Catalog_product_search.ipynb

Notebook to search Sentinel product catalog with specified search conditions based on date, location etc. *Not needed for Firedpy integration *.

Dataset_generation.ipynb

Notebook to create images (dNBR and segmentation masks) and compile the dataset from the optical bands downloaded in download_scenes.py.

Training_dev.ipynb

Notebook to train a deep learning model using the dataset stored in the following folder structure in /Bhaltos/ASHWATH/Dataset:

/Dataset	–	/dNBR (predictors)
		/Masks (targets)
		/RGB (not needed for training)

Training.py

Same as training_dev.ipynb, but as a Python script.