Expanding and Updating OSM Data with Deep Learning

The problem

- Open Street Map
- OSM data is not available everywhere and it’s also not updated everywhere in a high frequency

  Why not use the OSM labels for expanding the dataset to less covered areas and help the data to be updates?

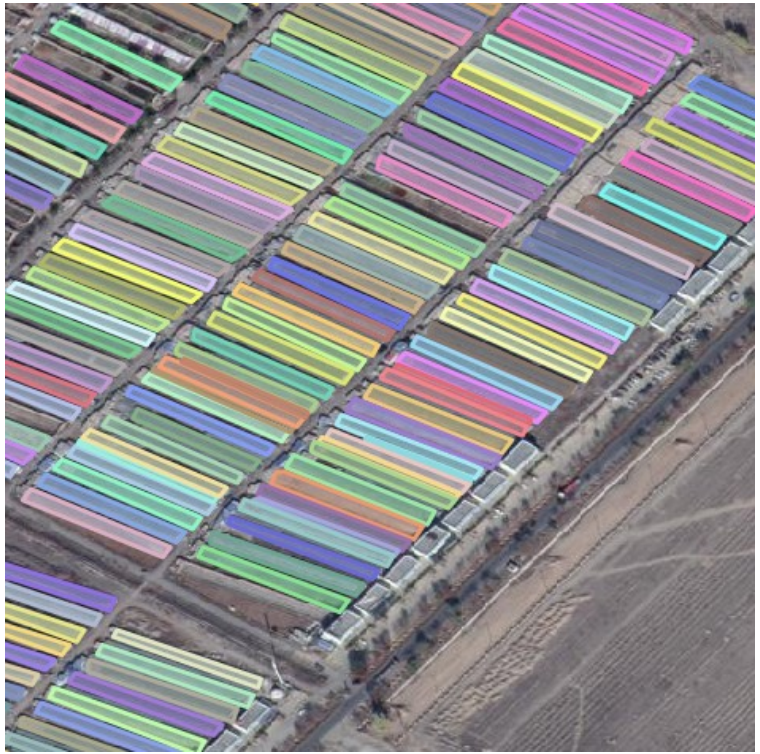
The Framework

- WebScraping
- Checking labels and cleaning data
- Select features
- Narrow detections (South America? Africa?)
- Gather images from WMTS service and cut it and other pre-processing
- CNN and Vision Transformer
- Model assessment and comparison

On Going

- WebScraping ✔
- Checking labels and cleaning data ✔
- Select features ✔
- Narrow detections (South America? Africa?) to be analysed
- Gather images from WMTS service and cut it and other pre-processing ✔
- CNN and Vision Transformer Next one : COCO annotations
- Model assessment and comparison

shp2coco



https://github.com/DuncanChen2018/shp2coco

For two weeks

- COCO annotations – done
- First try with CNN (Local, Palma, debugging...)