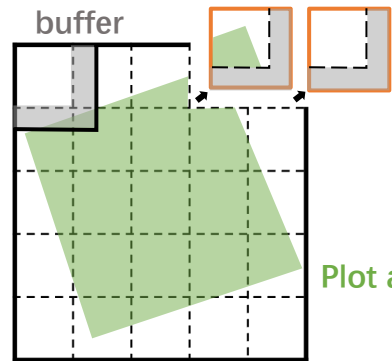
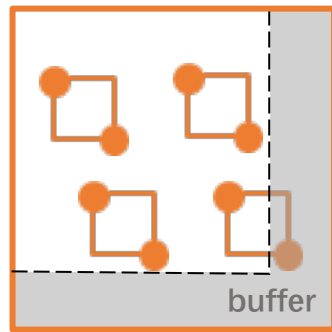


## (a) Seedling detection

1. Crop by pixel grid



2. mark training data



DOM<sub>seedling</sub>

labelme

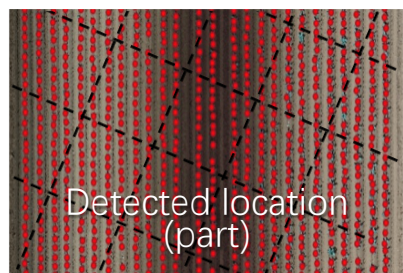
3. train

4. Apply

Yolo v5 model

All grids

5. Merge by NMS

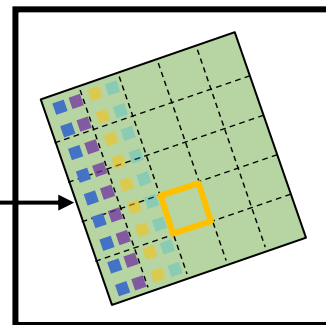


6. Manual check & adjust in QGIS

7. Label plant id along ridge

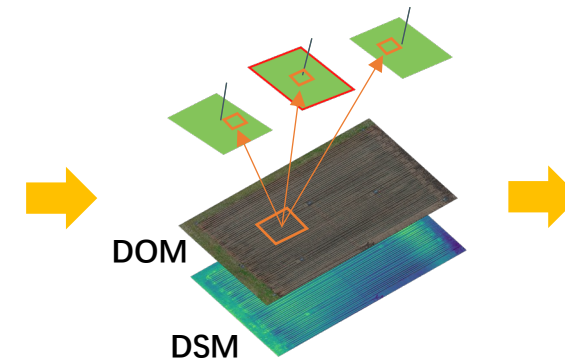
## (b) Head segmentation

1. Crop by plot grid



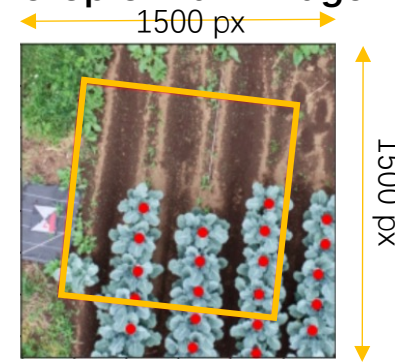
DOM<sub>heading</sub>

2. Backward to raw UAV image



Select the closest one

3. Crop on raw image

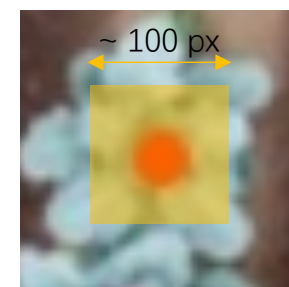


• Seedling position

labelme

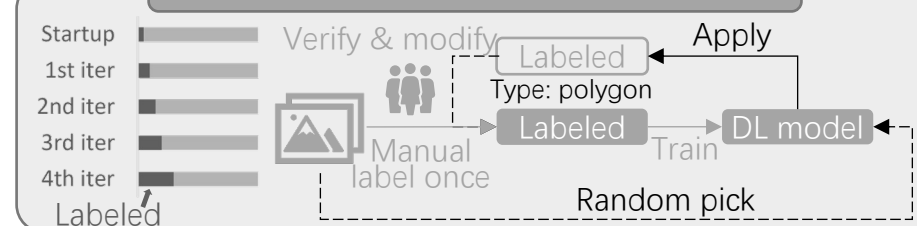
Training data

BiSeNetV2



4. processing region

5. Interactive annotation



Apply to all

6. Segment result

