Download data from:

<https://drive.google.com/drive/folders/1yfK7heuufuAN0HIS4dQkJaanD0CTE0Jv?usp=sharing>

1 run **crop\_video.m** generate video. Input: original video output: video with size 1200\*1200

1 use **generate\_mask\_distinguish\_defects\_reflection.py** to generate mask. Input: image, xml file output: mask image. Please note to modify src\_folder and save\_folder.

2 use **bbox\_track.py** to generate bounding box and video. It will read mask image and video and save fileid\_bbox.png(image with bounding box), fileid\_date.avi(video with bbox), a folder named ‘txt\_fileid\_date’, in which are a list of txt files with coordinates of each box.

3. use txt files plot trace by **plot\_trace.m**.