{0: {'LineConvergenceH': 12.372500803855756, 'LineConvergenceV': 11.305611344387337, 'PicConsistency': 236.4071375062959}, 1: {'LineConvergenceH': 12.576518728642348, 'LineConvergenceV': 11.305611344387337, 'PicConsistency': 207.88618201103532}, 2: {'LineConvergenceH': 12.793103264901761, 'LineConvergenceV': 11.305611344387337, 'PicConsistency': 305.2810279558152}}

{4: 162, 6: 535, 5: 71, 3: 286}

/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6 "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py"  
type the picture number u wanna test or c to cancel: 59  
img\_59\_{0}  
Type in the index for horizontal slice: (range: [0, 479]) 30  
Type in the index for vertical slice: (range: [0, 639]) 300  
/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py:176: RuntimeWarning: overflow encountered in exp  
 return a \* np.exp(- (x - b) \*\* 2 / (2 \* c\_s))  
/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py:176: RuntimeWarning: overflow encountered in multiply  
 return a \* np.exp(- (x - b) \*\* 2 / (2 \* c\_s))  
0:00:00.003400  
0:00:00.001617  
0:00:00.001382  
edge: 106.90241734802697, poly:130.08608608608608, gaussian:137.0  
0:00:00.002707  
edge: 215.8282069593912 poly:200.8108108108108, gaussian:203.94794794794794  
type the picture number u wanna test or c to cancel: 59  
img\_59\_{0}  
Type in the index for horizontal slice: (range: [0, 479]) 200  
Type in the index for vertical slice: (range: [0, 639]) 100  
0:00:00.002029  
0:00:00.001229  
0:00:00.002837  
edge: 92.21657196969699, poly:92.74474474474475, gaussian:92.64864864864865  
0:00:00.002217  
edge: -1 poly:196.7027027027027, gaussian:220.20220220220222  
type the picture number u wanna test or c to cancel: 59  
img\_59\_{0}  
Type in the index for horizontal slice: (range: [0, 479]) 200 400  
Type in the index for vertical slice: (range: [0, 639]) 400  
Bad Input, try again: (range: [0, 479]) 200  
0:00:00.001940  
0:00:00.001643  
0:00:00.003162  
edge: 92.21657196969699, poly:92.74474474474475, gaussian:92.64864864864865  
0:00:00.001327  
edge: 214.17900156837212 poly:194.24424424424424, gaussian:197.81381381381382  
type the picture number u wanna test or c to cancel: 60  
img\_60\_{0}  
Type in the index for horizontal slice: (range: [0, 479]) 200  
Type in the index for vertical slice: (range: [0, 639]) 500  
0:00:00.002107  
0:00:00.001729  
0:00:00.003385  
edge: 92.32846573208725, poly:92.03003003003003, gaussian:92.08708708708708  
0:00:00.001771  
edge: 210.0317535296279 poly:189.0990990990991, gaussian:212.75375375375376  
type the picture number u wanna test or c to cancel: 60  
img\_60\_{0}  
Type in the index for horizontal slice: (range: [0, 479]) 400  
Type in the index for vertical slice: (range: [0, 639]) 100  
0:00:00.003010  
0:00:00.001167  
0:00:00.000944  
edge: 93.30595634480204, poly:94.14414414414415, gaussian:93.81681681681681  
0:00:00.003850  
/Library/Frameworks/Python.framework/Versions/3.6/lib/python3.6/site-packages/scipy/optimize/minpack.py:794: OptimizeWarning: Covariance of the parameters could not be estimated  
 category=OptimizeWarning)  
edge: 307.8291557805356 poly:354.0, gaussian:308.5155155155155  
type the picture number u wanna test or c to cancel: 400  
Traceback (most recent call last):  
 File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1699, in <module>  
 test()  
 File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1073, in test  
 imgr, ori = test\_noise\_reduce(IMGDIR + imgn + ".png", numIMG=5)  
 File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 742, in test\_noise\_reduce  
 imgr = np.uint16(target)  
TypeError: int() argument must be a string, a bytes-like object or a number, not 'NoneType'  
img\_400\_{0}

type the picture number u wanna test or c to cancel: 60

img\_60\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 400

Type in the index for vertical slice: (range: [0, 639]) 400

0:00:00.005662

0:00:00.002262

0:00:00.001326

edge: 93.30595634480204, poly:94.14414414414415, gaussian:93.81681681681681

0:00:00.001187

edge: 212.21240264432728 poly:190.33833833833833, gaussian:193.35135135135135

type the picture number u wanna test or c to cancel: 61

img\_61\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 400

Type in the index for vertical slice: (range: [0, 639]) 400

0:00:00.004118

0:00:00.002345

0:00:00.001601

edge: 93.19376913380157, poly:94.17417417417417, gaussian:94.03603603603604

0:00:00.001510

edge: 212.52264302981456 poly:190.97897897897897, gaussian:194.45845845845847

type the picture number u wanna test or c to cancel: 70

Traceback (most recent call last):

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1699, in <module>

test()

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1073, in test

imgr, ori = test\_noise\_reduce(IMGDIR + imgn + ".png", numIMG=5)

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 742, in test\_noise\_reduce

imgr = np.uint16(target)

TypeError: int() argument must be a string, a bytes-like object or a number, not 'NoneType'

img\_70\_{0}

type the picture number u wanna test or c to cancel: 73

img\_73\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 400

Type in the index for vertical slice: (range: [0, 639]) 400

0:00:00.003744

0:00:00.001954

/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py:176: RuntimeWarning: overflow encountered in exp

return a \* np.exp(- (x - b) \*\* 2 / (2 \* c\_s))

/Library/Frameworks/Python.framework/Versions/3.6/lib/python3.6/site-packages/scipy/optimize/minpack.py:794: OptimizeWarning: Covariance of the parameters could not be estimated

category=OptimizeWarning)

0:00:00.007927

edge: 283.485064401206, poly:323.0, gaussian:286.4864864864865

0:00:00.000992

edge: 195.9362609551483 poly:189.6016016016016, gaussian:190.22222222222223

type the picture number u wanna test or c to cancel: 78

img\_78\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 400

Type in the index for vertical slice: (range: [0, 639]) 260

0:00:00.001703

0:00:00.002443

0:00:00.002832

edge: 366.0705646776132, poly:403.0, gaussian:402.0

0:00:00.001402

edge: 206.59396835595538 poly:198.7157157157157, gaussian:201.34434434434434

type the picture number u wanna test or c to cancel: 100

img\_100\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 120

Type in the index for vertical slice: (range: [0, 639]) 300

0:00:00.001614

0:00:00.001336

0:00:00.001008

edge: 301.99372883964287, poly:333.0, gaussian:272.0

Traceback (most recent call last):

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1699, in <module>

191.3312878110514 279 22

test()

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1207, in test

paramvp, xp2 = poly\_fitting\_params(y\_s\_y, deducedy)

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 539, in poly\_fitting\_params

raise RuntimeError("Bad column or row")

RuntimeError: Bad column or row

/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6 "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py"

type the picture number u wanna test or c to cancel: 130

img\_130\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 300

Type in the index for vertical slice: (range: [0, 639]) 350

0:00:00.002001

0:00:00.002146

0:00:00.002091

edge: 478.06332670022255, poly:479.2022022022022, gaussian:478.8808808808809

/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py:176: RuntimeWarning: overflow encountered in exp

return a \* np.exp(- (x - b) \*\* 2 / (2 \* c\_s))

0:00:00.001999

edge: 315.1341000267452 poly:314.23823823823824, gaussian:347.0

type the picture number u wanna test or c to cancel: 130

img\_130\_{0}

Type in the index for horizontal slice: (range: [0, 479]) 350

Type in the index for vertical slice: (range: [0, 639]) 400

0:00:00.003800

0:00:00.004702

0:00:00.001156

edge: 476.5766195632225, poly:479.4594594594595, gaussian:477.3223223223223

0:00:00.000888

edge: 310.42203052422025 poly:313.1111111111111, gaussian:312.4864864864865

type the picture number u wanna test or c to cancel: 400

img\_400\_{0}

Traceback (most recent call last):

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1699, in <module>

test()

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 1073, in test

imgr, ori = test\_noise\_reduce(IMGDIR + imgn + ".png", numIMG=5)

File "/Users/albertqu/Documents/7.Research/PEER Research/bridge\_settlement/img\_rec\_module/sig\_proc\_test.py", line 742, in test\_noise\_reduce

imgr = np.uint16(target)

TypeError: int() argument must be a string, a bytes-like object or a number, not 'NoneType'