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1 C:\Users\Kevin.DUCHARLET\Home\PycharmProjects\
  datastreamOutlierDetection\venv\Scripts\python.exe C
  :/Users/Kevin.DUCHARLET/Home/PycharmProjects/
  datastreamOutlierDetection/tests/
  oscod_parameters_selection.py
2 OSCOD k=5 R=0.1 win_size=100: 100%|██████████| 4520/
  4520 [00:03<00:00, 1308.37it/s]
3 OSCOD k=5 R=0.1 win_size=200: 100%|██████████| 4520/
  4520 [00:04<00:00, 1002.65it/s]
4 OSCOD k=5 R=0.1 win_size=500: 100%|██████████| 4520/
  4520 [00:07<00:00, 603.89it/s]
5 OSCOD k=5 R=0.1 win_size=1000: 100%|██████████| 4520/
  4520 [00:07<00:00, 604.87it/s]
6 OSCOD k=5 R=0.1 win_size=2000: 100%|██████████| 4520/
  4520 [00:07<00:00, 604.47it/s]
7 OSCOD k=5 R=0.1 win_size=5000: 100%|██████████| 4520/
  4520 [00:07<00:00, 603.38it/s]
8 OSCOD k=5 R=0.2 win_size=100: 100%|██████████| 4520/
  4520 [00:04<00:00, 1111.13it/s]
9 OSCOD k=5 R=0.2 win_size=200: 100%|██████████| 4520/
  4520 [00:05<00:00, 775.82it/s]
10 OSCOD k=5 R=0.2 win_size=500: 100%|██████████| 4520/
  4520 [00:10<00:00, 437.18it/s]
11 OSCOD k=5 R=0.2 win_size=1000: 100%|██████████| 4520/
  4520 [00:10<00:00, 444.92it/s]
12 OSCOD k=5 R=0.2 win_size=2000: 100%|██████████| 4520/
  4520 [00:10<00:00, 438.26it/s]
13 OSCOD k=5 R=0.2 win_size=5000: 100%|██████████| 4520/
  4520 [00:10<00:00, 438.19it/s]
14 OSCOD k=5 R=0.5 win_size=100: 100%|██████████| 4520/
  4520 [00:05<00:00, 812.99it/s]
15 OSCOD k=5 R=0.5 win_size=200: 100%|██████████| 4520/
  4520 [00:09<00:00, 488.30it/s]
16 OSCOD k=5 R=0.5 win_size=500: 100%|██████████| 4520/
  4520 [00:18<00:00, 243.21it/s]
17 OSCOD k=5 R=0.5 win_size=1000: 100%|██████████| 4520/
  4520 [00:18<00:00, 245.78it/s]
18 OSCOD k=5 R=0.5 win_size=2000: 100%|██████████| 4520/
  4520 [00:18<00:00, 245.74it/s]
19 OSCOD k=5 R=0.5 win_size=5000: 100%|██████████| 4520/
  4520 [00:18<00:00, 243.37it/s]

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20 OSCOD k=5 R=1 win_size=100: 100%|██████████| 4520/
    4520 [00:08<00:00, 514.39it/s]
21 OSCOD k=5 R=1 win_size=200: 100%|██████████| 4520/
    4520 [00:15<00:00, 296.22it/s]
22 OSCOD k=5 R=1 win_size=500: 100%|██████████| 4520/
    4520 [00:34<00:00, 132.63it/s]
23 OSCOD k=5 R=1 win_size=1000: 100%|██████████| 4520/
    4520 [00:34<00:00, 129.67it/s]
24 OSCOD k=5 R=1 win_size=2000: 100%|██████████| 4520/
    4520 [00:34<00:00, 132.60it/s]
25 OSCOD k=5 R=1 win_size=5000: 100%|██████████| 4520/
    4520 [00:34<00:00, 129.73it/s]
26 OSCOD k=5 R=1.2 win_size=100: 100%|██████████| 4520/
    4520 [00:08<00:00, 526.87it/s]
27 OSCOD k=5 R=1.2 win_size=200: 100%|██████████| 4520/
    4520 [00:15<00:00, 285.05it/s]
28 OSCOD k=5 R=1.2 win_size=500: 100%|██████████| 4520/
    4520 [00:34<00:00, 131.22it/s]
29 OSCOD k=5 R=1.2 win_size=1000: 100%|██████████| 4520/
    4520 [00:35<00:00, 128.10it/s]
30 OSCOD k=5 R=1.2 win_size=2000: 100%|██████████| 4520/
    4520 [00:35<00:00, 127.87it/s]
31 OSCOD k=5 R=1.2 win_size=5000: 100%|██████████| 4520/
    4520 [00:36<00:00, 124.22it/s]
32 OSCOD k=5 R=1.5 win_size=100: 100%|██████████| 4520/
    4520 [00:08<00:00, 524.59it/s]
33 OSCOD k=5 R=1.5 win_size=200: 100%|██████████| 4520/
    4520 [00:15<00:00, 294.07it/s]
34 OSCOD k=5 R=1.5 win_size=500: 100%|██████████| 4520/
    4520 [00:35<00:00, 126.67it/s]
35 OSCOD k=5 R=1.5 win_size=1000: 100%|██████████| 4520/
    4520 [00:35<00:00, 127.55it/s]
36 OSCOD k=5 R=1.5 win_size=2000: 100%|██████████| 4520/
    4520 [00:35<00:00, 128.74it/s]
37 OSCOD k=5 R=1.5 win_size=5000: 100%|██████████| 4520/
    4520 [00:35<00:00, 128.86it/s]
38 OSCOD k=10 R=0.1 win_size=100: 100%|██████████| 4520/
    4520 [00:03<00:00, 1202.04it/s]
39 OSCOD k=10 R=0.1 win_size=200: 100%|██████████| 4520/
    4520 [00:04<00:00, 933.30it/s]
40 OSCOD k=10 R=0.1 win_size=500: 100%|██████████| 4520/
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40 4520 [00:07<00:00, 596.54it/s]
41 OSCOD k=10 R=0.1 win_size=1000: 100%|██████████| 4520
   /4520 [00:07<00:00, 573.11it/s]
42 OSCOD k=10 R=0.1 win_size=2000: 100%|██████████| 4520
   /4520 [00:07<00:00, 602.04it/s]
43 OSCOD k=10 R=0.1 win_size=5000: 100%|██████████| 4520
   /4520 [00:07<00:00, 595.69it/s]
44 OSCOD k=10 R=0.2 win_size=100: 100%|██████████| 4520/
   4520 [00:04<00:00, 996.64it/s]
45 OSCOD k=10 R=0.2 win_size=200: 100%|██████████| 4520/
   4520 [00:05<00:00, 776.81it/s]
46 OSCOD k=10 R=0.2 win_size=500: 100%|██████████| 4520/
   4520 [00:12<00:00, 357.94it/s]
47 OSCOD k=10 R=0.2 win_size=1000: 100%|██████████| 4520
   /4520 [00:12<00:00, 375.68it/s]
48 OSCOD k=10 R=0.2 win_size=2000: 100%|██████████| 4520
   /4520 [00:10<00:00, 429.37it/s]
49 OSCOD k=10 R=0.2 win_size=5000: 100%|██████████| 4520
   /4520 [00:10<00:00, 430.55it/s]
50 OSCOD k=10 R=0.5 win_size=100: 100%|██████████| 4520/
   4520 [00:05<00:00, 757.52it/s]
51 OSCOD k=10 R=0.5 win_size=200: 100%|██████████| 4520/
   4520 [00:08<00:00, 503.80it/s]
52 OSCOD k=10 R=0.5 win_size=500: 100%|██████████| 4520/
   4520 [00:18<00:00, 238.46it/s]
53 OSCOD k=10 R=0.5 win_size=1000: 100%|██████████| 4520
   /4520 [00:18<00:00, 241.45it/s]
54 OSCOD k=10 R=0.5 win_size=2000: 100%|██████████| 4520
   /4520 [00:19<00:00, 237.83it/s]
55 OSCOD k=10 R=0.5 win_size=5000: 100%|██████████| 4520
   /4520 [00:19<00:00, 236.90it/s]
56 OSCOD k=10 R=1 win_size=100: 100%|██████████| 4520/
   4520 [00:09<00:00, 501.99it/s]
57 OSCOD k=10 R=1 win_size=200: 100%|██████████| 4520/
   4520 [00:17<00:00, 263.43it/s]
58 OSCOD k=10 R=1 win_size=500: 100%|██████████| 4520/
   4520 [00:47<00:00, 95.81it/s]
59 OSCOD k=10 R=1 win_size=1000: 100%|██████████| 4520/
   4520 [00:37<00:00, 119.65it/s]
60 OSCOD k=10 R=1 win_size=2000: 100%|██████████| 4520/
   4520 [00:35<00:00, 125.97it/s]

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61 OSCOD k=10 R=1 win_size=5000: 100%|██████████| 4520/
    4520 [00:35<00:00, 126.01it/s]
62 OSCOD k=10 R=1.2 win_size=100: 100%|██████████| 4520
    /4520 [00:08<00:00, 513.36it/s]
63 OSCOD k=10 R=1.2 win_size=200: 100%|██████████| 4520
    /4520 [00:15<00:00, 291.18it/s]
64 OSCOD k=10 R=1.2 win_size=500: 100%|██████████| 4520
    /4520 [00:36<00:00, 124.85it/s]
65 OSCOD k=10 R=1.2 win_size=1000: 100%|██████████|
    4520/4520 [00:36<00:00, 124.22it/s]
66 OSCOD k=10 R=1.2 win_size=2000: 100%|██████████|
    4520/4520 [00:37<00:00, 119.14it/s]
67 OSCOD k=10 R=1.2 win_size=5000: 100%|██████████|
    4520/4520 [00:39<00:00, 113.86it/s]
68 OSCOD k=10 R=1.5 win_size=100: 100%|██████████| 4520
    /4520 [00:08<00:00, 524.71it/s]
69 OSCOD k=10 R=1.5 win_size=200: 100%|██████████| 4520
    /4520 [00:15<00:00, 291.20it/s]
70 OSCOD k=10 R=1.5 win_size=500: 100%|██████████| 4520
    /4520 [00:34<00:00, 129.36it/s]
71 OSCOD k=10 R=1.5 win_size=1000: 100%|██████████|
    4520/4520 [00:35<00:00, 126.02it/s]
72 OSCOD k=10 R=1.5 win_size=2000: 100%|██████████|
    4520/4520 [00:35<00:00, 127.76it/s]
73 OSCOD k=10 R=1.5 win_size=5000: 100%|██████████|
    4520/4520 [00:35<00:00, 126.04it/s]
74 OSCOD k=15 R=0.1 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1307.42it/s]
75 OSCOD k=15 R=0.1 win_size=200: 100%|██████████| 4520
    /4520 [00:04<00:00, 988.53it/s]
76 OSCOD k=15 R=0.1 win_size=500: 100%|██████████| 4520
    /4520 [00:08<00:00, 527.13it/s]
77 OSCOD k=15 R=0.1 win_size=1000: 100%|██████████|
    4520/4520 [00:08<00:00, 511.74it/s]
78 OSCOD k=15 R=0.1 win_size=2000: 100%|██████████|
    4520/4520 [00:07<00:00, 586.56it/s]
79 OSCOD k=15 R=0.1 win_size=5000: 100%|██████████|
    4520/4520 [00:07<00:00, 594.48it/s]
80 OSCOD k=15 R=0.2 win_size=100: 100%|██████████| 4520
    /4520 [00:04<00:00, 937.07it/s]
81 OSCOD k=15 R=0.2 win_size=200: 100%|██████████| 4520

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81 /4520 [00:05<00:00, 754.08it/s]
82 OSCOD k=15 R=0.2 win_size=500: 100%|██████████| 4520
   /4520 [00:10<00:00, 417.37it/s]
83 OSCOD k=15 R=0.2 win_size=1000: 100%|██████████|
   4520/4520 [00:10<00:00, 430.36it/s]
84 OSCOD k=15 R=0.2 win_size=2000: 100%|██████████|
   4520/4520 [00:10<00:00, 428.51it/s]
85 OSCOD k=15 R=0.2 win_size=5000: 100%|██████████|
   4520/4520 [00:10<00:00, 433.91it/s]
86 OSCOD k=15 R=0.5 win_size=100: 100%|██████████| 4520
   /4520 [00:05<00:00, 803.94it/s]
87 OSCOD k=15 R=0.5 win_size=200: 100%|██████████| 4520
   /4520 [00:09<00:00, 499.94it/s]
88 OSCOD k=15 R=0.5 win_size=500: 100%|██████████| 4520
   /4520 [00:18<00:00, 240.69it/s]
89 OSCOD k=15 R=0.5 win_size=1000: 100%|██████████|
   4520/4520 [00:18<00:00, 239.85it/s]
90 OSCOD k=15 R=0.5 win_size=2000: 100%|██████████|
   4520/4520 [00:18<00:00, 248.05it/s]
91 OSCOD k=15 R=0.5 win_size=5000: 100%|██████████|
   4520/4520 [00:18<00:00, 246.71it/s]
92 OSCOD k=15 R=1 win_size=100: 100%|██████████| 4520/
   4520 [00:07<00:00, 633.34it/s]
93 OSCOD k=15 R=1 win_size=200: 100%|██████████| 4520/
   4520 [00:13<00:00, 324.87it/s]
94 OSCOD k=15 R=1 win_size=500: 100%|██████████| 4520/
   4520 [00:29<00:00, 155.00it/s]
95 OSCOD k=15 R=1 win_size=1000: 100%|██████████| 4520/
   4520 [00:28<00:00, 159.33it/s]
96 OSCOD k=15 R=1 win_size=2000: 100%|██████████| 4520/
   4520 [00:27<00:00, 161.60it/s]
97 OSCOD k=15 R=1 win_size=5000: 100%|██████████| 4520/
   4520 [00:29<00:00, 151.87it/s]
98 OSCOD k=15 R=1.2 win_size=100: 100%|██████████| 4520
   /4520 [00:07<00:00, 618.12it/s]
99 OSCOD k=15 R=1.2 win_size=200: 100%|██████████| 4520
   /4520 [00:12<00:00, 359.94it/s]
100 OSCOD k=15 R=1.2 win_size=500: 100%|██████████| 4520
   /4520 [00:29<00:00, 152.55it/s]
101 OSCOD k=15 R=1.2 win_size=1000: 100%|██████████|
   4520/4520 [00:29<00:00, 151.00it/s]

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102 OSCOD k=15 R=1.2 win_size=2000: 100%|██████████|
    4520/4520 [00:28<00:00, 158.97it/s]
103 OSCOD k=15 R=1.2 win_size=5000: 100%|██████████|
    4520/4520 [00:27<00:00, 161.77it/s]
104 OSCOD k=15 R=1.5 win_size=100: 100%|██████████| 4520
    /4520 [00:06<00:00, 652.31it/s]
105 OSCOD k=15 R=1.5 win_size=200: 100%|██████████| 4520
    /4520 [00:12<00:00, 372.24it/s]
106 OSCOD k=15 R=1.5 win_size=500: 100%|██████████| 4520
    /4520 [00:27<00:00, 162.08it/s]
107 OSCOD k=15 R=1.5 win_size=1000: 100%|██████████|
    4520/4520 [00:31<00:00, 143.08it/s]
108 OSCOD k=15 R=1.5 win_size=2000: 100%|██████████|
    4520/4520 [00:32<00:00, 141.13it/s]
109 OSCOD k=15 R=1.5 win_size=5000: 100%|██████████|
    4520/4520 [00:32<00:00, 141.22it/s]
110 OSCOD k=20 R=0.1 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1221.58it/s]
111 OSCOD k=20 R=0.1 win_size=200: 100%|██████████| 4520
    /4520 [00:04<00:00, 952.68it/s]
112 OSCOD k=20 R=0.1 win_size=500: 100%|██████████| 4520
    /4520 [00:07<00:00, 569.29it/s]
113 OSCOD k=20 R=0.1 win_size=1000: 100%|██████████|
    4520/4520 [00:06<00:00, 700.98it/s]
114 OSCOD k=20 R=0.1 win_size=2000: 100%|██████████|
    4520/4520 [00:06<00:00, 677.38it/s]
115 OSCOD k=20 R=0.1 win_size=5000: 100%|██████████|
    4520/4520 [00:08<00:00, 528.17it/s]
116 OSCOD k=20 R=0.2 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1185.50it/s]
117 OSCOD k=20 R=0.2 win_size=200: 100%|██████████| 4520
    /4520 [00:05<00:00, 866.42it/s]
118 OSCOD k=20 R=0.2 win_size=500: 100%|██████████| 4520
    /4520 [00:10<00:00, 449.02it/s]
119 OSCOD k=20 R=0.2 win_size=1000: 100%|██████████|
    4520/4520 [00:09<00:00, 479.20it/s]
120 OSCOD k=20 R=0.2 win_size=2000: 100%|██████████|
    4520/4520 [00:09<00:00, 495.70it/s]
121 OSCOD k=20 R=0.2 win_size=5000: 100%|██████████|
    4520/4520 [00:12<00:00, 354.95it/s]
122 OSCOD k=20 R=0.5 win_size=100: 100%|██████████| 4520

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122 /4520 [00:04<00:00, 973.61it/s]
123 OSCOD k=20 R=0.5 win_size=200: 100%|██████████| 4520
    /4520 [00:07<00:00, 607.97it/s]
124 OSCOD k=20 R=0.5 win_size=500: 100%|██████████| 4520
    /4520 [00:17<00:00, 259.58it/s]
125 OSCOD k=20 R=0.5 win_size=1000: 100%|██████████|
    4520/4520 [00:16<00:00, 275.83it/s]
126 OSCOD k=20 R=0.5 win_size=2000: 100%|██████████|
    4520/4520 [00:16<00:00, 268.39it/s]
127 OSCOD k=20 R=0.5 win_size=5000: 100%|██████████|
    4520/4520 [00:17<00:00, 259.12it/s]
128 OSCOD k=20 R=1 win_size=100: 100%|██████████| 4520/
    4520 [00:08<00:00, 519.44it/s]
129 OSCOD k=20 R=1 win_size=200: 100%|██████████| 4520/
    4520 [00:16<00:00, 278.29it/s]
130 OSCOD k=20 R=1 win_size=500: 100%|██████████| 4520/
    4520 [00:31<00:00, 141.43it/s]
131 OSCOD k=20 R=1 win_size=1000: 100%|██████████| 4520/
    4520 [00:27<00:00, 161.84it/s]
132 OSCOD k=20 R=1 win_size=2000: 100%|██████████| 4520/
    4520 [00:28<00:00, 158.99it/s]
133 OSCOD k=20 R=1 win_size=5000: 100%|██████████| 4520/
    4520 [00:28<00:00, 161.04it/s]
134 OSCOD k=20 R=1.2 win_size=100: 100%|██████████| 4520
    /4520 [00:06<00:00, 647.12it/s]
135 OSCOD k=20 R=1.2 win_size=200: 100%|██████████| 4520
    /4520 [00:12<00:00, 364.46it/s]
136 OSCOD k=20 R=1.2 win_size=500: 100%|██████████| 4520
    /4520 [00:28<00:00, 160.41it/s]
137 OSCOD k=20 R=1.2 win_size=1000: 100%|██████████|
    4520/4520 [00:28<00:00, 160.62it/s]
138 OSCOD k=20 R=1.2 win_size=2000: 100%|██████████|
    4520/4520 [00:28<00:00, 158.48it/s]
139 OSCOD k=20 R=1.2 win_size=5000: 100%|██████████|
    4520/4520 [00:27<00:00, 162.62it/s]
140 OSCOD k=20 R=1.5 win_size=100: 100%|██████████| 4520
    /4520 [00:07<00:00, 633.29it/s]
141 OSCOD k=20 R=1.5 win_size=200: 100%|██████████| 4520
    /4520 [00:12<00:00, 355.53it/s]
142 OSCOD k=20 R=1.5 win_size=500: 100%|██████████| 4520
    /4520 [00:28<00:00, 157.55it/s]

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143 OSCOD k=20 R=1.5 win_size=1000: 100%|██████████|
    4520/4520 [00:30<00:00, 146.88it/s]
144 OSCOD k=20 R=1.5 win_size=2000: 100%|██████████|
    4520/4520 [00:31<00:00, 143.61it/s]
145 OSCOD k=20 R=1.5 win_size=5000: 100%|██████████|
    4520/4520 [00:31<00:00, 144.85it/s]
146 OSCOD k=25 R=0.1 win_size=100: 100%|██████████| 4520
    /4520 [00:02<00:00, 1588.26it/s]
147 OSCOD k=25 R=0.1 win_size=200: 100%|██████████| 4520
    /4520 [00:03<00:00, 1180.98it/s]
148 OSCOD k=25 R=0.1 win_size=500: 100%|██████████| 4520
    /4520 [00:06<00:00, 736.03it/s]
149 OSCOD k=25 R=0.1 win_size=1000: 100%|██████████|
    4520/4520 [00:06<00:00, 742.17it/s]
150 OSCOD k=25 R=0.1 win_size=2000: 100%|██████████|
    4520/4520 [00:06<00:00, 693.12it/s]
151 OSCOD k=25 R=0.1 win_size=5000: 100%|██████████|
    4520/4520 [00:06<00:00, 732.22it/s]
152 OSCOD k=25 R=0.2 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1335.26it/s]
153 OSCOD k=25 R=0.2 win_size=200: 100%|██████████| 4520
    /4520 [00:04<00:00, 955.69it/s]
154 OSCOD k=25 R=0.2 win_size=500: 100%|██████████| 4520
    /4520 [00:08<00:00, 539.50it/s]
155 OSCOD k=25 R=0.2 win_size=1000: 100%|██████████|
    4520/4520 [00:08<00:00, 536.12it/s]
156 OSCOD k=25 R=0.2 win_size=2000: 100%|██████████|
    4520/4520 [00:10<00:00, 437.92it/s]
157 OSCOD k=25 R=0.2 win_size=5000: 100%|██████████|
    4520/4520 [00:11<00:00, 389.65it/s]
158 OSCOD k=25 R=0.5 win_size=100: 100%|██████████| 4520
    /4520 [00:05<00:00, 837.45it/s]
159 OSCOD k=25 R=0.5 win_size=200: 100%|██████████| 4520
    /4520 [00:08<00:00, 537.95it/s]
160 OSCOD k=25 R=0.5 win_size=500: 100%|██████████| 4520
    /4520 [00:16<00:00, 269.18it/s]
161 OSCOD k=25 R=0.5 win_size=1000: 100%|██████████|
    4520/4520 [00:17<00:00, 265.08it/s]
162 OSCOD k=25 R=0.5 win_size=2000: 100%|██████████|
    4520/4520 [00:16<00:00, 278.33it/s]
163 OSCOD k=25 R=0.5 win_size=5000: 100%|██████████|

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163 4520/4520 [00:16<00:00, 276.63it/s]
164 OSCOD k=25 R=1 win_size=100: 100%|██████████| 4520/
    4520 [00:07<00:00, 568.80it/s]
165 OSCOD k=25 R=1 win_size=200: 100%|██████████| 4520/
    4520 [00:12<00:00, 364.11it/s]
166 OSCOD k=25 R=1 win_size=500: 100%|██████████| 4520/
    4520 [00:27<00:00, 167.35it/s]
167 OSCOD k=25 R=1 win_size=1000: 100%|██████████| 4520/
    4520 [00:27<00:00, 162.13it/s]
168 OSCOD k=25 R=1 win_size=2000: 100%|██████████| 4520/
    4520 [00:29<00:00, 153.46it/s]
169 OSCOD k=25 R=1 win_size=5000: 100%|██████████| 4520/
    4520 [00:29<00:00, 151.54it/s]
170 OSCOD k=25 R=1.2 win_size=100: 100%|██████████| 4520
    /4520 [00:07<00:00, 594.98it/s]
171 OSCOD k=25 R=1.2 win_size=200: 100%|██████████| 4520
    /4520 [00:15<00:00, 299.61it/s]
172 OSCOD k=25 R=1.2 win_size=500: 100%|██████████| 4520
    /4520 [00:28<00:00, 155.93it/s]
173 OSCOD k=25 R=1.2 win_size=1000: 100%|██████████|
    4520/4520 [00:27<00:00, 162.63it/s]
174 OSCOD k=25 R=1.2 win_size=2000: 100%|██████████|
    4520/4520 [00:27<00:00, 161.65it/s]
175 OSCOD k=25 R=1.2 win_size=5000: 100%|██████████|
    4520/4520 [00:28<00:00, 160.11it/s]
176 OSCOD k=25 R=1.5 win_size=100: 100%|██████████| 4520
    /4520 [00:07<00:00, 570.43it/s]
177 OSCOD k=25 R=1.5 win_size=200: 100%|██████████| 4520
    /4520 [00:13<00:00, 328.09it/s]
178 OSCOD k=25 R=1.5 win_size=500: 100%|██████████| 4520
    /4520 [00:30<00:00, 147.02it/s]
179 OSCOD k=25 R=1.5 win_size=1000: 100%|██████████|
    4520/4520 [00:30<00:00, 147.86it/s]
180 OSCOD k=25 R=1.5 win_size=2000: 100%|██████████|
    4520/4520 [00:31<00:00, 141.44it/s]
181 OSCOD k=25 R=1.5 win_size=5000: 100%|██████████|
    4520/4520 [00:30<00:00, 148.38it/s]
182 OSCOD k=30 R=0.1 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1463.83it/s]
183 OSCOD k=30 R=0.1 win_size=200: 100%|██████████| 4520
    /4520 [00:04<00:00, 1114.25it/s]

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184 OSCOD k=30 R=0.1 win_size=500: 100%|██████████| 4520
    /4520 [00:06<00:00, 679.99it/s]
185 OSCOD k=30 R=0.1 win_size=1000: 100%|██████████|
    4520/4520 [00:06<00:00, 684.66it/s]
186 OSCOD k=30 R=0.1 win_size=2000: 100%|██████████|
    4520/4520 [00:06<00:00, 699.23it/s]
187 OSCOD k=30 R=0.1 win_size=5000: 100%|██████████|
    4520/4520 [00:06<00:00, 693.72it/s]
188 OSCOD k=30 R=0.2 win_size=100: 100%|██████████| 4520
    /4520 [00:03<00:00, 1269.99it/s]
189 OSCOD k=30 R=0.2 win_size=200: 100%|██████████| 4520
    /4520 [00:05<00:00, 900.92it/s]
190 OSCOD k=30 R=0.2 win_size=500: 100%|██████████| 4520
    /4520 [00:09<00:00, 486.71it/s]
191 OSCOD k=30 R=0.2 win_size=1000: 100%|██████████|
    4520/4520 [00:08<00:00, 504.00it/s]
192 OSCOD k=30 R=0.2 win_size=2000: 100%|██████████|
    4520/4520 [00:08<00:00, 511.32it/s]
193 OSCOD k=30 R=0.2 win_size=5000: 100%|██████████|
    4520/4520 [00:09<00:00, 492.44it/s]
194 OSCOD k=30 R=0.5 win_size=100: 100%|██████████| 4520
    /4520 [00:04<00:00, 913.54it/s]
195 OSCOD k=30 R=0.5 win_size=200: 100%|██████████| 4520
    /4520 [00:07<00:00, 587.67it/s]
196 OSCOD k=30 R=0.5 win_size=500: 100%|██████████| 4520
    /4520 [00:16<00:00, 281.59it/s]
197 OSCOD k=30 R=0.5 win_size=1000: 100%|██████████|
    4520/4520 [00:18<00:00, 249.30it/s]
198 OSCOD k=30 R=0.5 win_size=2000: 100%|██████████|
    4520/4520 [00:17<00:00, 261.08it/s]
199 OSCOD k=30 R=0.5 win_size=5000: 100%|██████████|
    4520/4520 [00:17<00:00, 253.37it/s]
200 OSCOD k=30 R=1 win_size=100: 100%|██████████| 4520/
    4520 [00:07<00:00, 580.29it/s]
201 OSCOD k=30 R=1 win_size=200: 100%|██████████| 4520/
    4520 [00:14<00:00, 307.12it/s]
202 OSCOD k=30 R=1 win_size=500: 100%|██████████| 4520/
    4520 [00:31<00:00, 142.00it/s]
203 OSCOD k=30 R=1 win_size=1000: 100%|██████████| 4520/
    4520 [00:29<00:00, 151.18it/s]
204 OSCOD k=30 R=1 win_size=2000: 100%|██████████| 4520/

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204 4520 [00:30<00:00, 147.18it/s]
205 OSCOD k=30 R=1 win_size=5000: 100%|██████████| 4520/
    4520 [00:28<00:00, 161.19it/s]
206 OSCOD k=30 R=1.2 win_size=100: 100%|██████████| 4520
    /4520 [00:07<00:00, 637.23it/s]
207 OSCOD k=30 R=1.2 win_size=200: 100%|██████████| 4520
    /4520 [00:12<00:00, 363.27it/s]
208 OSCOD k=30 R=1.2 win_size=500: 100%|██████████| 4520
    /4520 [00:28<00:00, 160.41it/s]
209 OSCOD k=30 R=1.2 win_size=1000: 100%|██████████|
    4520/4520 [00:27<00:00, 162.62it/s]
210 OSCOD k=30 R=1.2 win_size=2000: 100%|██████████|
    4520/4520 [00:27<00:00, 163.27it/s]
211 OSCOD k=30 R=1.2 win_size=5000: 100%|██████████|
    4520/4520 [00:29<00:00, 152.13it/s]
212 OSCOD k=30 R=1.5 win_size=100: 100%|██████████| 4520
    /4520 [00:07<00:00, 616.19it/s]
213 OSCOD k=30 R=1.5 win_size=200: 100%|██████████| 4520
    /4520 [00:14<00:00, 318.14it/s]
214 OSCOD k=30 R=1.5 win_size=500: 100%|██████████| 4520
    /4520 [00:30<00:00, 150.20it/s]
215 OSCOD k=30 R=1.5 win_size=1000: 100%|██████████|
    4520/4520 [00:30<00:00, 148.54it/s]
216 OSCOD k=30 R=1.5 win_size=2000: 100%|██████████|
    4520/4520 [00:28<00:00, 158.48it/s]
217 OSCOD k=30 R=1.5 win_size=5000: 100%|██████████|
    4520/4520 [00:27<00:00, 163.07it/s]
218 Traceback (most recent call last):
219   File "C:\Users\Kevin.DUCHARLET\Home\
    PycharmProjects\datastreamOutlierDetection\tests\
    oscod_parameters_selection.py", line 39, in <module>
220     compute(METHODS, x_train, x_test, y_test, "
    choose_params_oscod_tm", show=False, close=True)
221   File "C:\Users\Kevin.DUCHARLET\Home\
    PycharmProjects\datastreamOutlierDetection\tests\
    methods_comparison.py", line 130, in compute
222     fig.tight_layout()
223   File "C:\Users\Kevin.DUCHARLET\Home\
    PycharmProjects\datastreamOutlierDetection\venv\lib\
    site-packages\matplotlib\figure.py", line 3224, in
    tight_layout

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```
224     kwargs = get_tight_layout_figure(  
225     File "C:\Users\Kevin.DUCHARLET\Home\  
PycharmProjects\datastreamOutlierDetection\venv\lib\  
site-packages\matplotlib\tight_layout.py", line 320  
    , in get_tight_layout_figure  
226     kwargs = _auto_adjust_subplotpars(fig, renderer,  
227     File "C:\Users\Kevin.DUCHARLET\Home\  
PycharmProjects\datastreamOutlierDetection\venv\lib\  
site-packages\matplotlib\tight_layout.py", line 128  
    , in _auto_adjust_subplotpars  
228     _api.warn_external('Tight layout not applied.  
The bottom and top '  
229     File "C:\Users\Kevin.DUCHARLET\Home\  
PycharmProjects\datastreamOutlierDetection\venv\lib\  
site-packages\matplotlib\_api\__init__.py", line 299  
    , in warn_external  
230     warnings.warn(message, category, stacklevel)  
231 UserWarning: Tight layout not applied. The bottom  
and top margins cannot be made large enough to  
accommodate all axes decorations.  
232  
233 Process finished with exit code 1  
234
```