Filename: unemployment_rate_by_age_groups.csv
Number of permutations: 10
Number of bootstrap samples: 10
Row bootstrap sample fraction: 90.0%
Column bootstrap sample fraction: 90.0%
Number of perturbations: 10
Scale factor for perturbations: 0.1
Skip columns: 5
Normalization: z-score
Random seed: 42

Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')
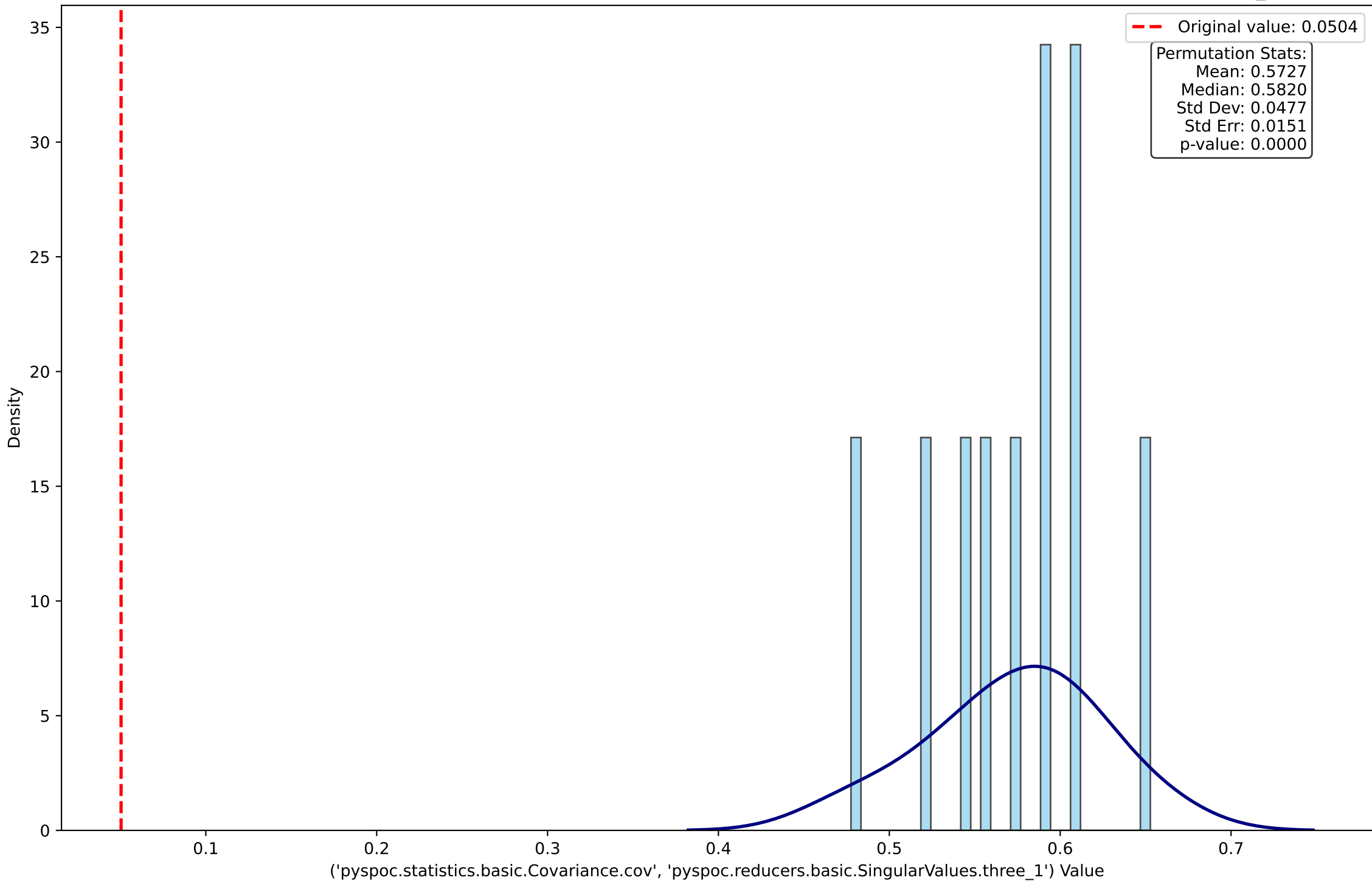
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2')

Original value: 0.0107

Permutation Stats:
Mean: 0.2600
Median: 0.2585
Std Dev: 0.0149
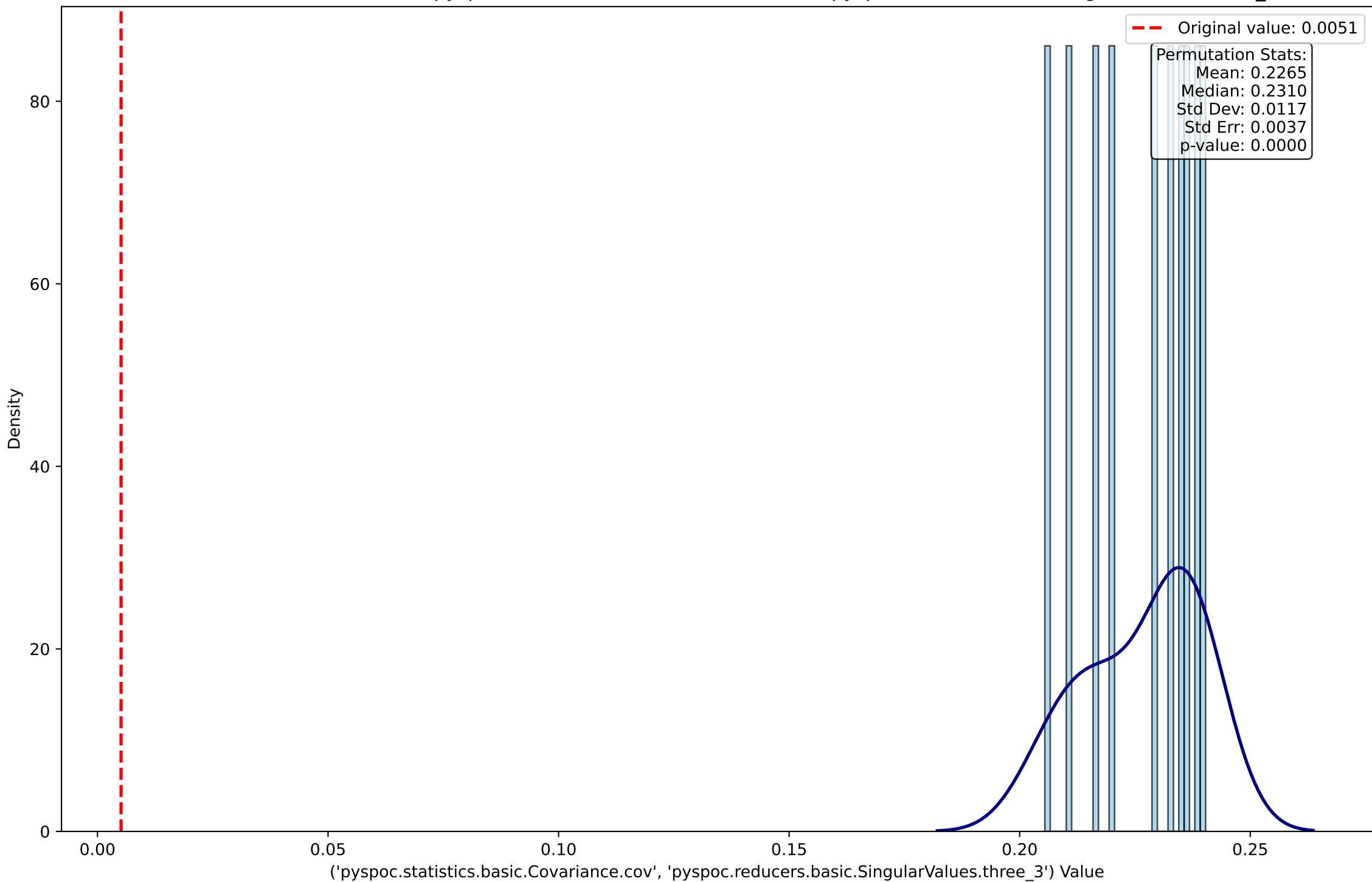Std Err: 0.0047
p-value: 0.0000

Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_3')

Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled')

1e-43
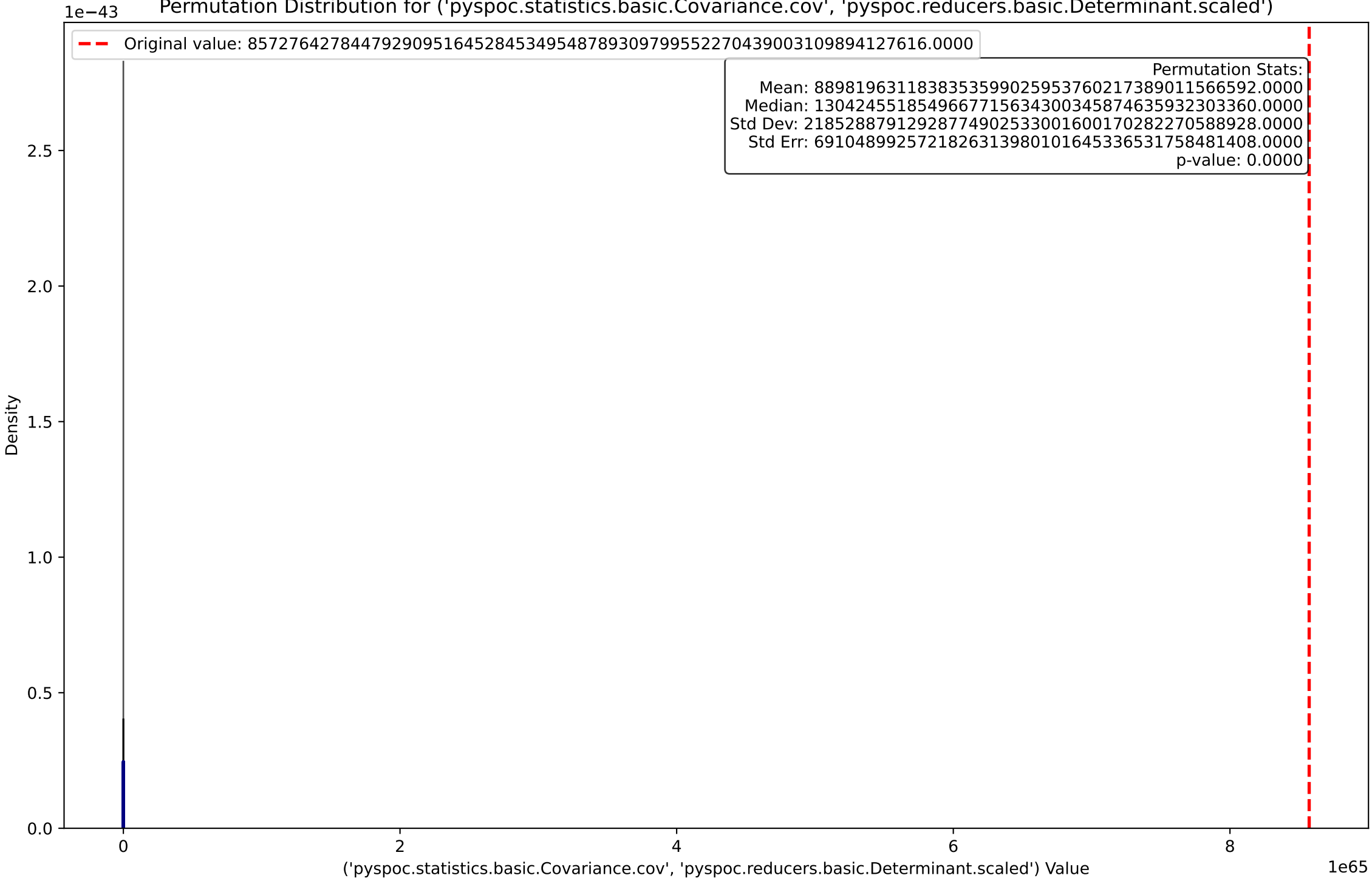
Original value: 857276427844792909516452845349548789309799552270439003109894127616.0000

Permutation Stats:
Mean: 8898196311838353599025953760217389011566592.0000
Median: 13042455185496677156343003458746359323033360.0000
Std Dev: 218528879129287749025330016001702270588928.0000
Std Err: 6910489925721826313980101645336531758481408.0000
p-value: 0.0000

Density

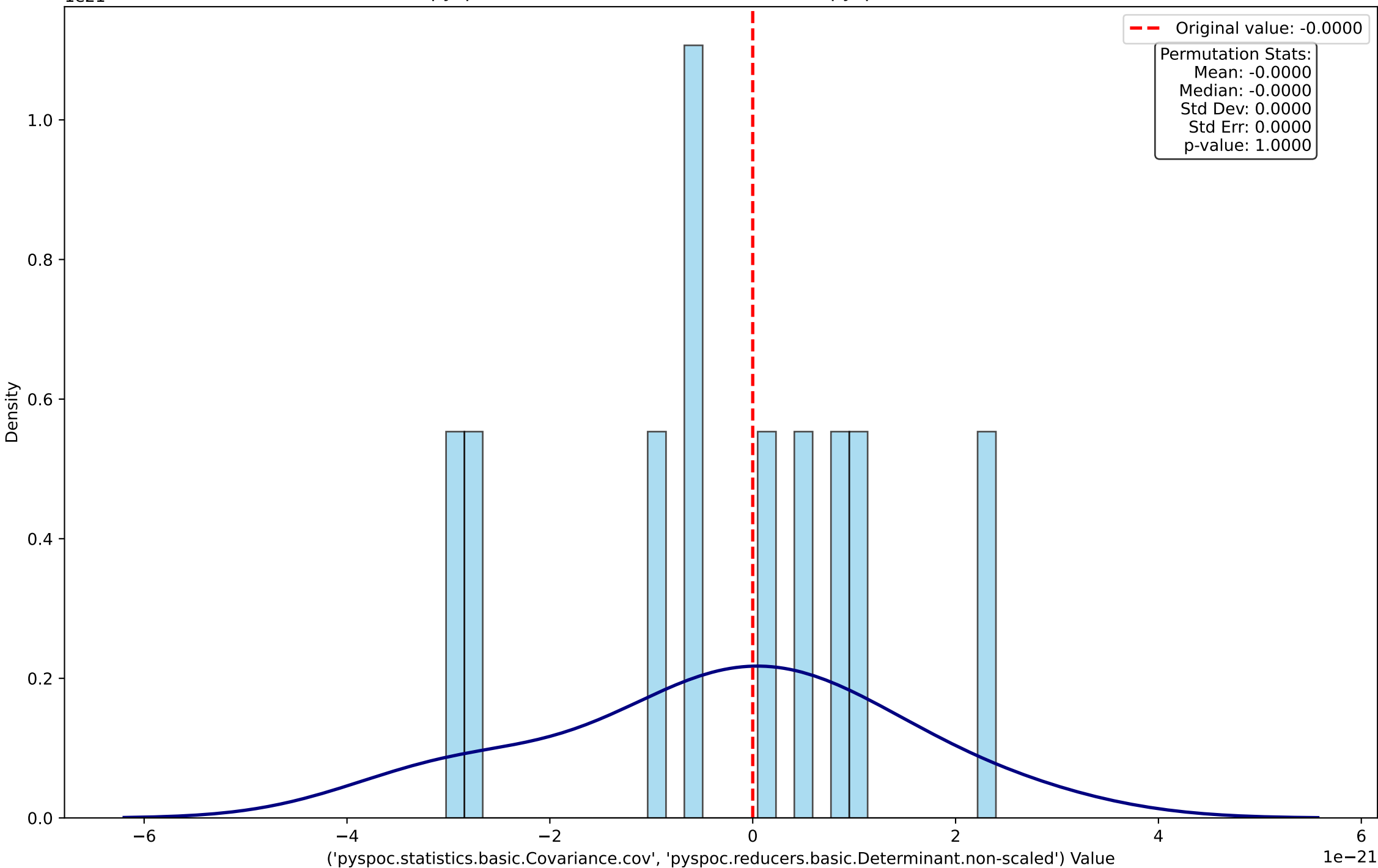('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled') Value

1e65

Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1')

Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')
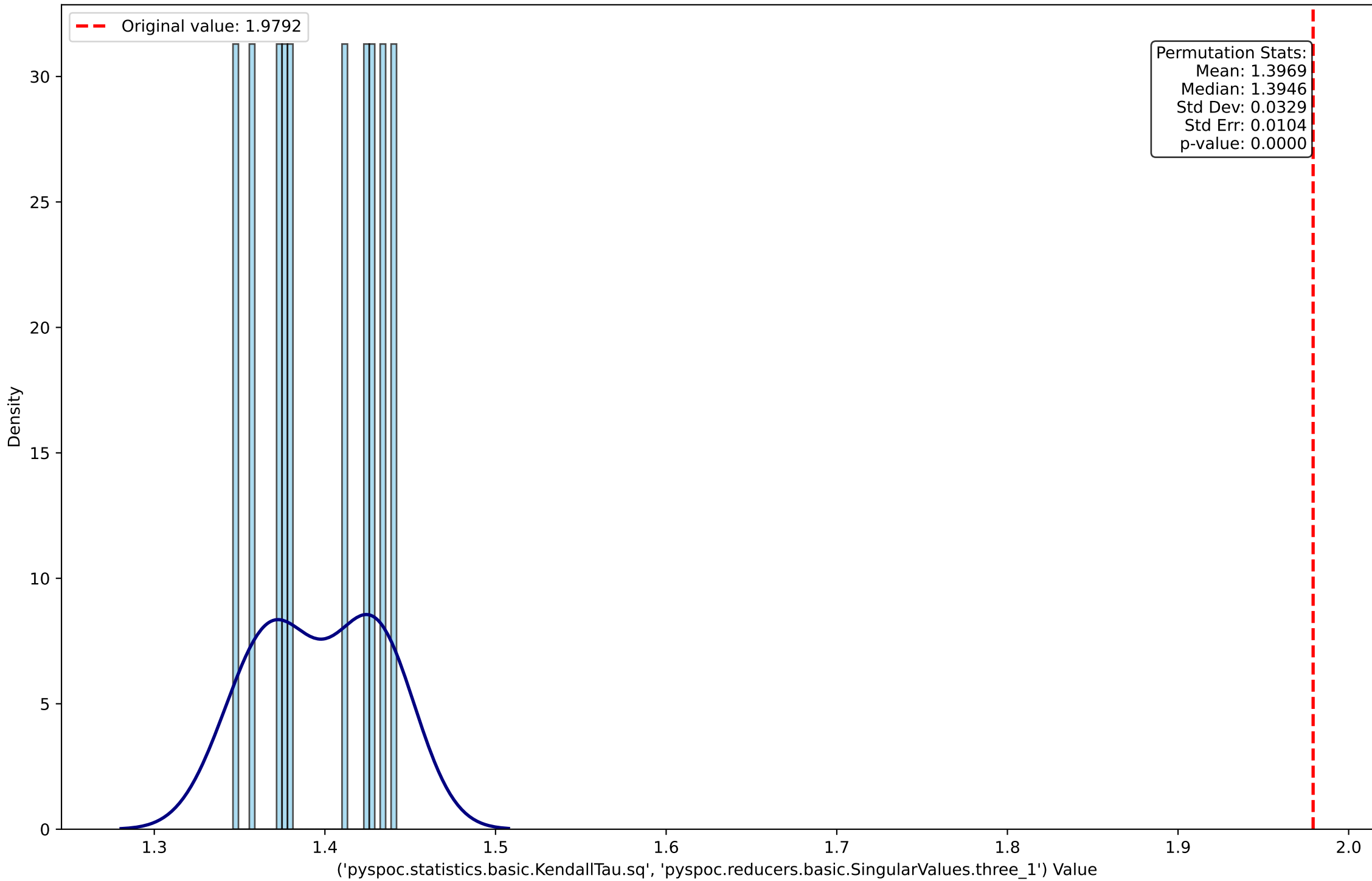
Original value: 1.3095

Permutation Stats:
Mean: 1.0761
Median: 1.0778
Std Dev: 0.0048
Std Err: 0.0015
p-value: 0.0000

('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2') Value
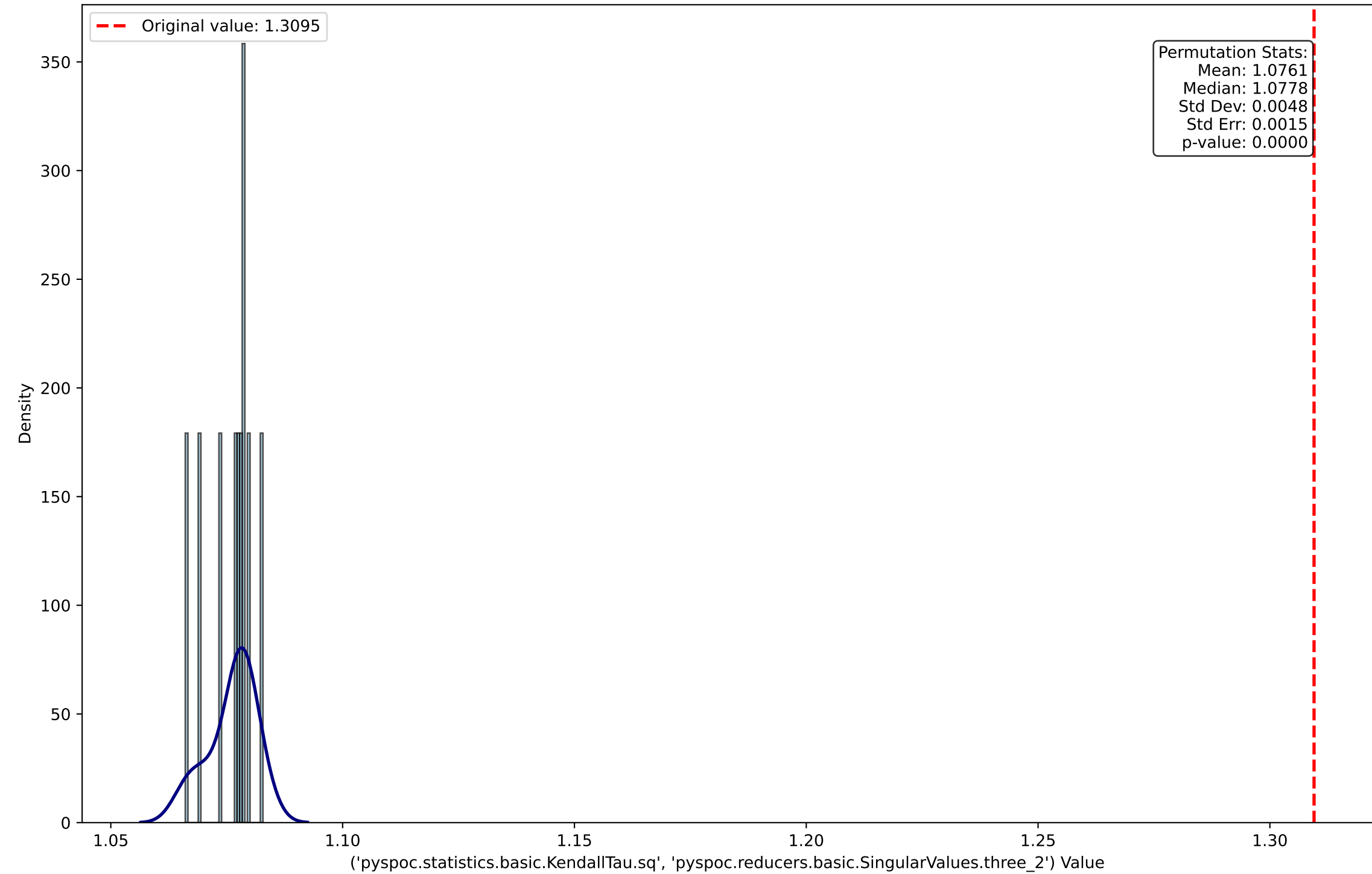
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3')

Original value: 0.9962

Permutation Stats:
Mean: 1.0133
Median: 1.0087
Std Dev: 0.0122
Std Err: 0.0039
p-value: 0.2000

Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1')

- - - Original value: 2.5795

Permutation Stats:
Mean: 1.7693
Median: 1.7672
Std Dev: 0.0540
Std Err: 0.0171
p-value: 0.0000

Density
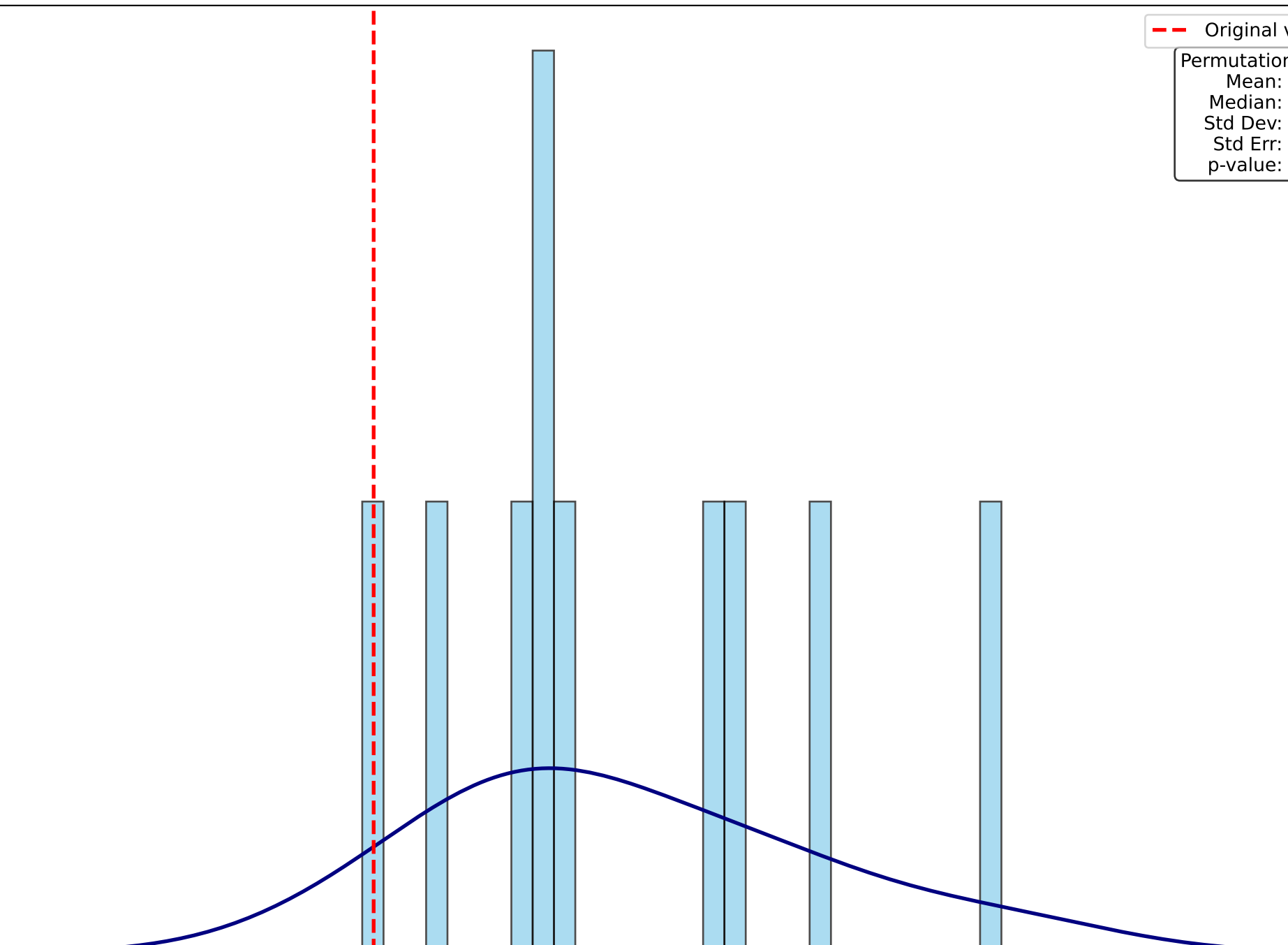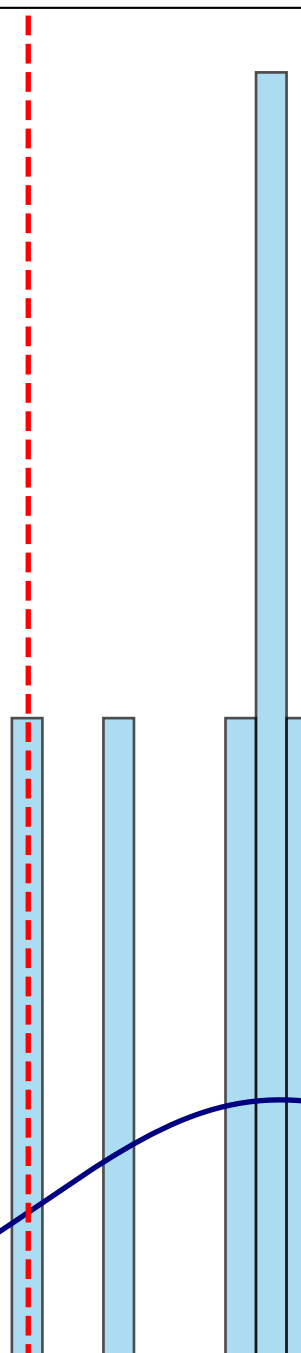
('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1') Value
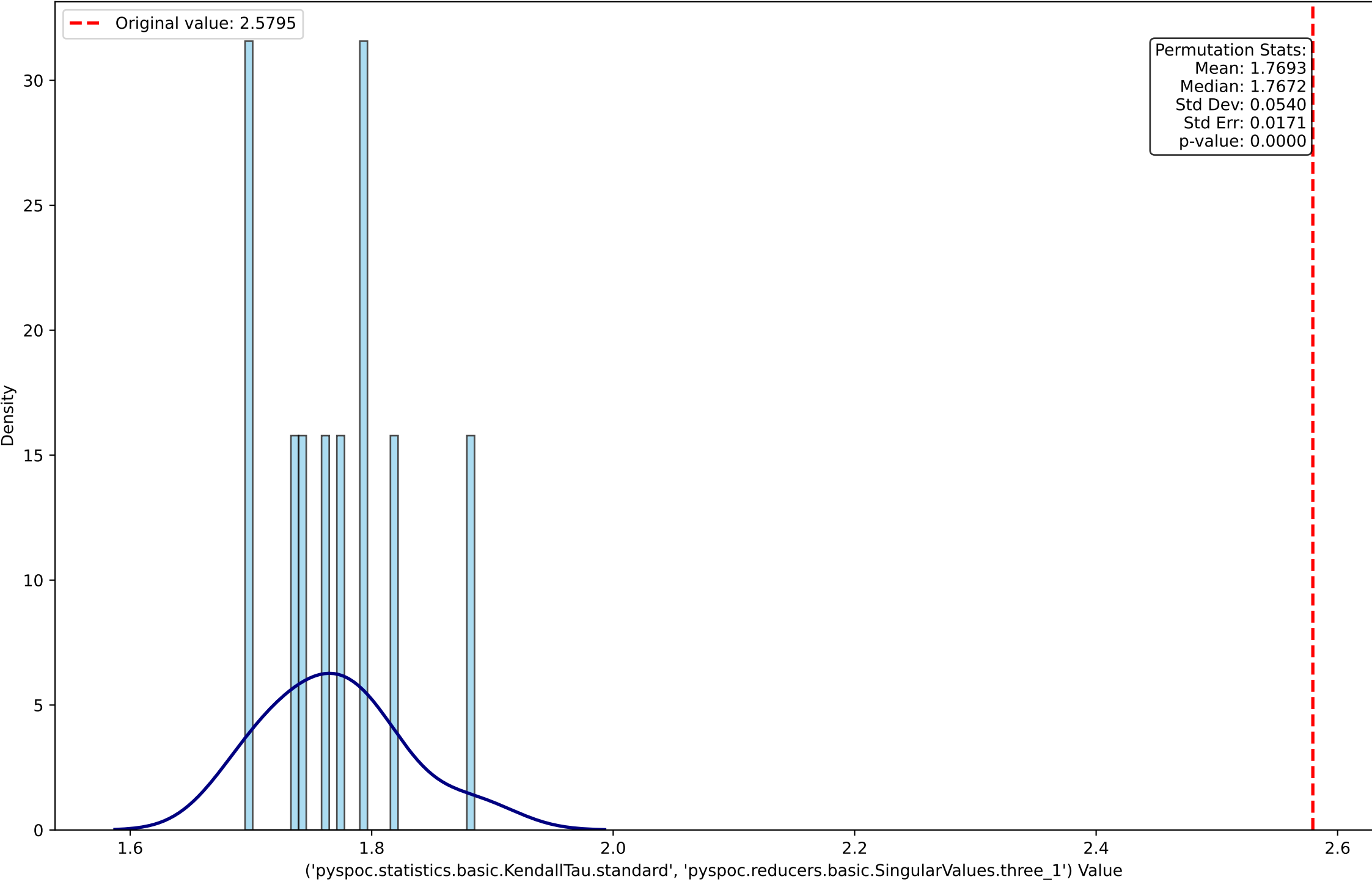
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2')

Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3')

Legend:
- Original value: 1.1008
- Permutation Stats:
  Mean: 1.1678
  Median: 1.1703
  Std Dev: 0.0242
  Std Err: 0.0076
  p-value: 0.0000
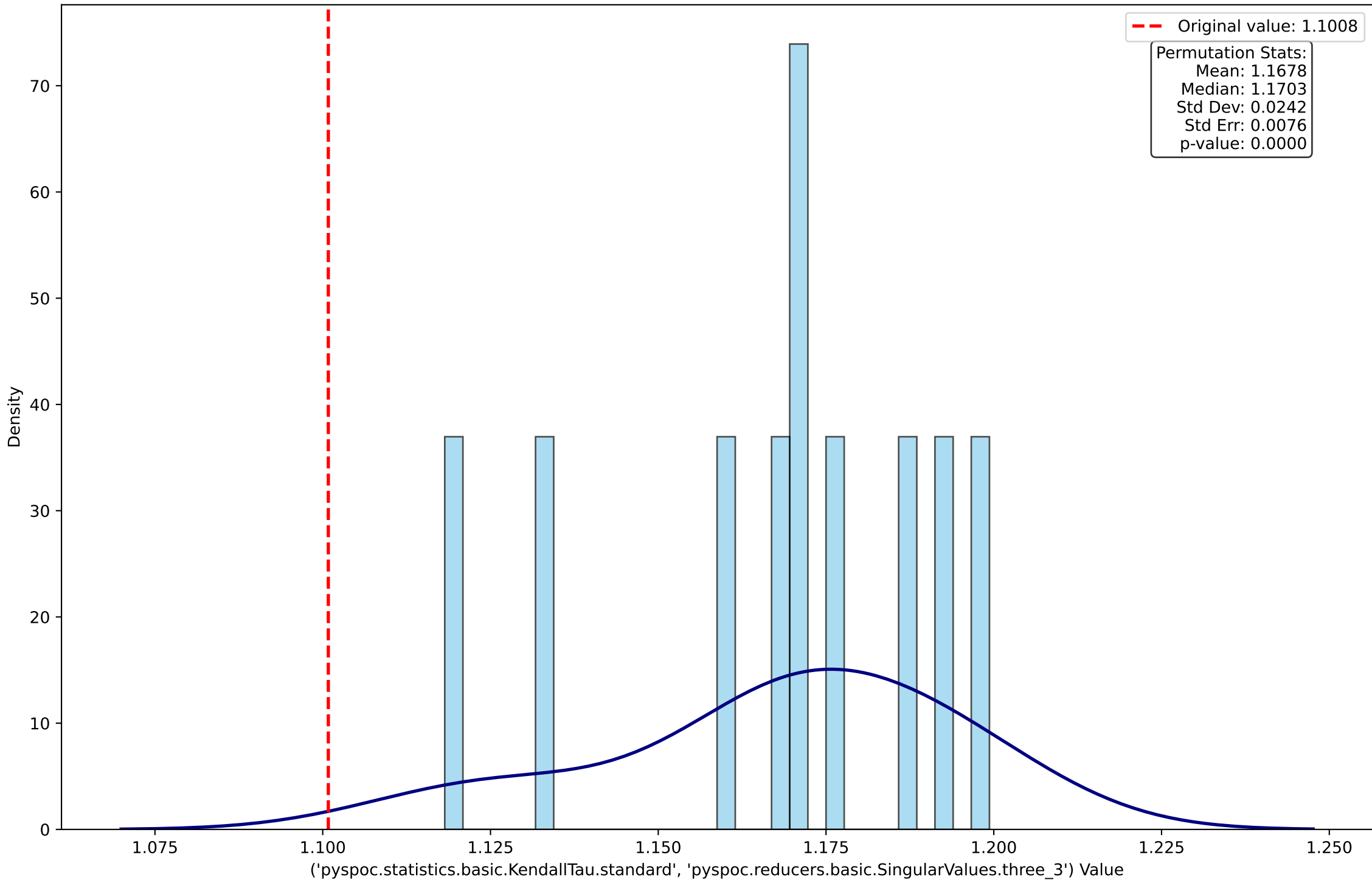
X-axis: ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3') Value

Y-axis: Density

Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')
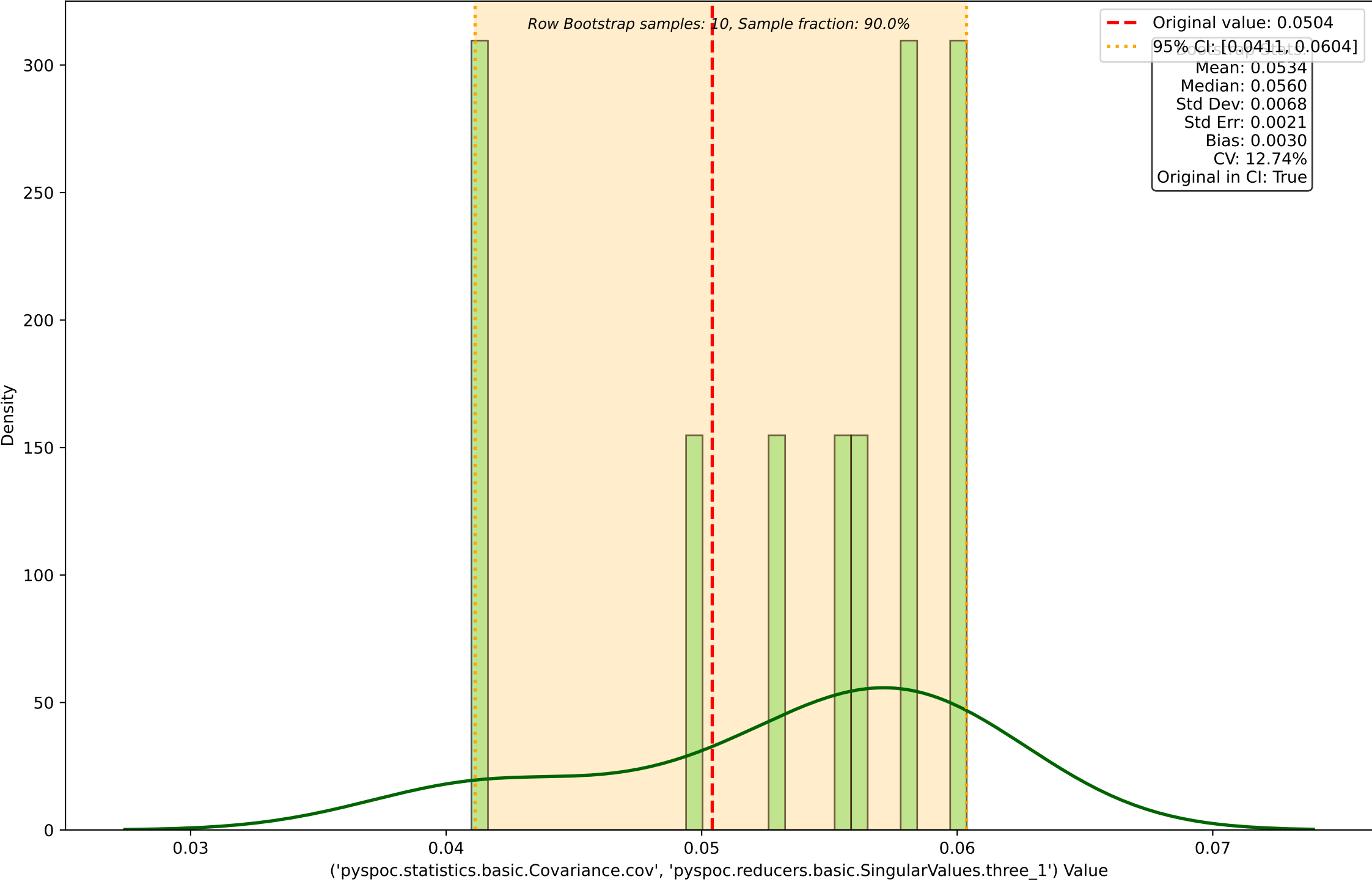
Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2')

Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_3')

Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determ

1e-66

6427844792909516452845349548789309799552270439003109894127616.0000

5160042192228813092555285744209998425620393540160847872.0000, 1629189475761572115188845030665146674371973084106339427202348613632.0000]

Mean: 341945057217665740395552661330552233309223227073702219496405598208.0000
Median: 174743358074400018246860031331884952207050266305746220800161087488.0000
Std Dev: 553378452163322549272417072357511788737604924296040324331902861312.0000
Std Err: 174993631689463103378041418026374622203718857877283643197581426688.0000
Bias: -515331370627127215888952578607889938518490972117793412603329904640.0000
CV: 161.83%
Original in CI: True

Density

('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled') Value 1e66

Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1')

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 1.9792
- 95% CI: [1.9275, 2.0487]
- Mean: 1.9964
- Median: 2.0052
- Std Dev: 0.0426
- Std Err: 0.0135
- Bias: 0.0172
- CV: 2.13%
- Original in CI: True

Y-axis: Density

X-axis: ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1') Value
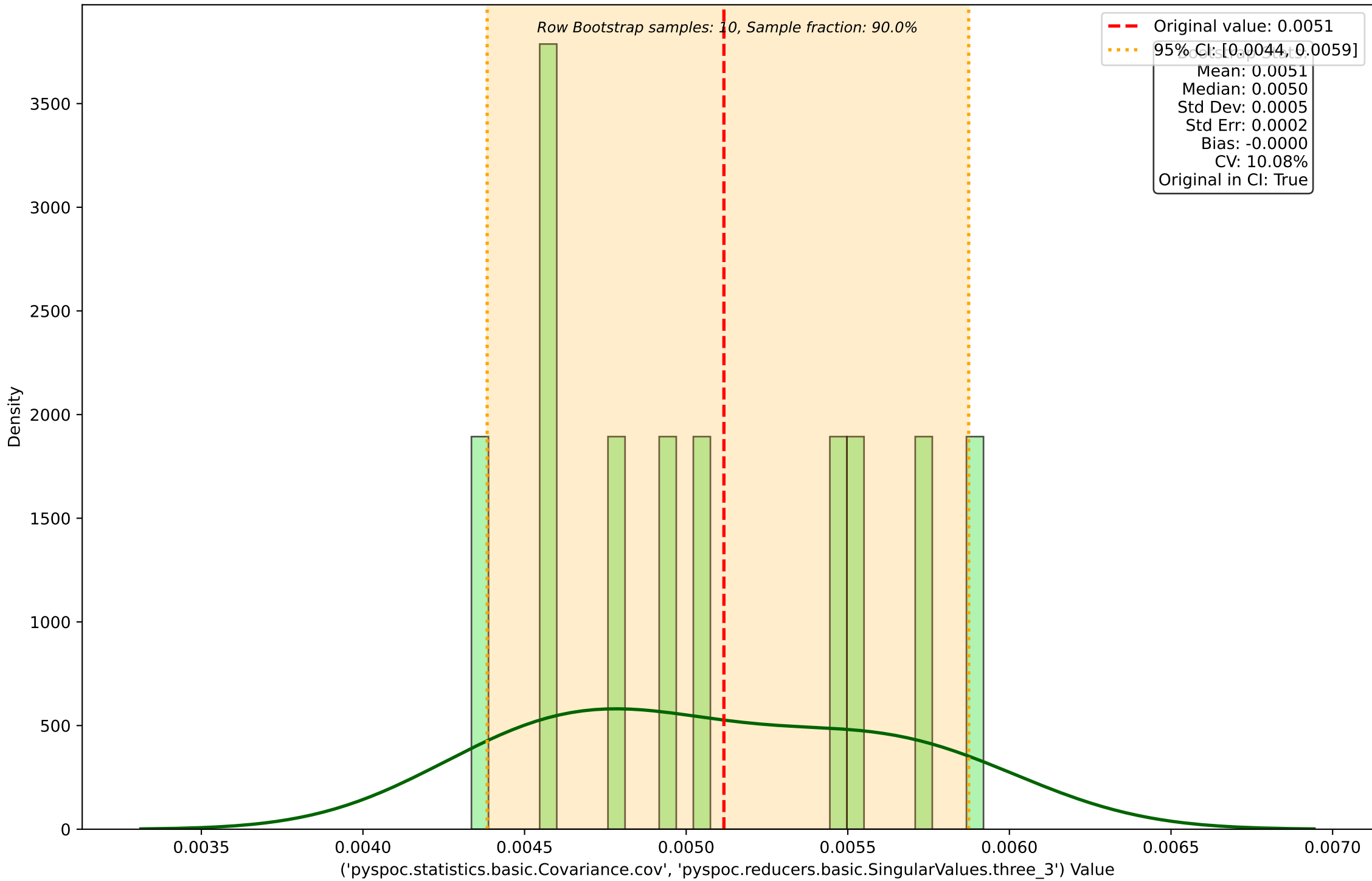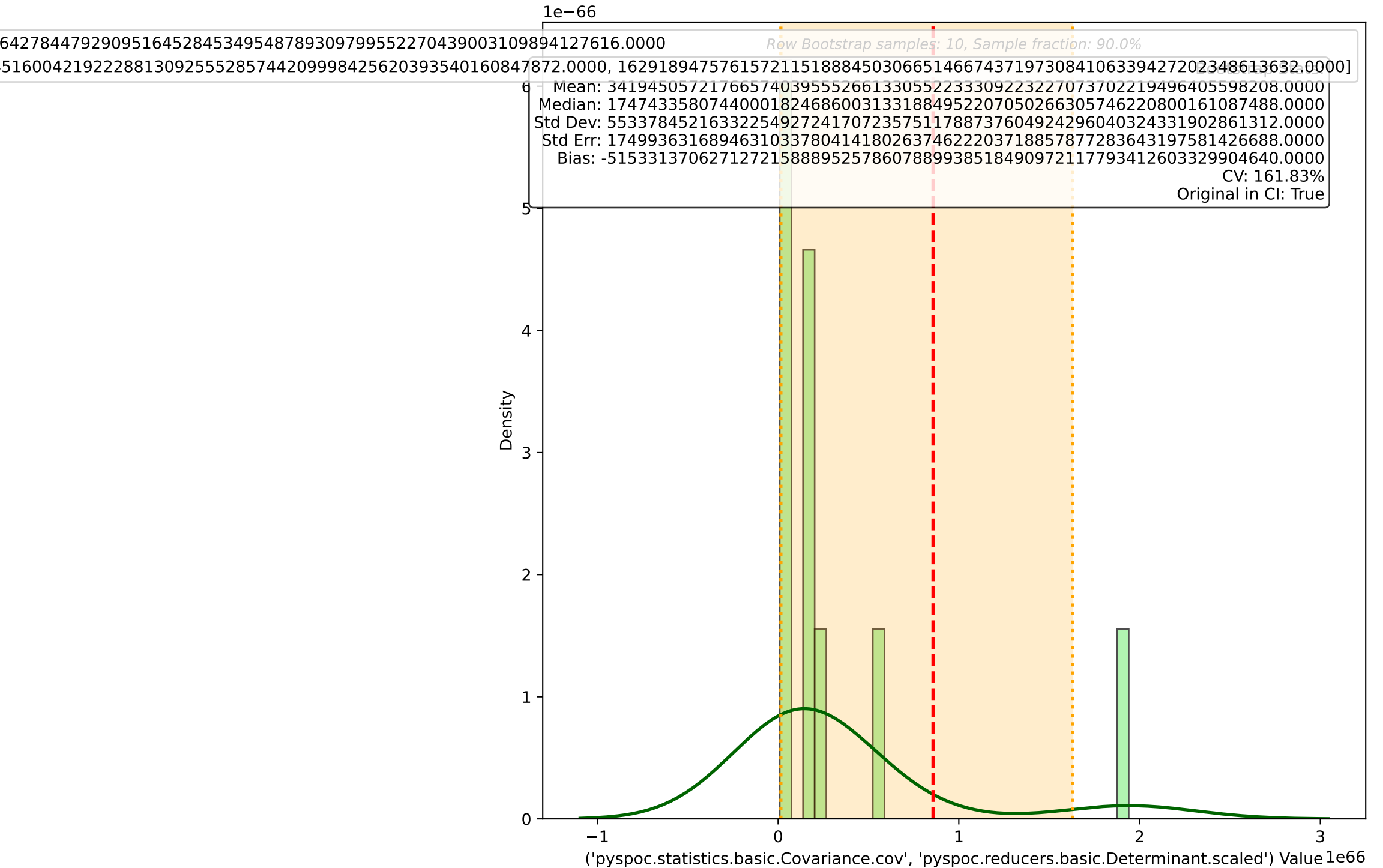
Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')

Row Bootstrap samples: 10, Sample fraction: 90.0%

- - - Original value: 1.3095
········ 95% CI: [1.2683, 1.3898]
Mean: 1.3232
Median: 1.3258
Std Dev: 0.0431
Std Err: 0.0136
Bias: 0.0137
CV: 3.26%
Original in CI: True

('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2') Value

Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3')
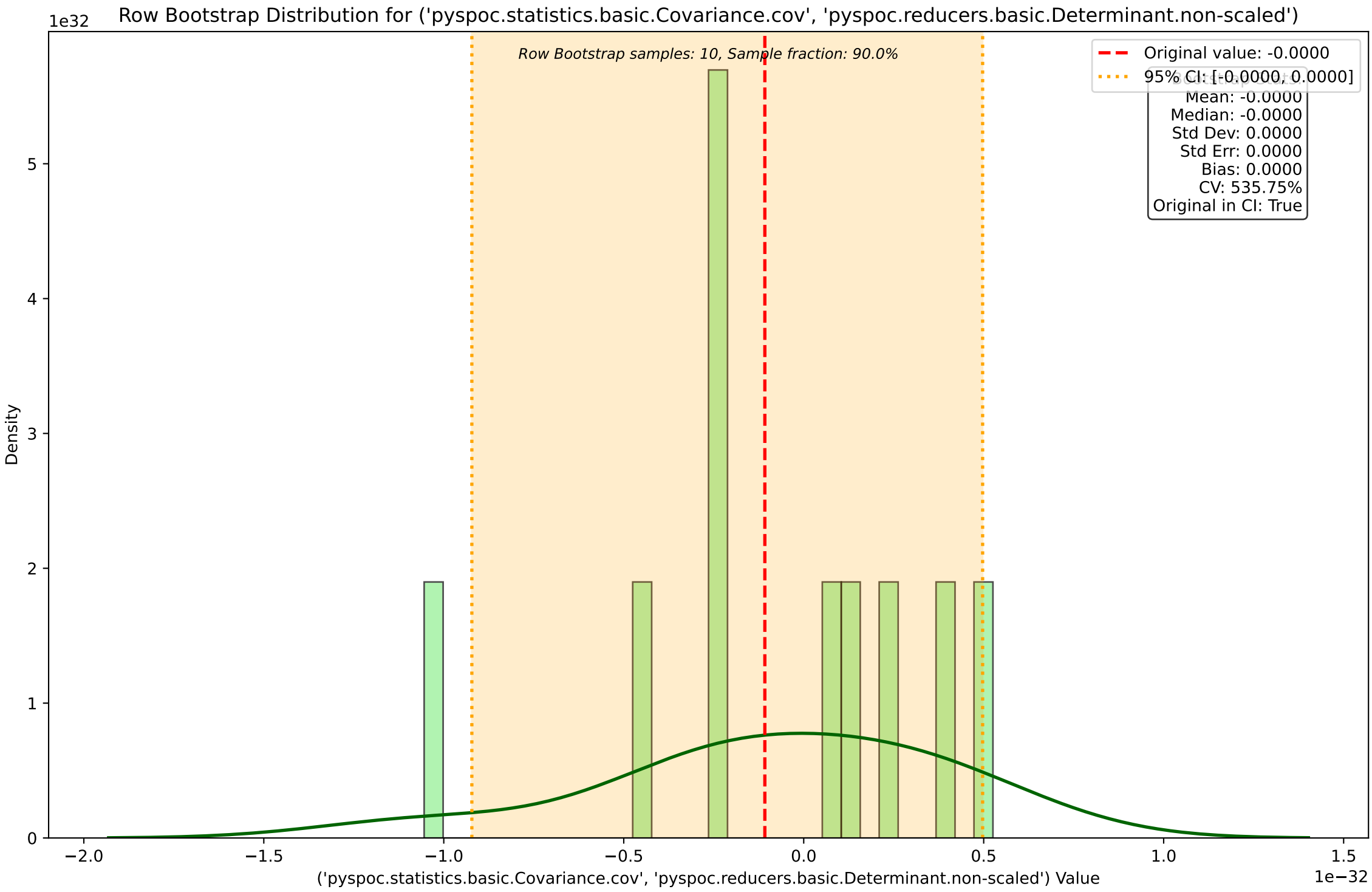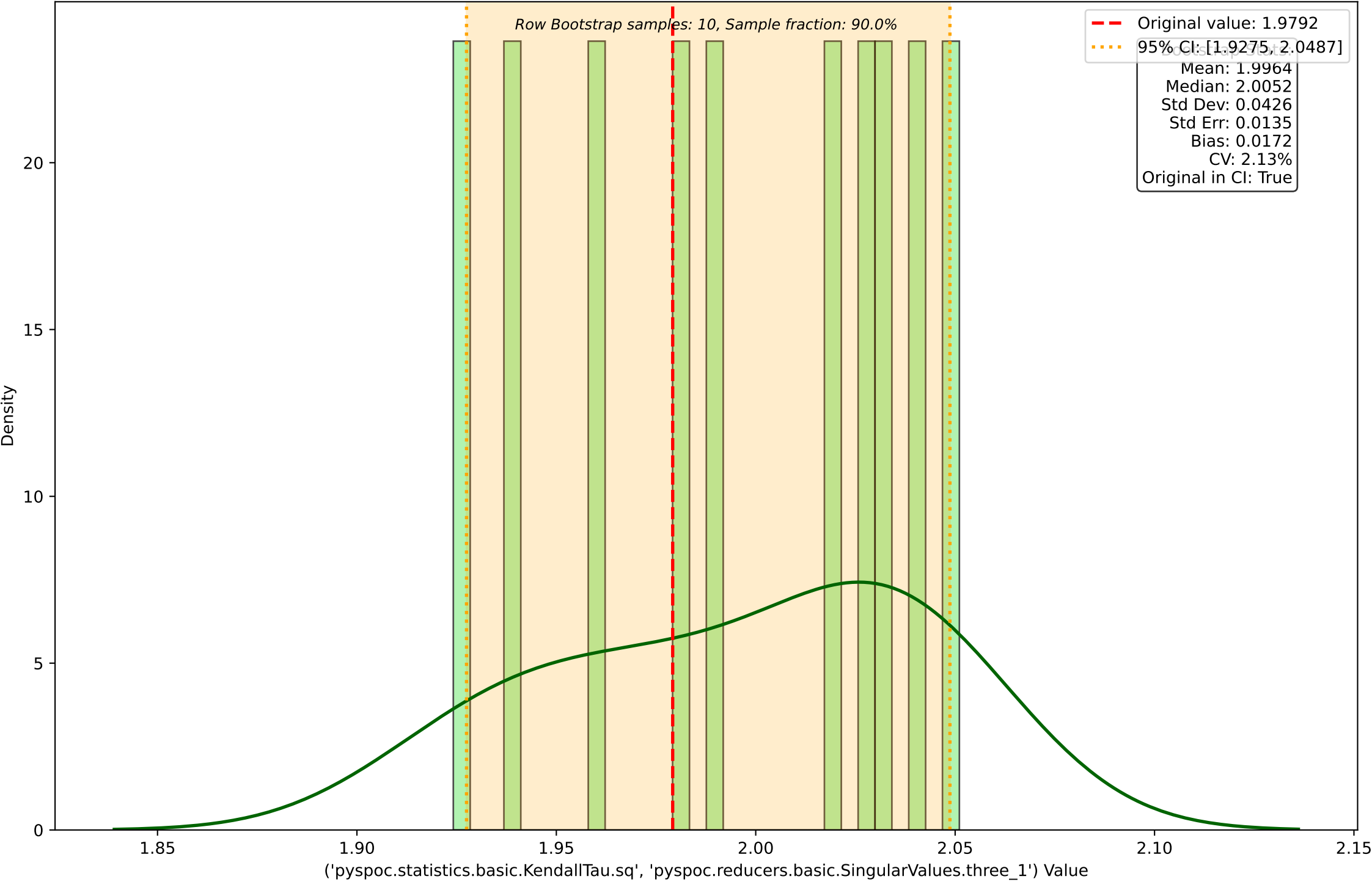
Row Bootstrap samples: 10, Sample fraction: 90.0%

Original value: 0.9962
95% CI: [0.9981, 1.0323]
Mean: 1.0115
Median: 1.0092
Std Dev: 0.0113
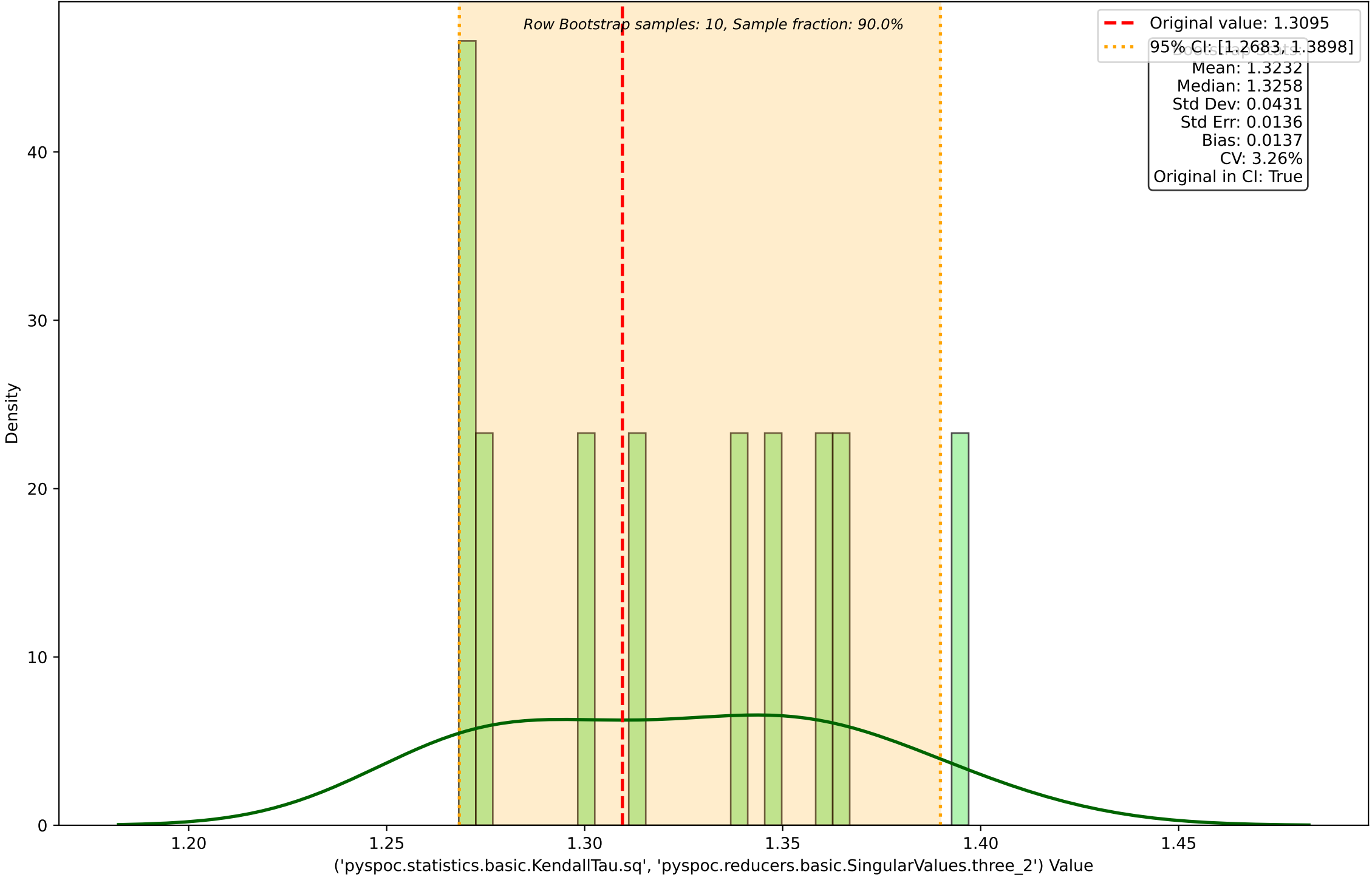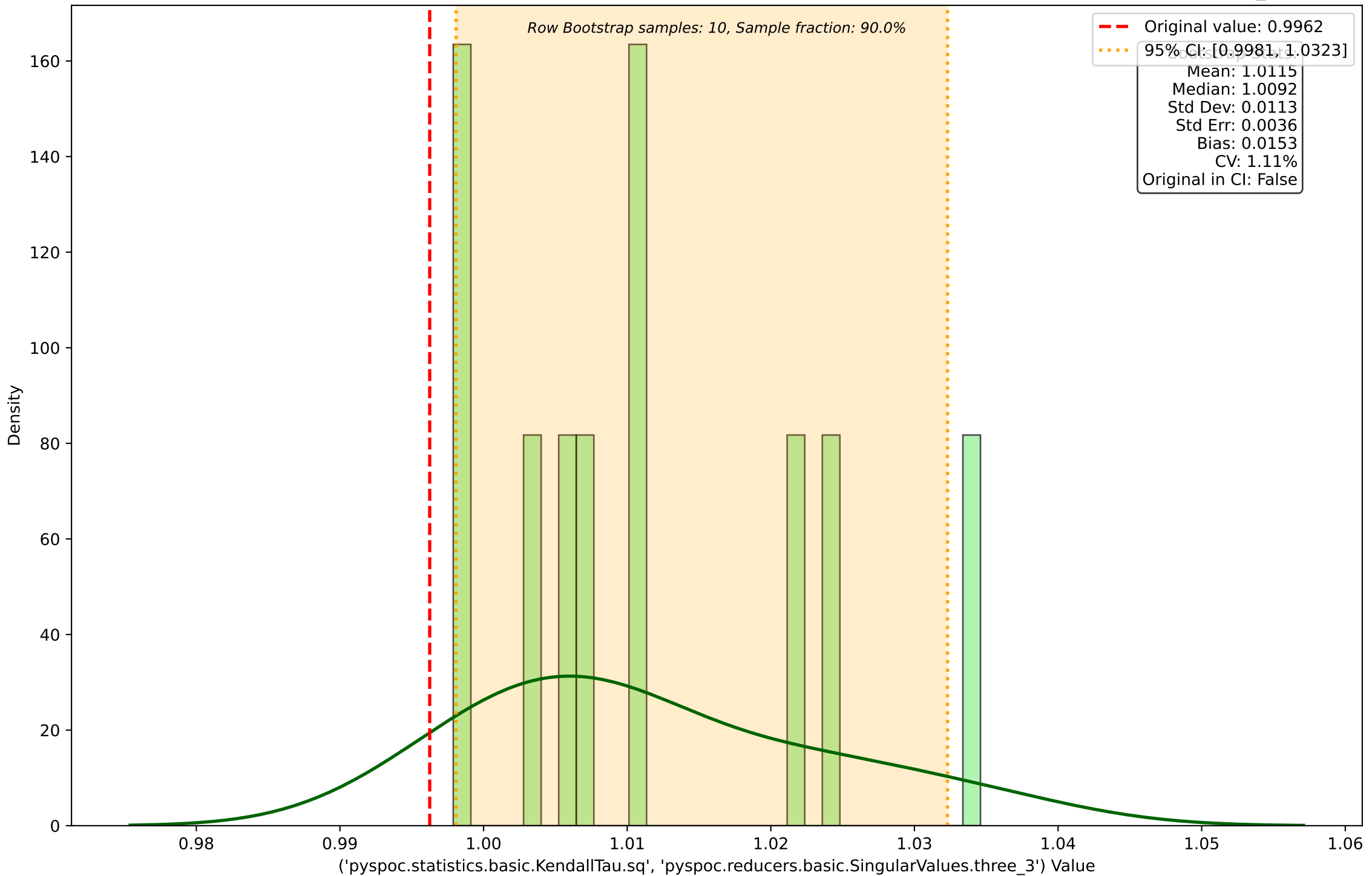Std Err: 0.0036
Bias: 0.0153
CV: 1.11%
Original in CI: False

Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1')

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 2.5795
- 95% CI: [2.4489, 2.7702]
- Mean: 2.6446
- Median: 2.6746
- Std Dev: 0.1108
- Std Err: 0.0350
- Bias: 0.0652
- CV: 4.19%
- Original in CI: True

X-axis: ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1') Value

Y-axis: Density

Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2')

Row Bootstrap samples: 10, Sample fraction: 90.0%

- Original value: 1.5573
- 95% CI: [1.4429, 1.6419]
- Mean: 1.5467
- Median: 1.5690
- Std Dev: 0.0671
- Std Err: 0.0212
- Bias: -0.0106
- CV: 4.34%
- Original in CI: True
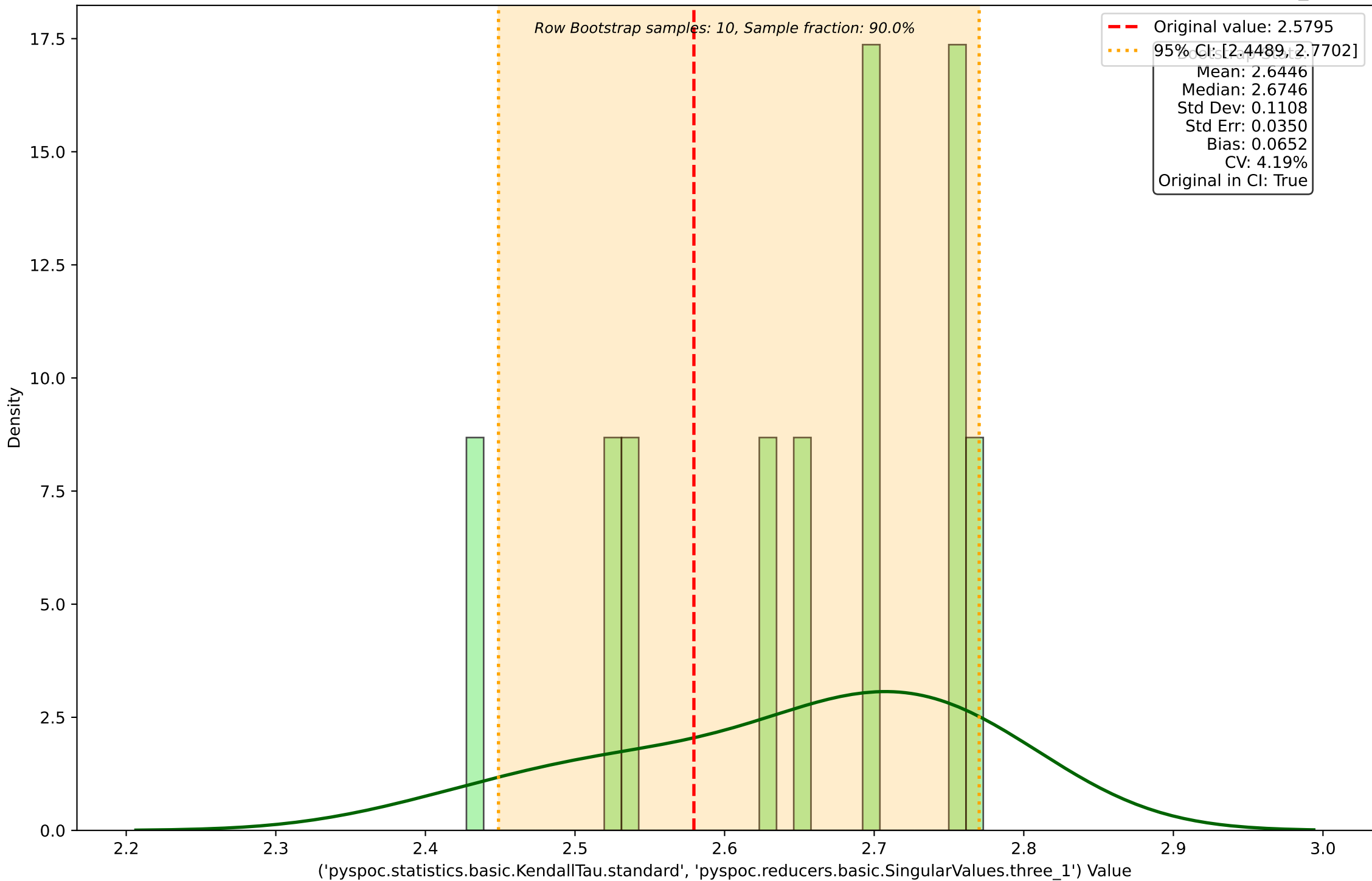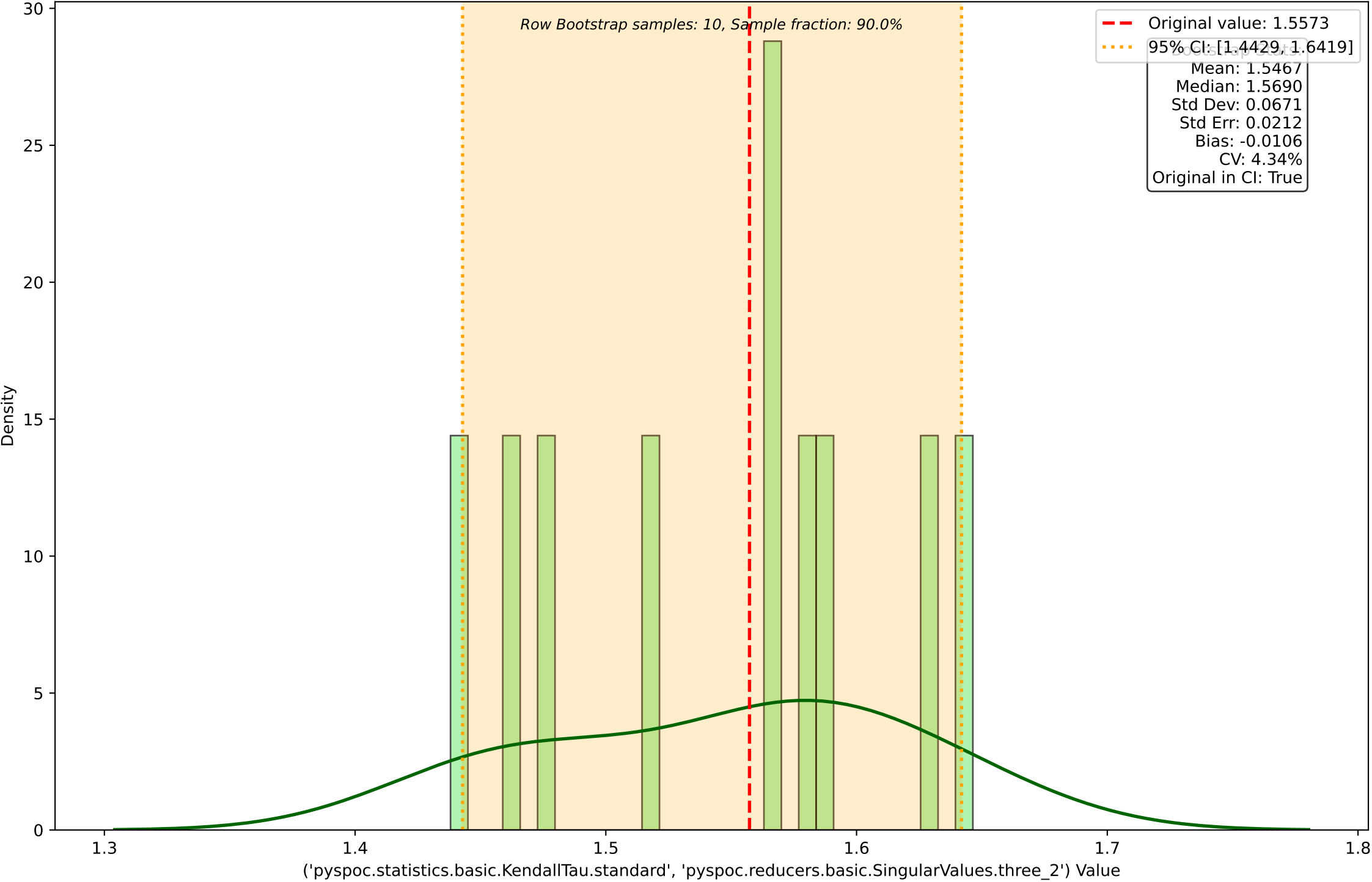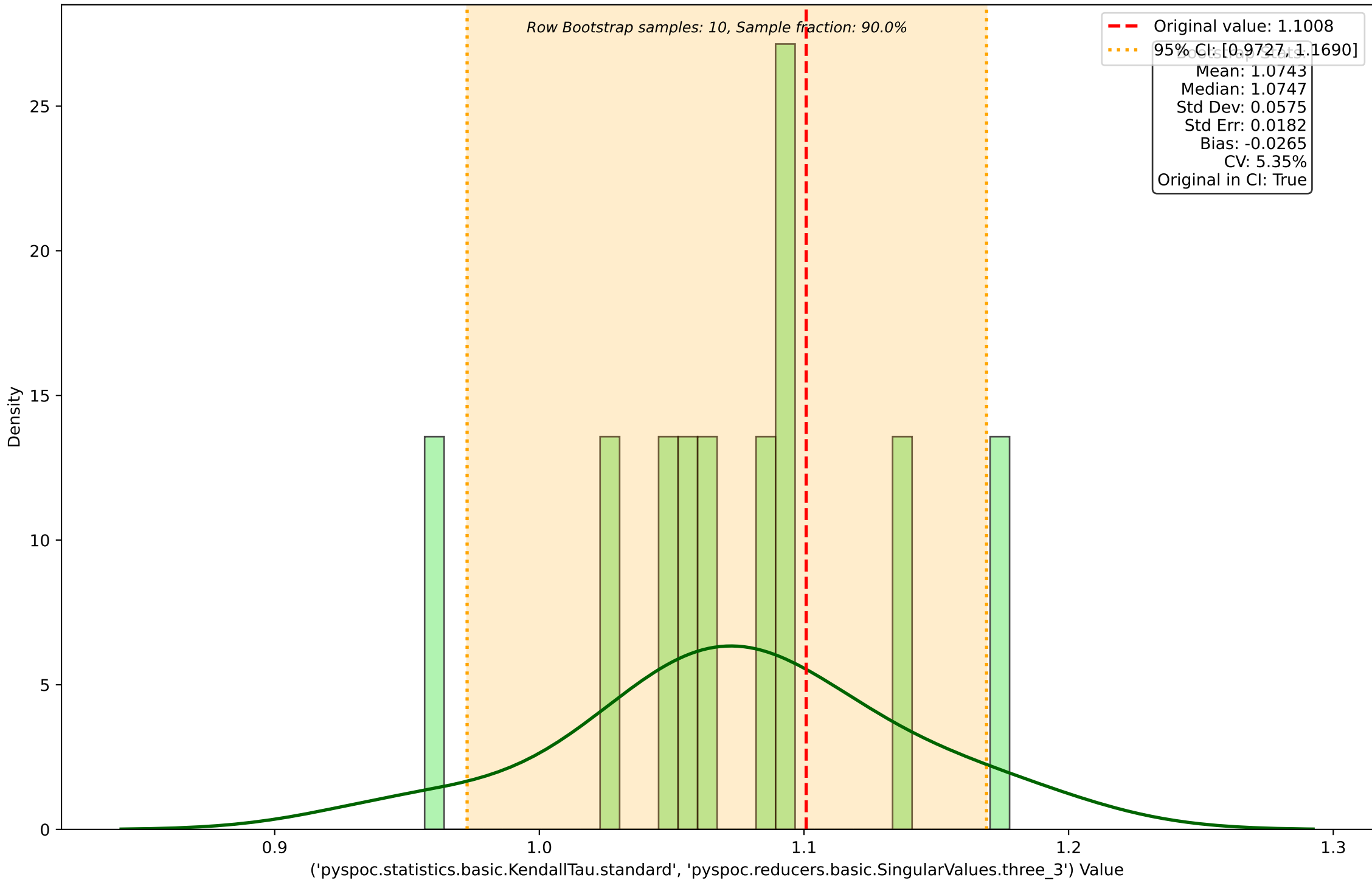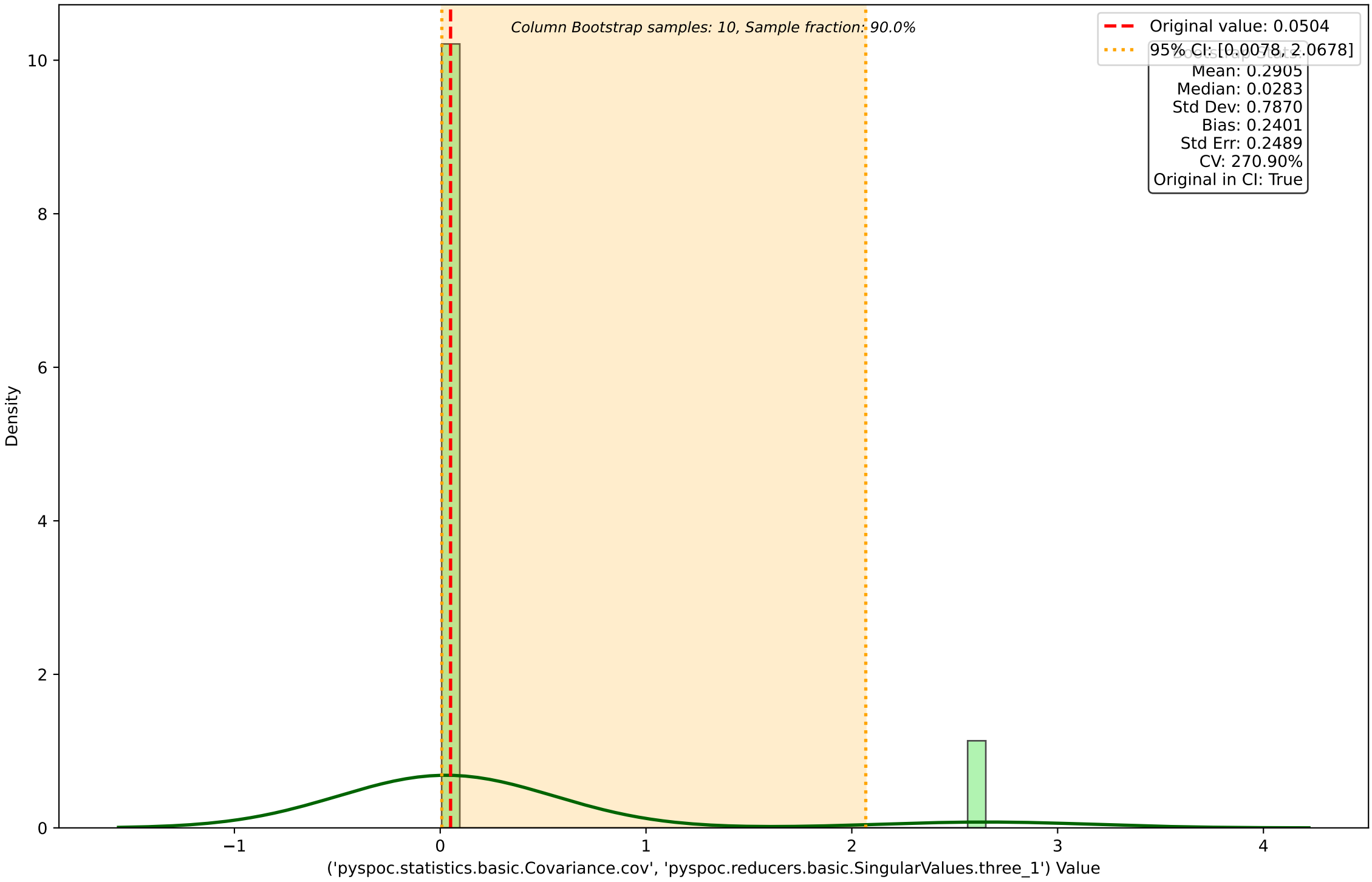
Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3')

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 1.1008
- 95% CI: [0.9727, 1.1690]
- Mean: 1.0743
- Median: 1.0747
- Std Dev: 0.0575
- Std Err: 0.0182
- Bias: -0.0265
- CV: 5.35%
- Original in CI: True

Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')

Column Bootstrap samples: 10, Sample fraction: 90.0%

- - - Original value: 0.0504
······ 95% CI: [0.0078, 2.0678]
Bootstrap stats:
Mean: 0.2905
Median: 0.0283
Std Dev: 0.7870
Bias: 0.2401
Std Err: 0.2489
CV: 270.90%
Original in CI: True

Density

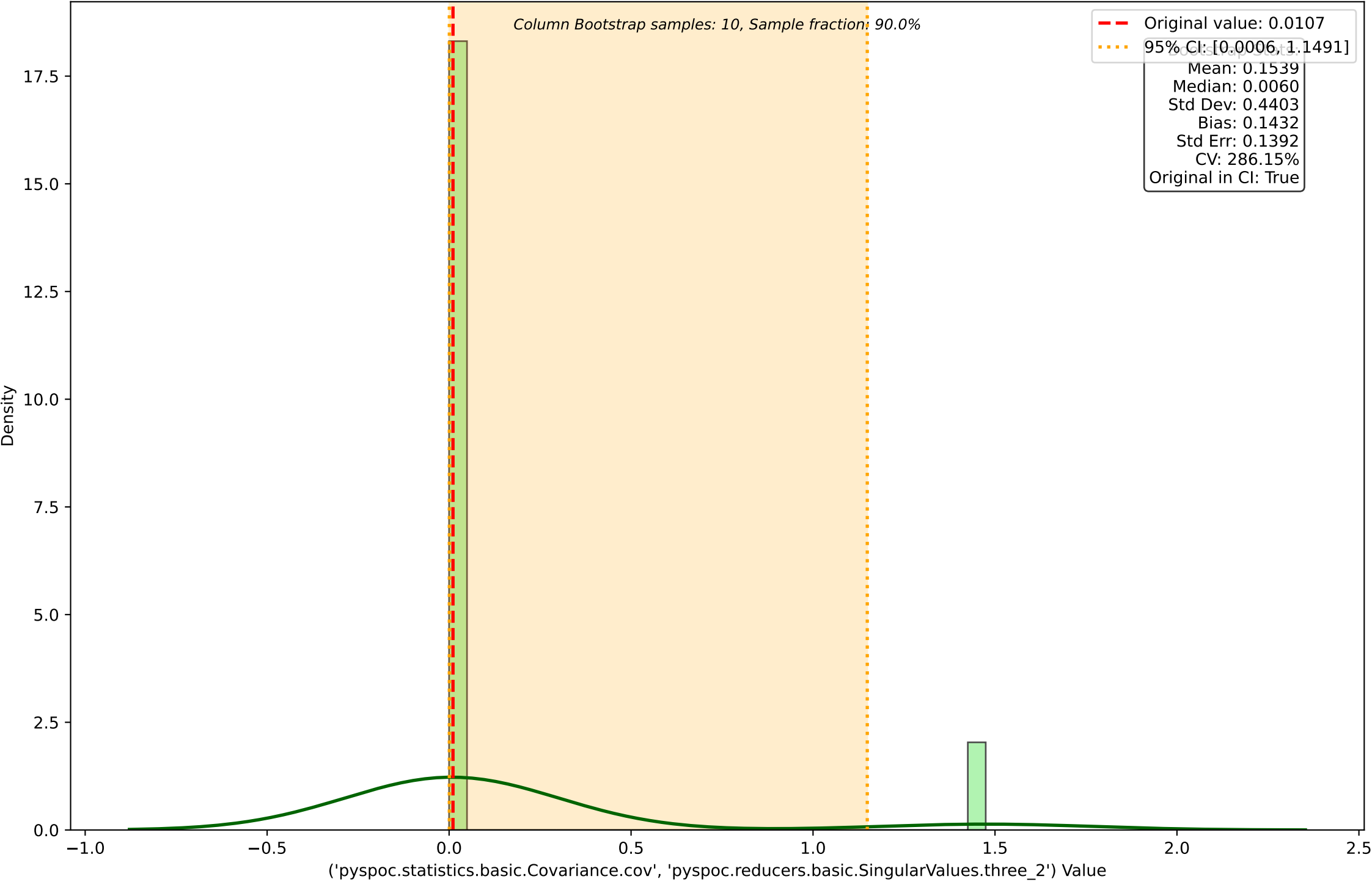('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1') Value

Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2')

Column Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 0.0107
- 95% CI: [0.0006, 1.1491]
- Mean: 0.1539
- Median: 0.0060
- Std Dev: 0.4403
- Bias: 0.1432
- Std Err: 0.1392
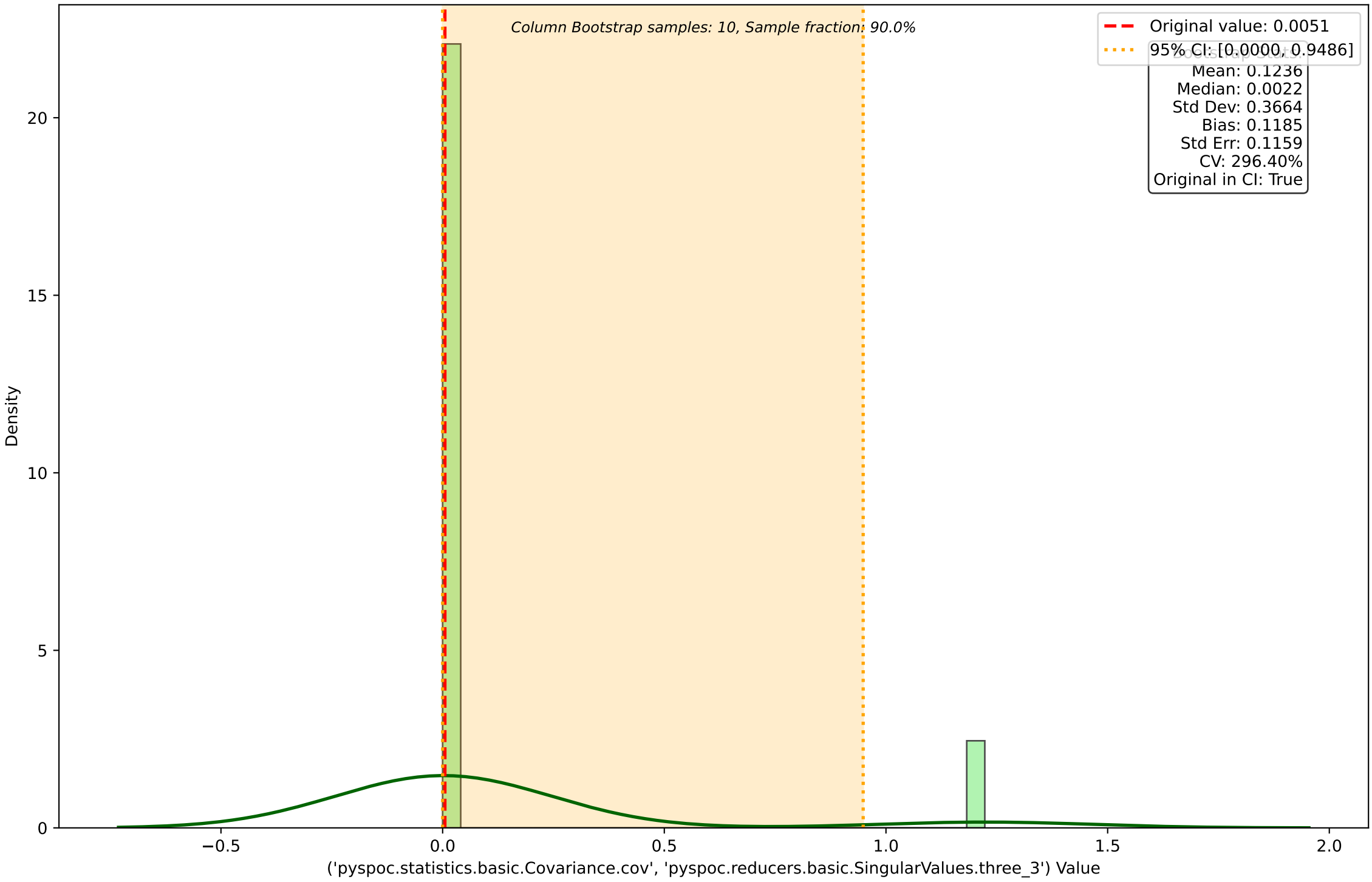- CV: 286.15%
- Original in CI: True

Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_3')

Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

Column Bootstrap samples: 10, Sample fraction: 90.0%

Bootstrap Stats:
Mean: -0.0000
Median: 0.0000
Std Dev: 0.0000
Bias: 0.0000
Std Err: 0.0000
CV: 303.03%
Original in CI: False

Original value: -0.0000
95% CI: [-0.0000, 0.0000]

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1')

Column Bootstrap samples: 10, Sample fraction: 90.0%

- - - Original value: 1.9792
······· 95% CI: [2.0926, 3.7200]
Mean: 2.8296
Median: 3.0284
Std Dev: 0.5769
Bias: 0.8504
Std Err: 0.1824
CV: 20.39%
Original in CI: False

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')

Column Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 1.3095
- 95% CI: [1.0314, 2.5814]
- Mean: 1.5103
- Median: 1.3466
- Std Dev: 0.5099
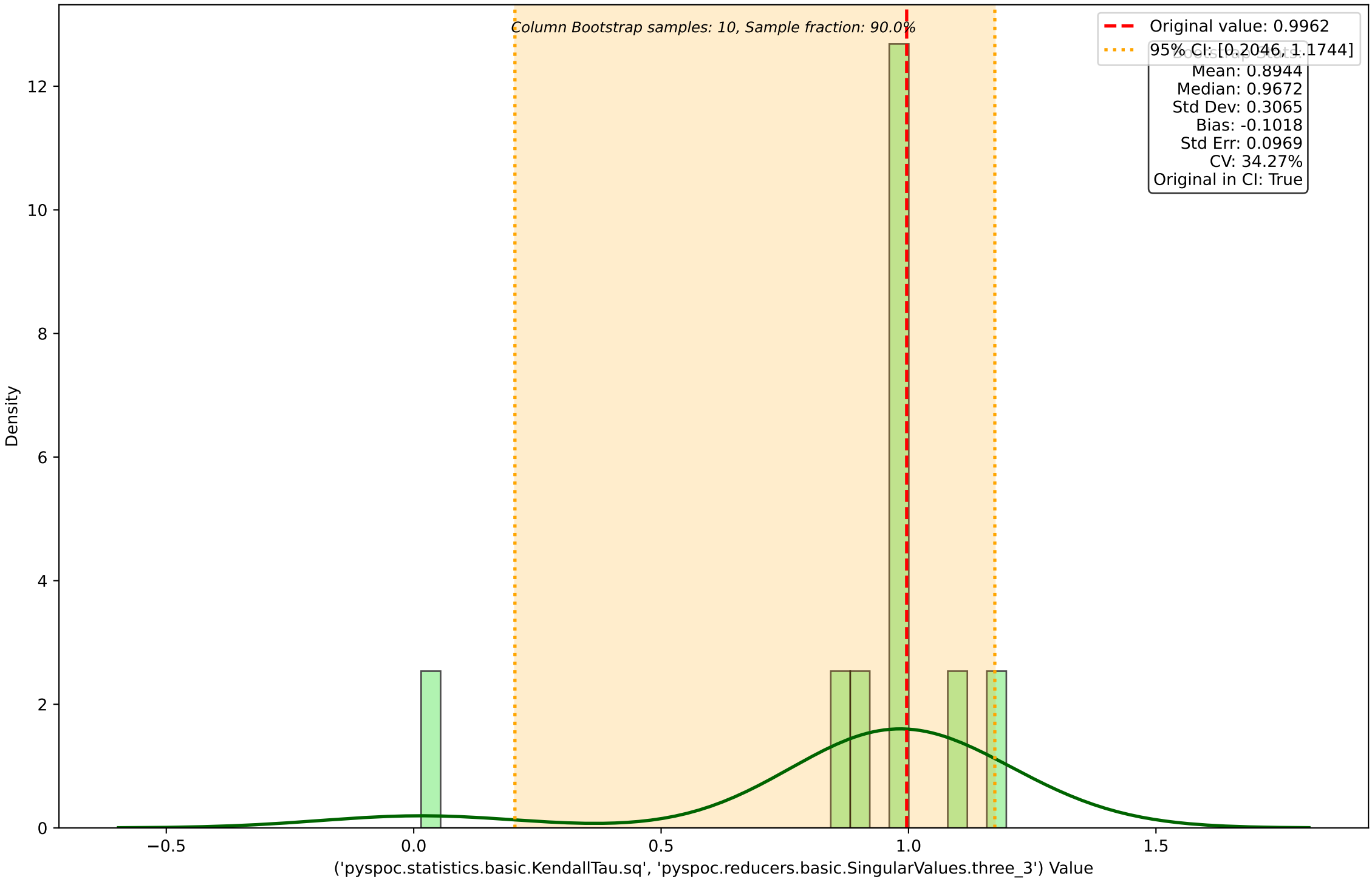- Bias: 0.2008
- Std Err: 0.1612
- CV: 33.76%
- Original in CI: True

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3')

Column Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 0.9962
- 95% CI: [0.2046, 1.1744]
- Mean: 0.8944
- Median: 0.9672
- Std Dev: 0.3065
- Bias: -0.1018
- Std Err: 0.0969
- CV: 34.27%
- Original in CI: True

X-axis: ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3') Value
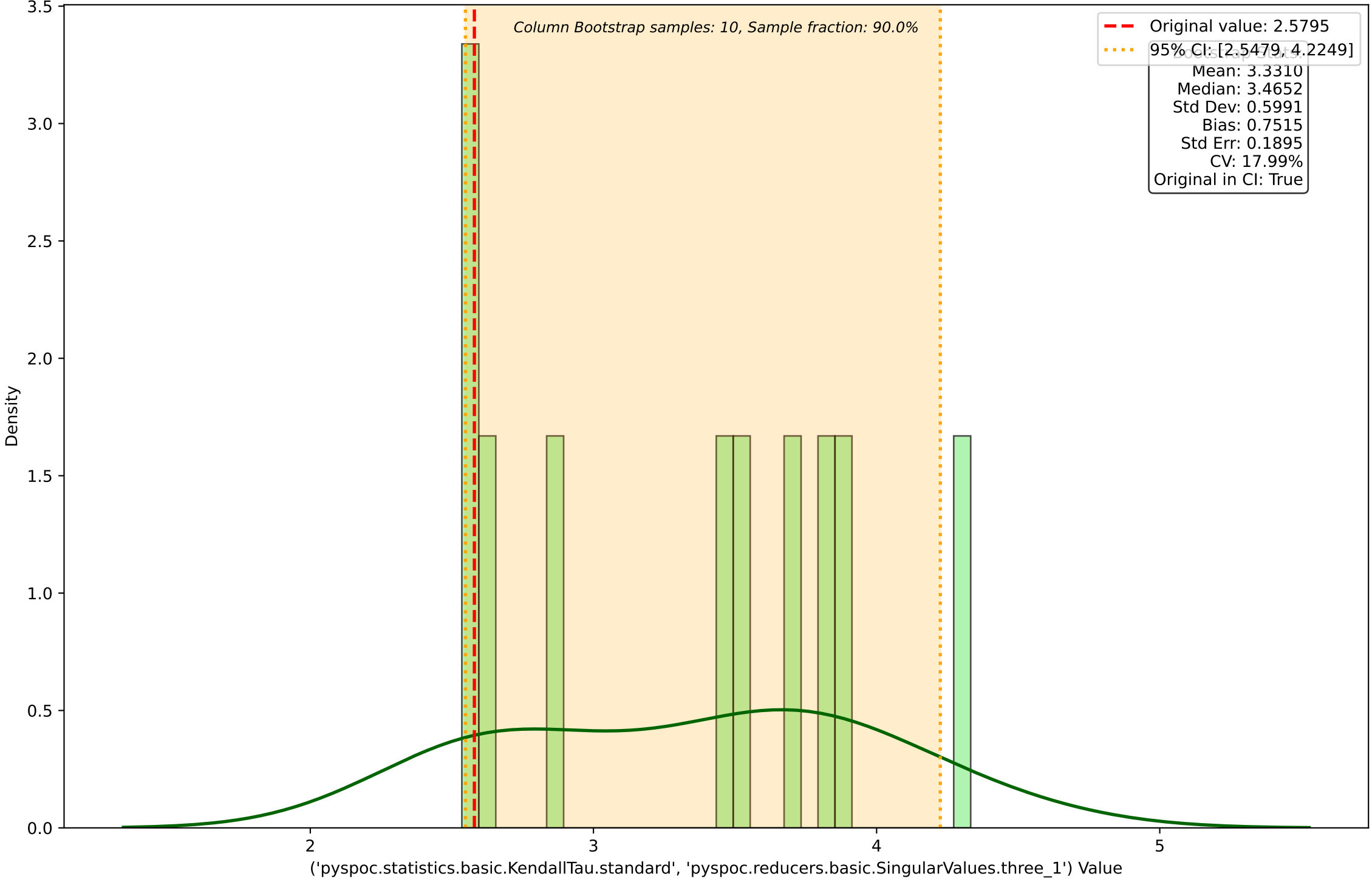
Y-axis: Density

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1')

Column Bootstrap samples: 10, Sample fraction: 90.0%

- - - Original value: 2.5795
····· 95% CI: [2.5479, 4.2249]
Mean: 3.3310
Median: 3.4652
Std Dev: 0.5991
Bias: 0.7515
Std Err: 0.1895
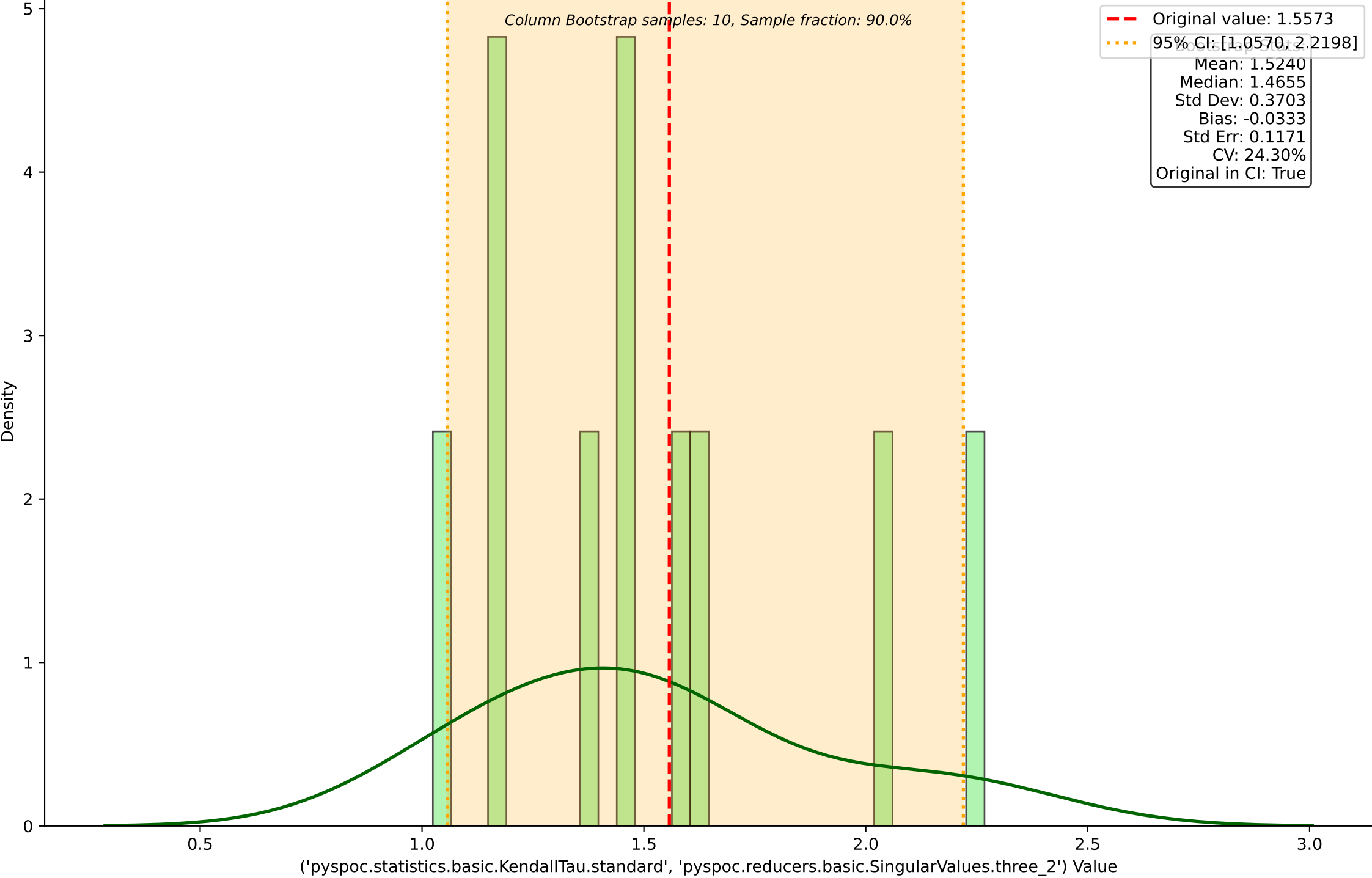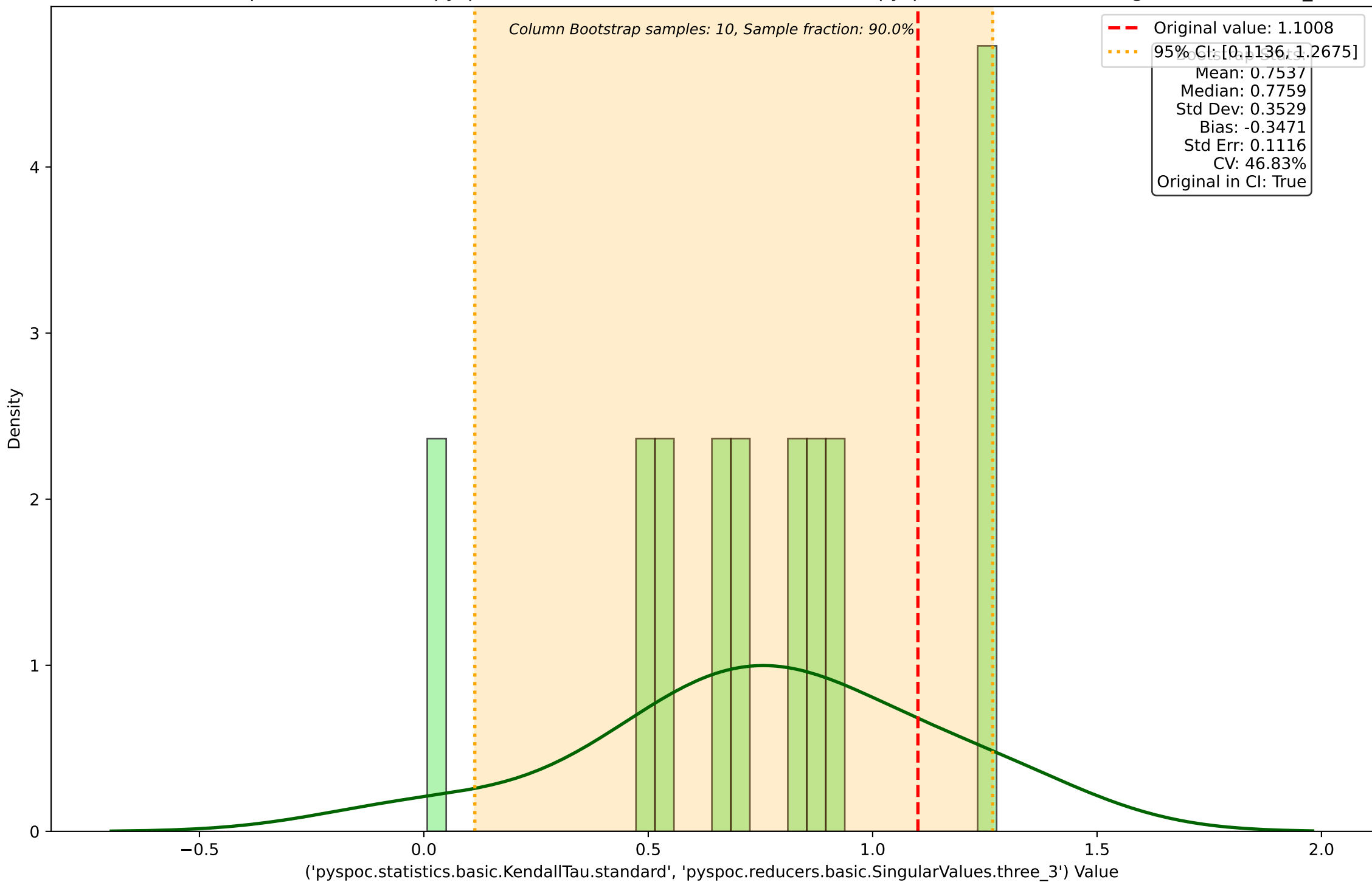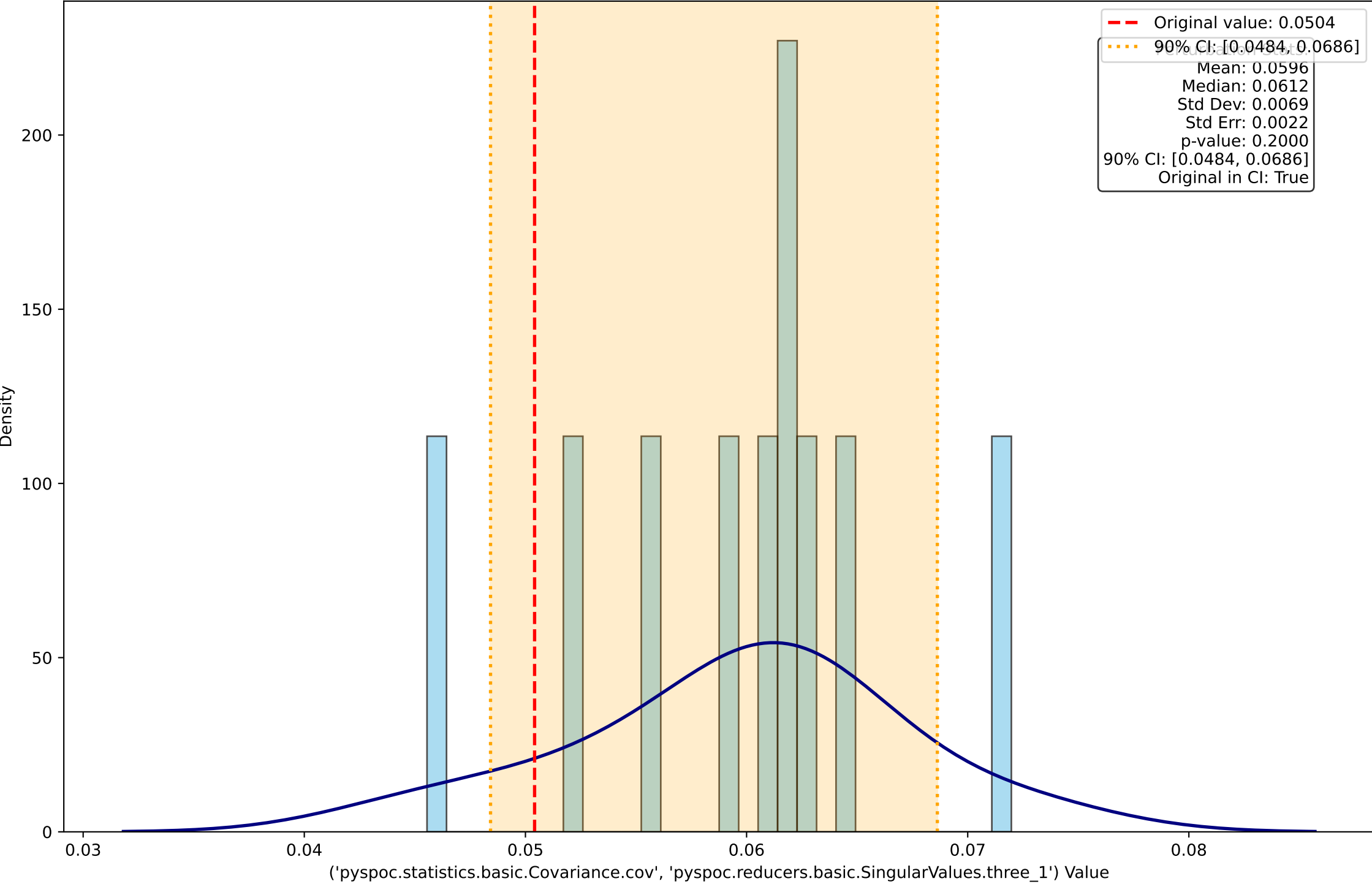CV: 17.99%
Original in CI: True

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2')

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3')

Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')

Legend:
- Original value: 0.0504
- 90% CI: [0.0484, 0.0686]
- Mean: 0.0596
- Median: 0.0612
- Std Dev: 0.0069
- Std Err: 0.0022
- p-value: 0.2000
- 90% CI: [0.0484, 0.0686]
- Original in CI: True

X-axis: ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1') Value

Y-axis: Density

Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2')

Legend:
- Original value: 0.0107
- 90% CI: [0.0120, 0.0149]
- Mean: 0.0131
- Median: 0.0130
- Std Dev: 0.0010
- Std Err: 0.0003
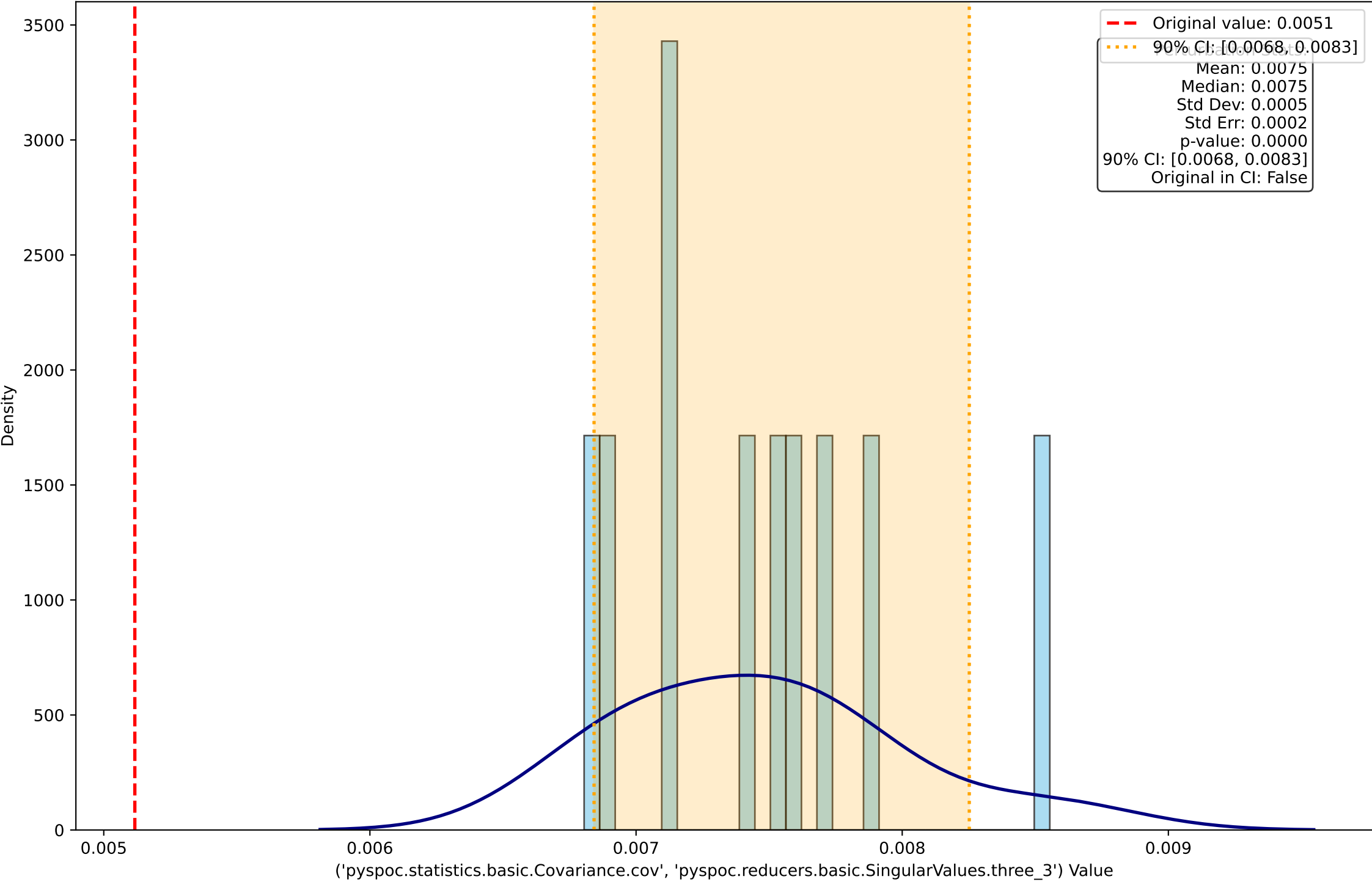- p-value: 0.0000
- 90% CI: [0.0120, 0.0149]
- Original in CI: False

Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_3')

Legend:
- Original value: 0.0051
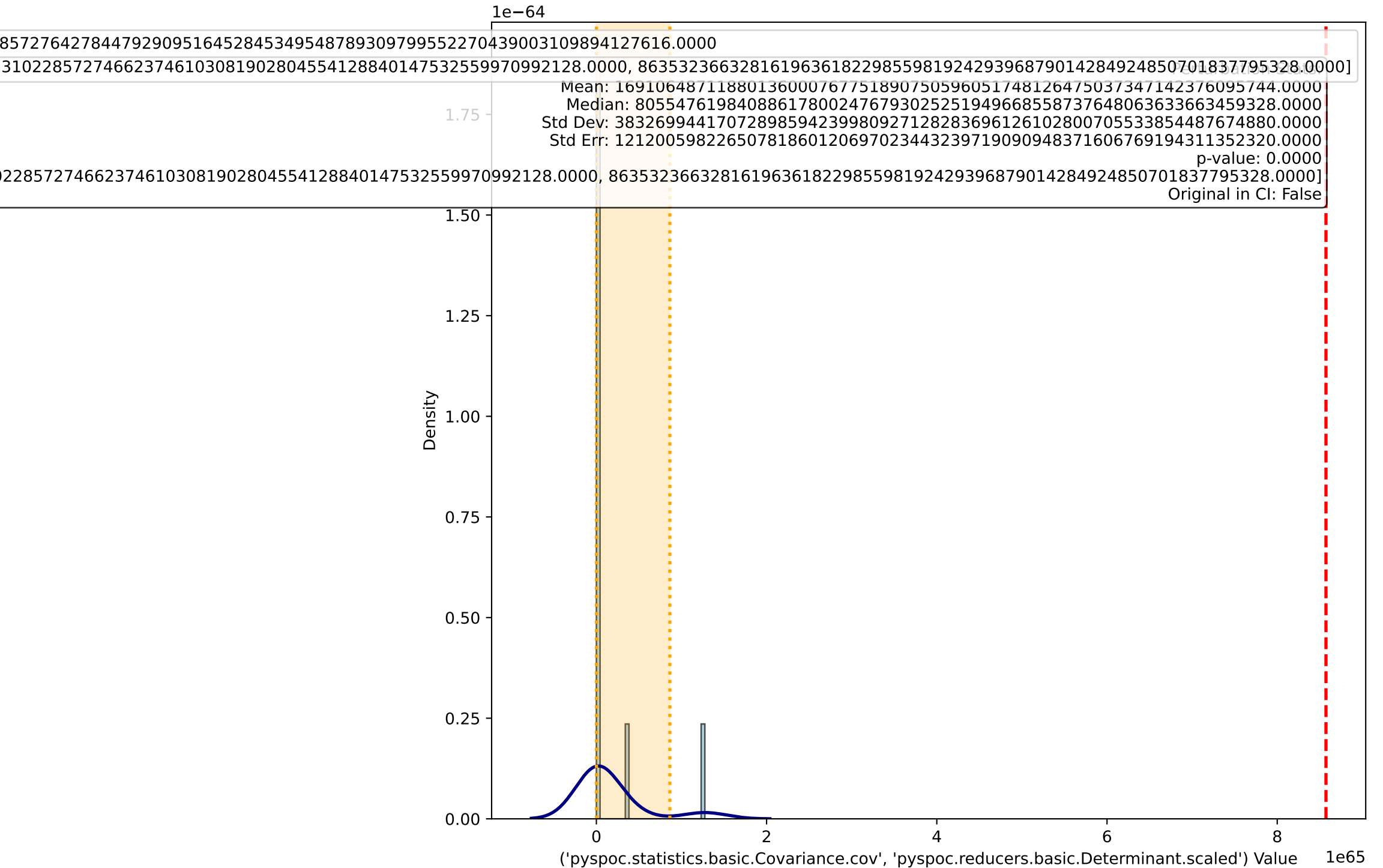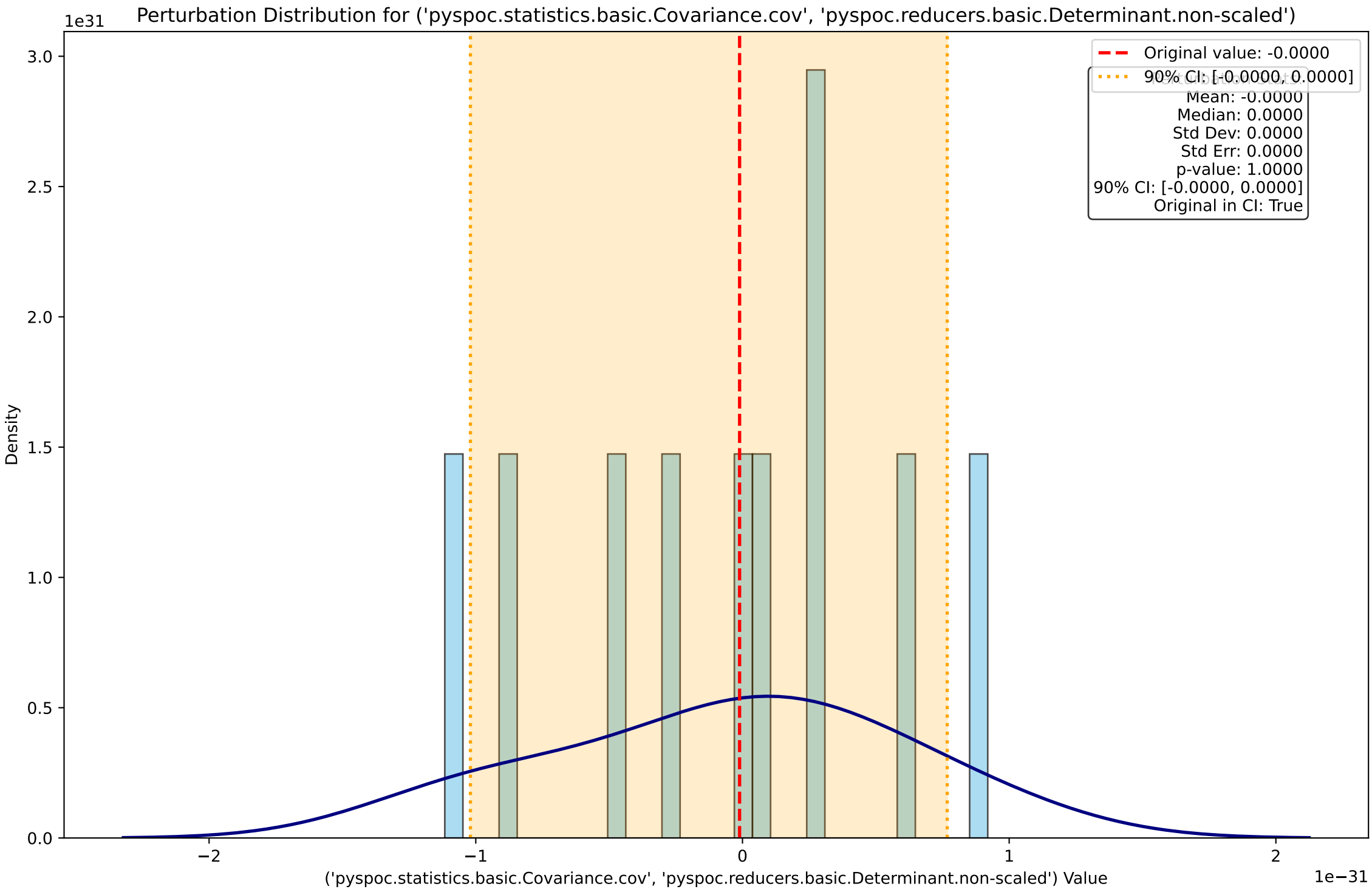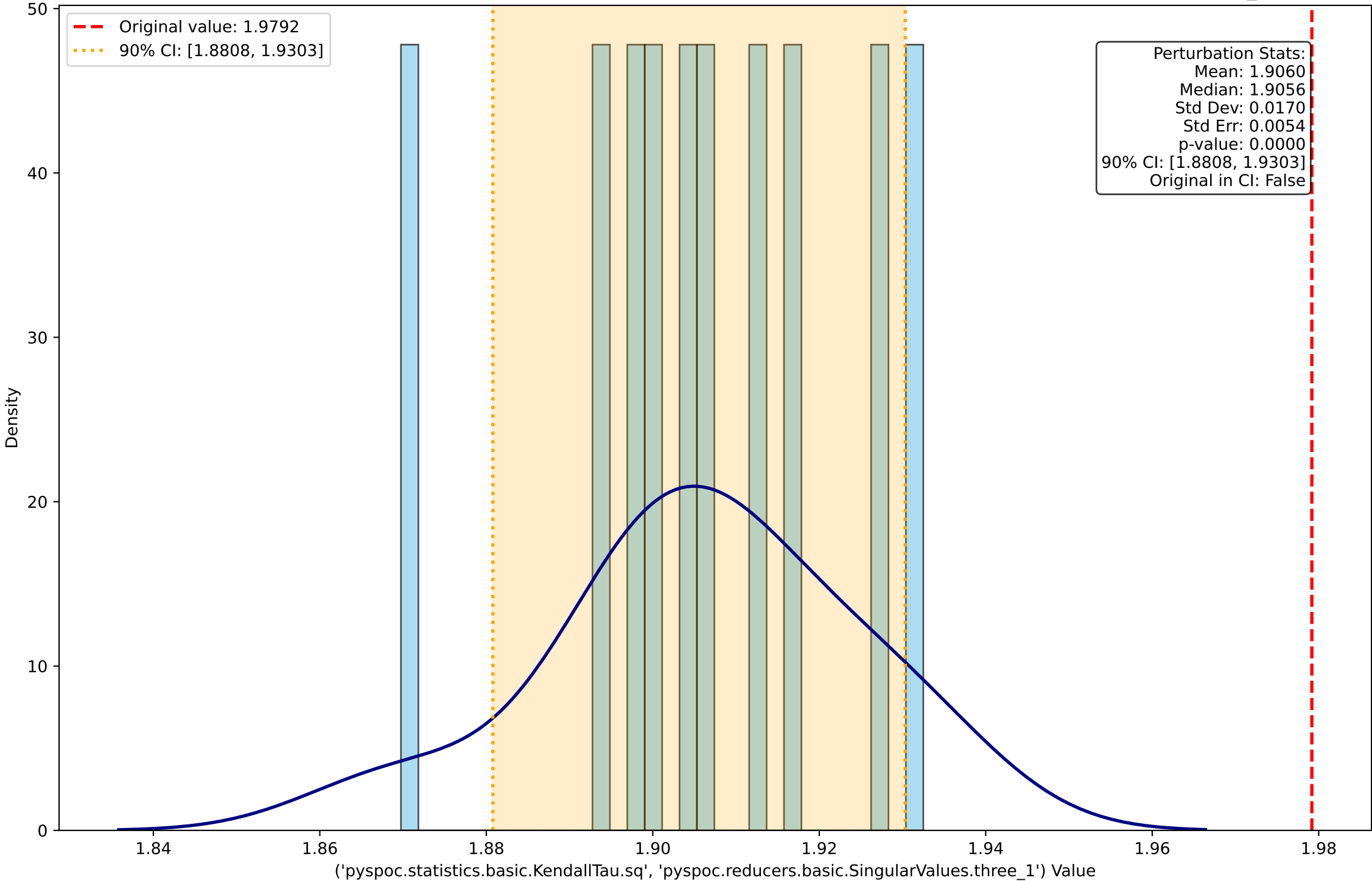- 90% CI: [0.0068, 0.0083]
- Mean: 0.0075
- Median: 0.0075
- Std Dev: 0.0005
- Std Err: 0.0002
- p-value: 0.0000
- 90% CI: [0.0068, 0.0083]
- Original in CI: False

Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinar

1e−64

85727642784479290951645284534954878930979955227043900310989412761 6.0000

3102285727466237461030819028045541288401475325599709921 28.0000, 8635323663281619636182298559819242939687901428492485070183779532 8.0000]

Mean: 1691064871188013600076775189075059605174812647503734714237609574 4.0000
Median: 8055476198408861780024767930252519496685587376480636336634593 28.0000
Std Dev: 3832699441707289859423998092712828369612610280070553385448767 4880.0000
Std Err: 12120059822650781860120697023443239719090948371606769194311 352320.0000
p-value: 0.0000

0228572746623746103081902804554128840147532559970992128.0000, 863532366328161963618229855981924293968790142849248507018377953 28.0000]

Original in CI: False

('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled') Value   1e65

Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

Legend:
- Original value: -0.0000
- 90% CI: [-0.0000, 0.0000]
- Mean: -0.0000
- Median: 0.0000
- Std Dev: 0.0000
- Std Err: 0.0000
- p-value: 1.0000
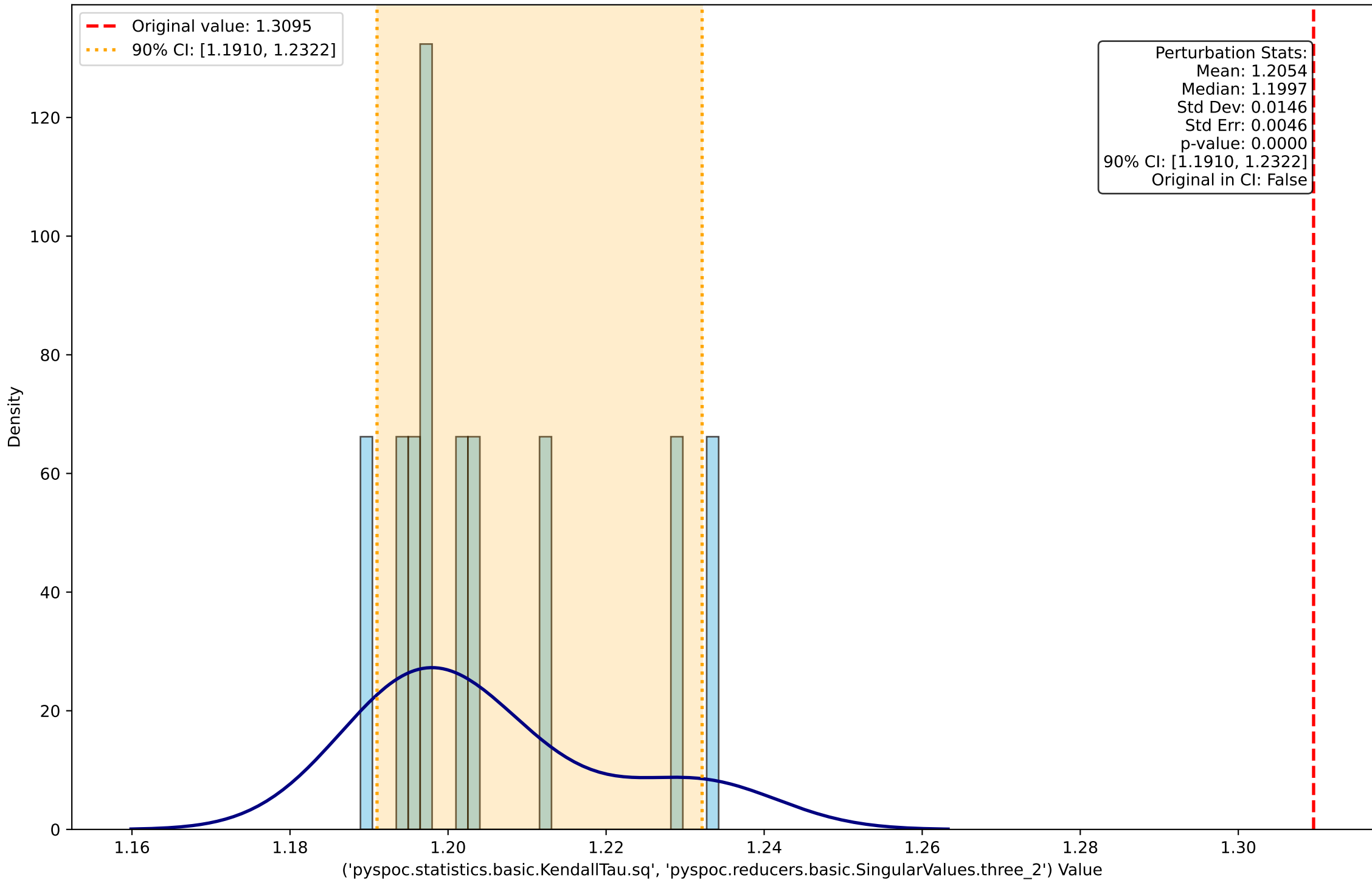- 90% CI: [-0.0000, 0.0000]
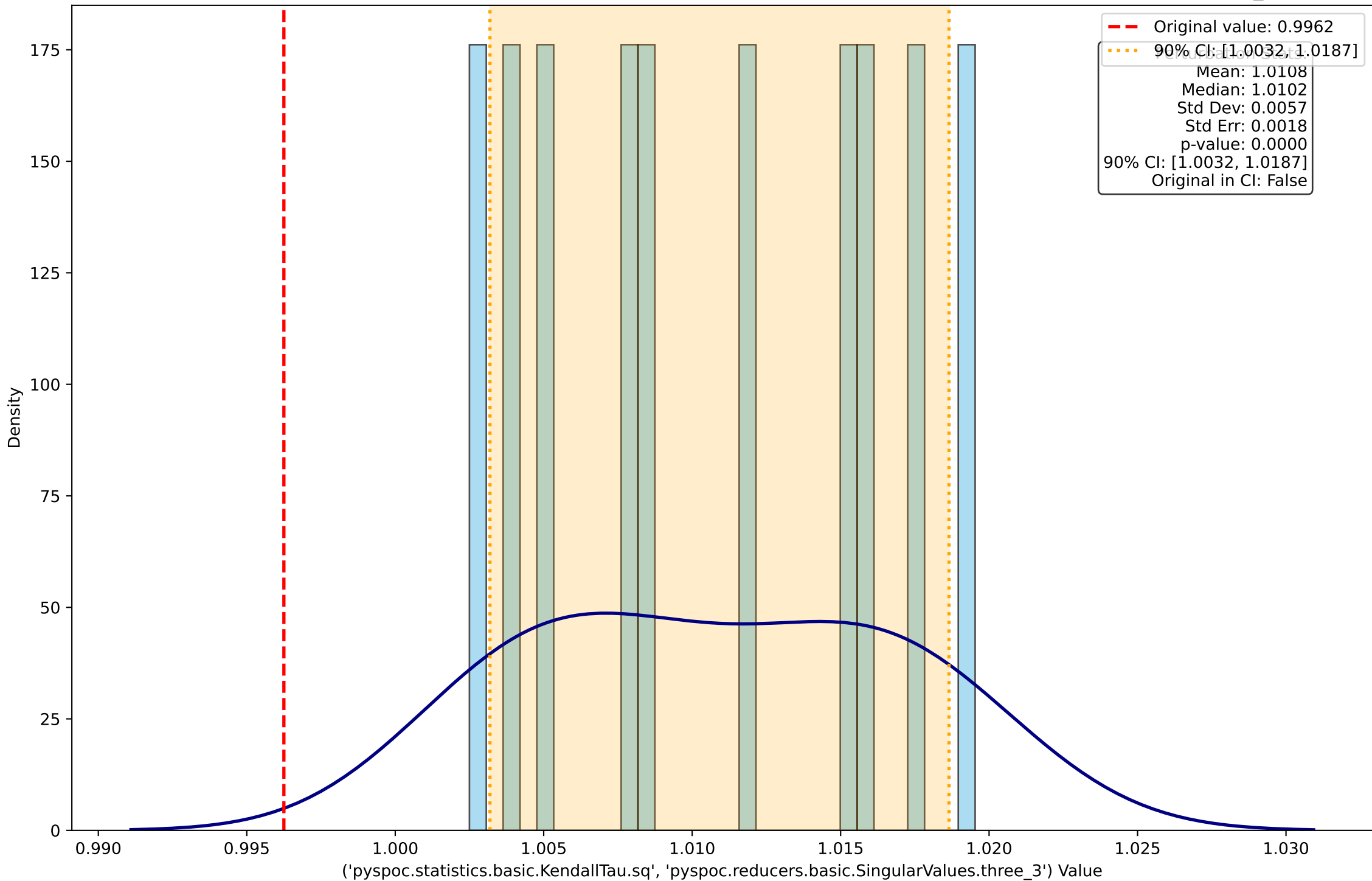- Original in CI: True

Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1')
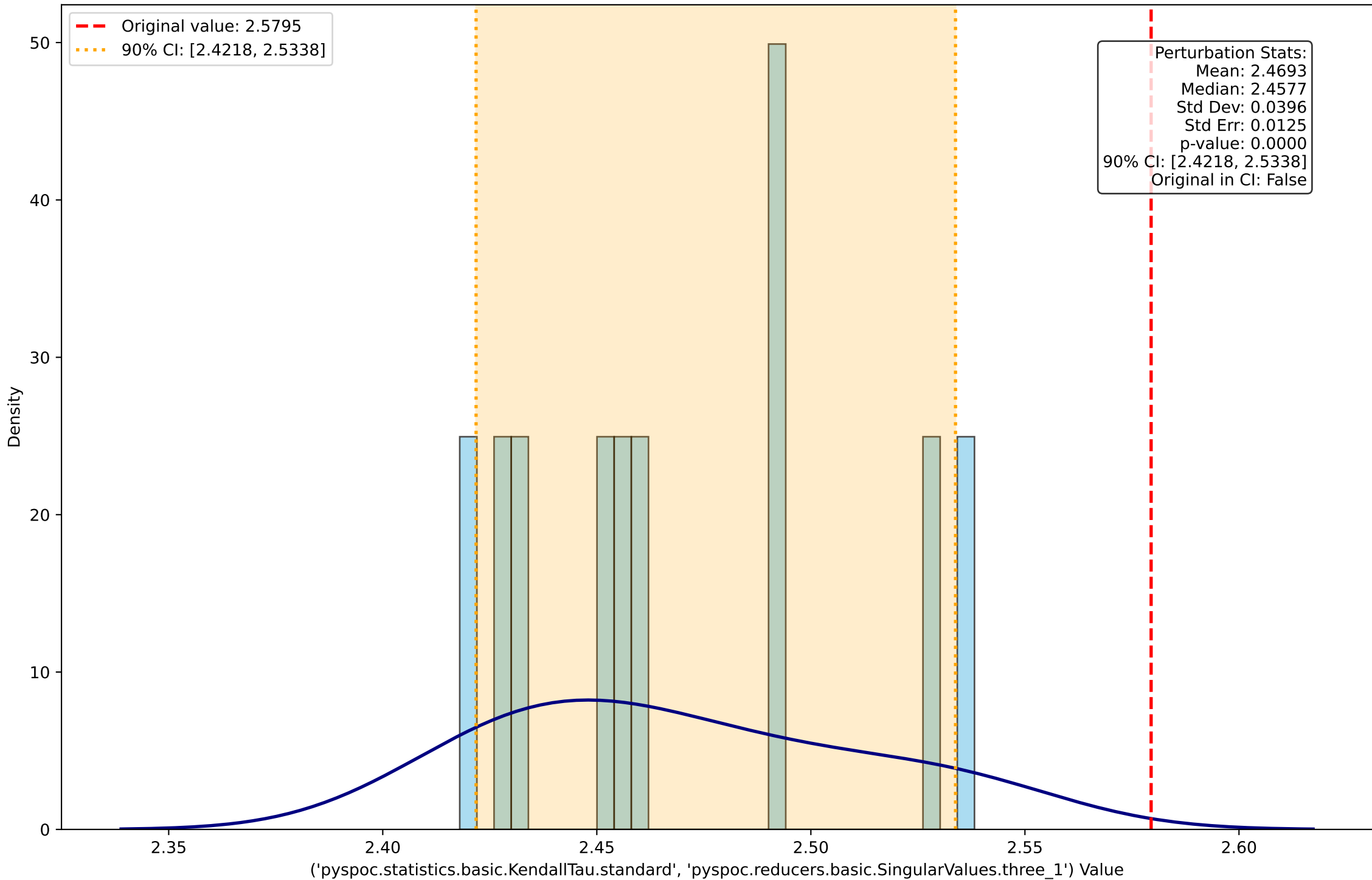
Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')
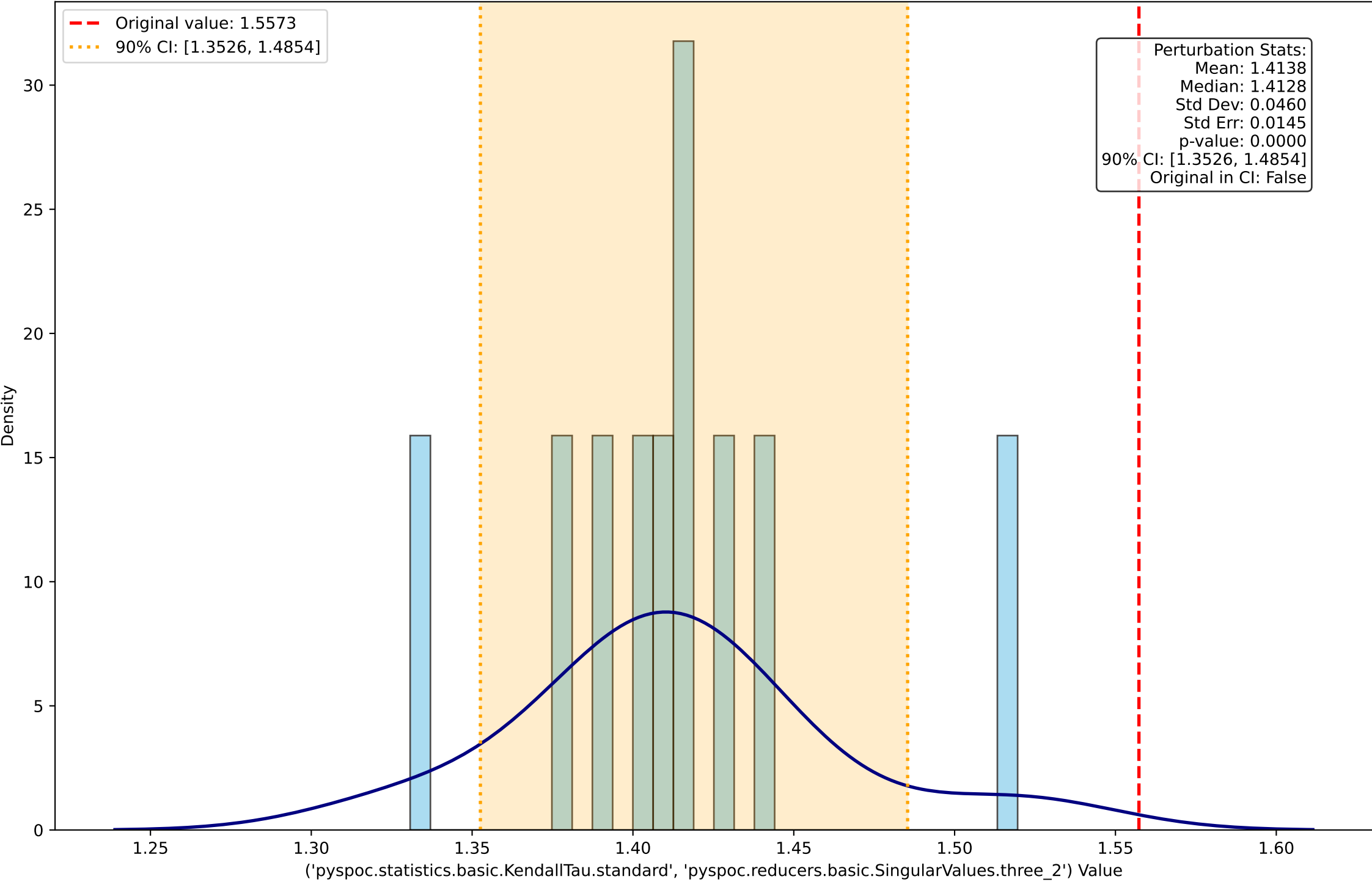
Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3')

Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1')

Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2')

Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3')

Legend:
- Original value: 1.1008
- 90% CI: [1.0459, 1.0967]
- Mean: 1.0696
- Median: 1.0686
- Std Dev: 0.0181
- Std Err: 0.0057
- p-value: 0.2000
- 90% CI: [1.0459, 1.0967]
- Original in CI: False