Filename: DailyDelhiClimateTest.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: 1
Normalization: z-score
Random seed: 42

Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')
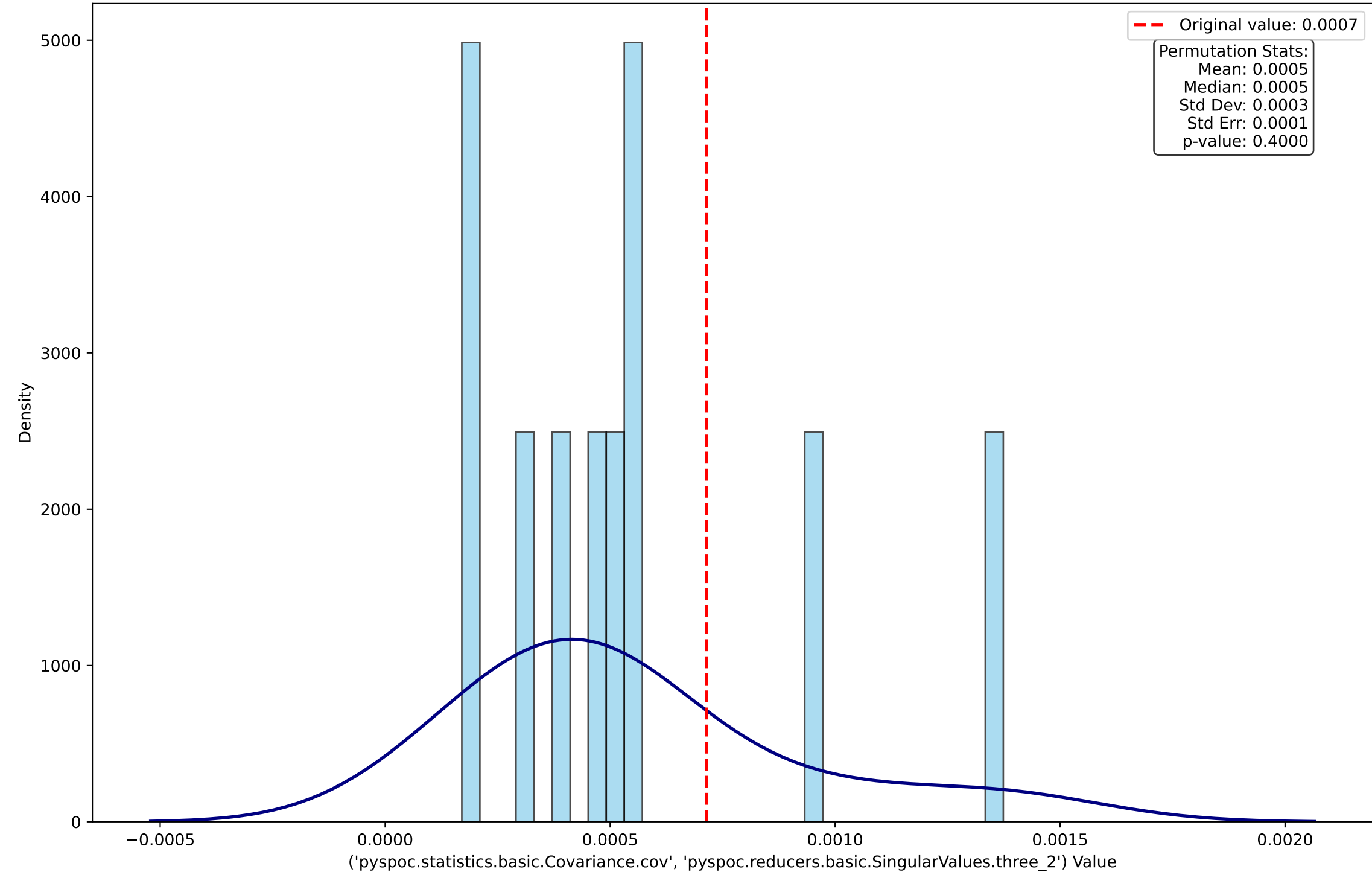
Original value: 0.0462

Permutation Stats:
Mean: 0.0284
Median: 0.0323
Std Dev: 0.0168
Std Err: 0.0053
p-value: 0.2000
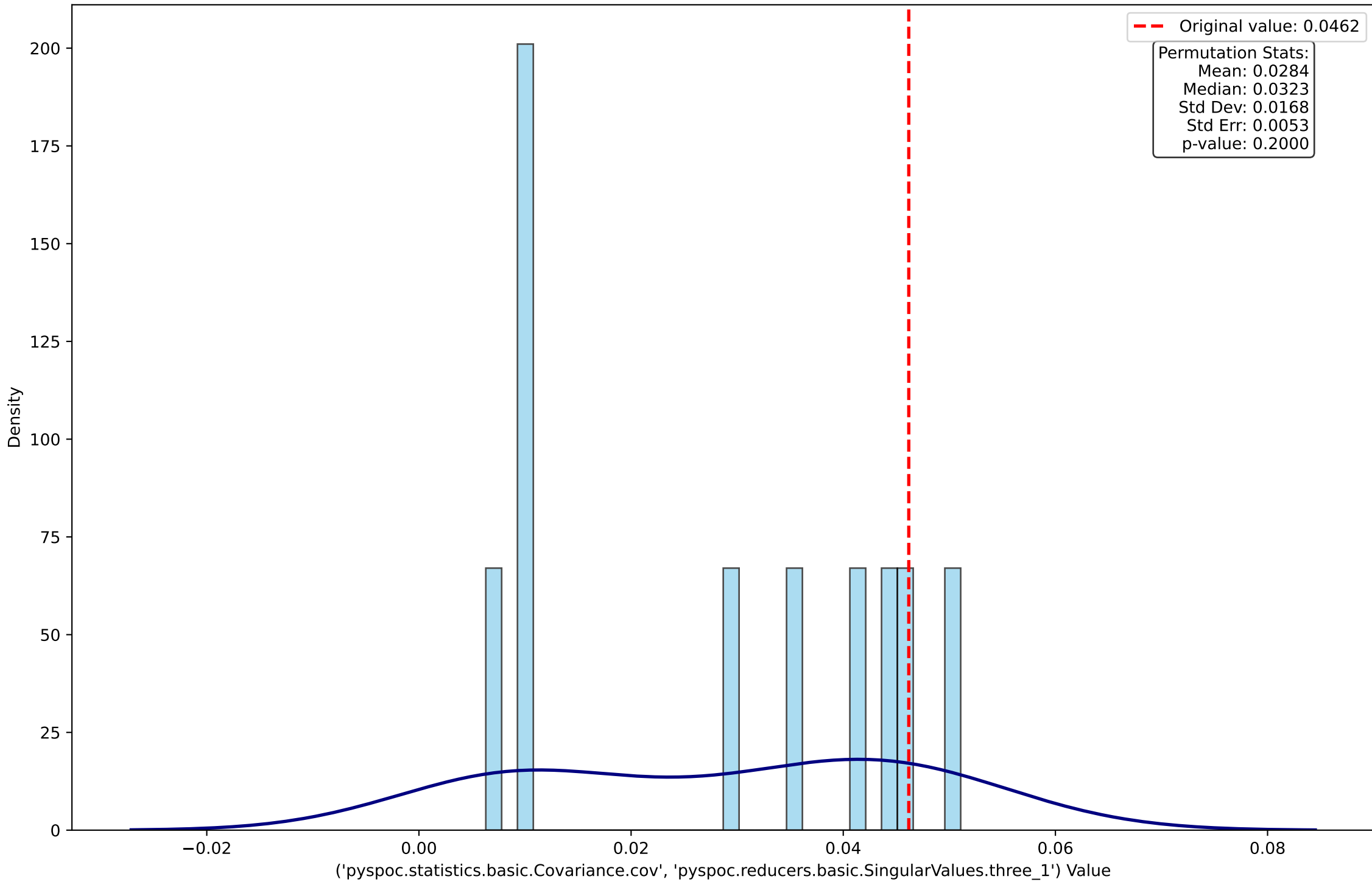
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2')

Density

('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2') Value

- - - Original value: 0.0007

Permutation Stats:
Mean: 0.0005
Median: 0.0005
Std Dev: 0.0003
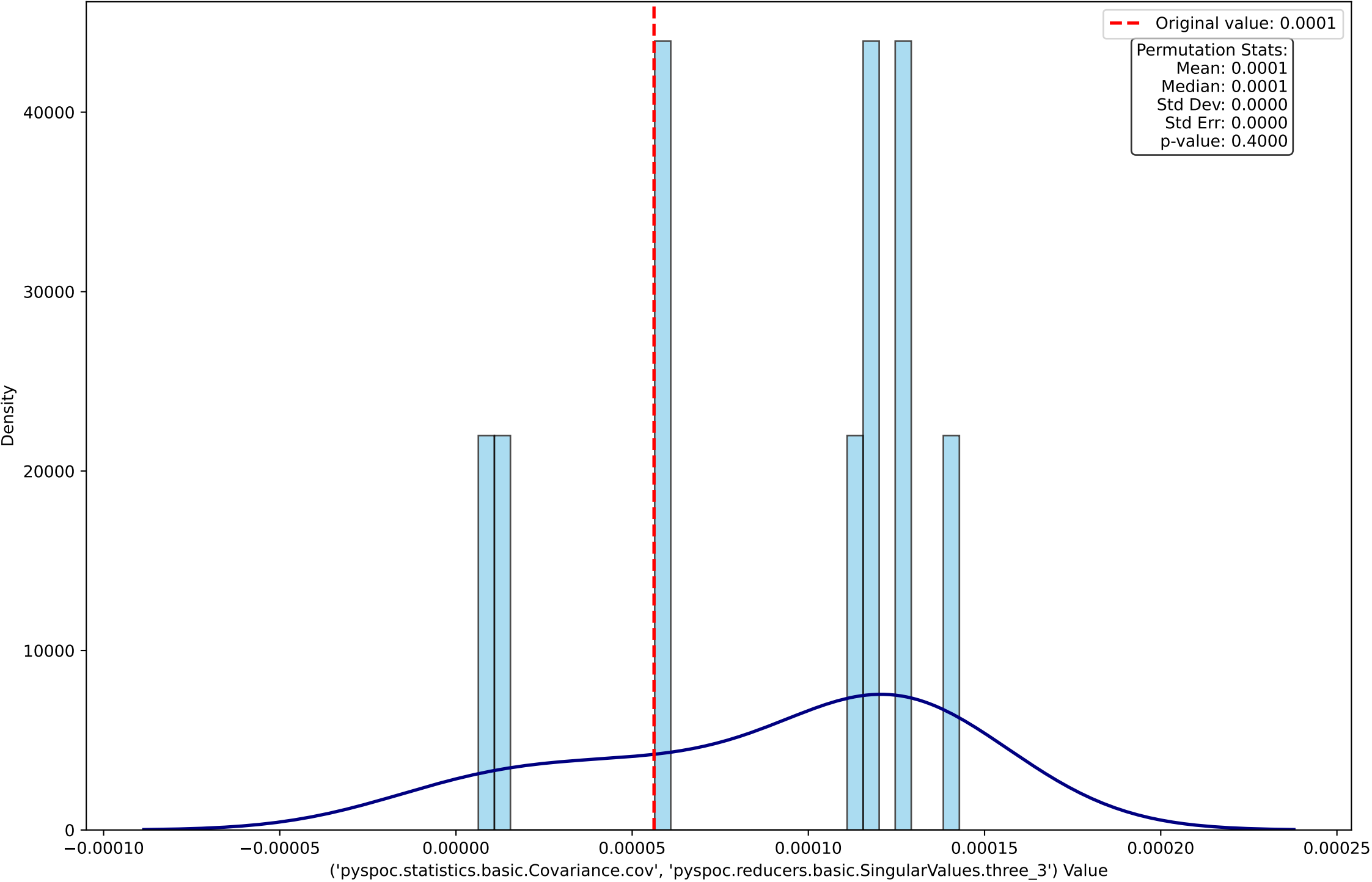Std Err: 0.0001
p-value: 0.4000

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

Legend:
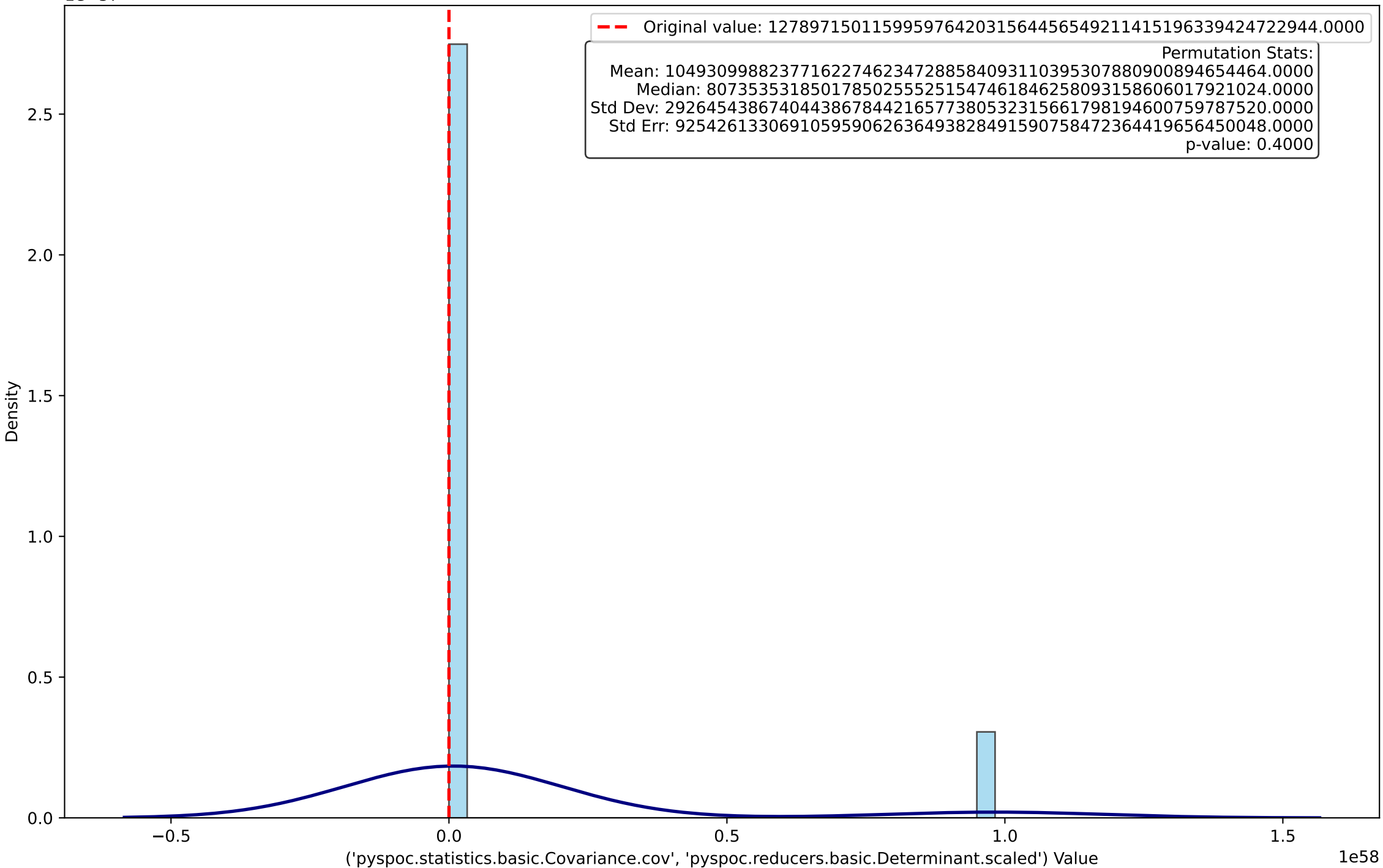- Original value: 0.0001

Permutation Stats:
Mean: 0.0001
Median: 0.0001
Std Dev: 0.0000
Std Err: 0.0000
p-value: 0.4000

X-axis: ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_3') Value

Y-axis: Density

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

Original value: 12789715011599597642031564456549211415196339424722944.0000

Permutation Stats:
Mean: 10493099882377162274623472885840931103953078809000894654464.0000
Median: 8073535318501785025552515474618462580931586060179210240.00
Std Dev: 29264543867404438678442165773805323156617981946007597875200.0000
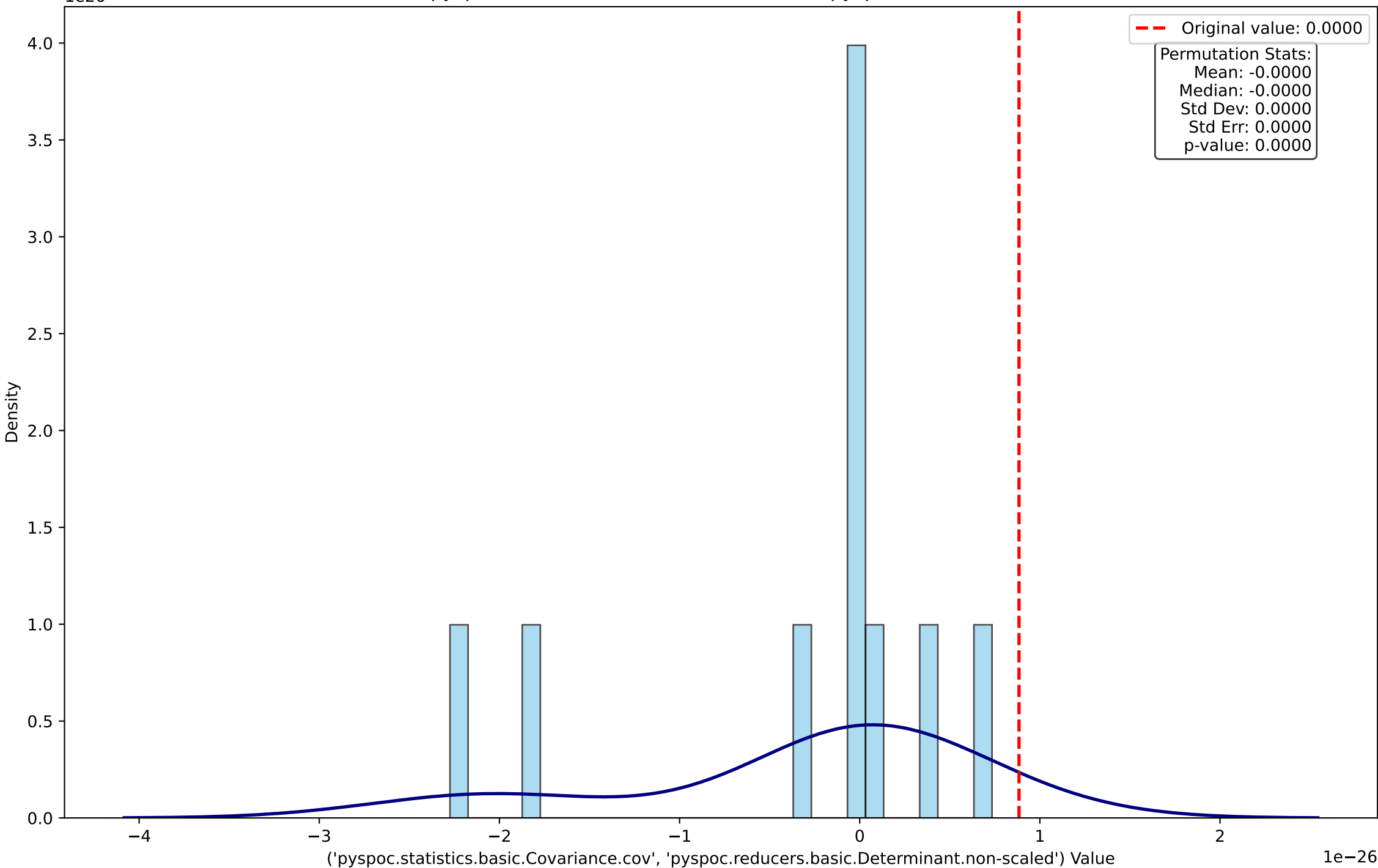Std Err: 925426133069105959062636493284915907584723641965645004800.0000
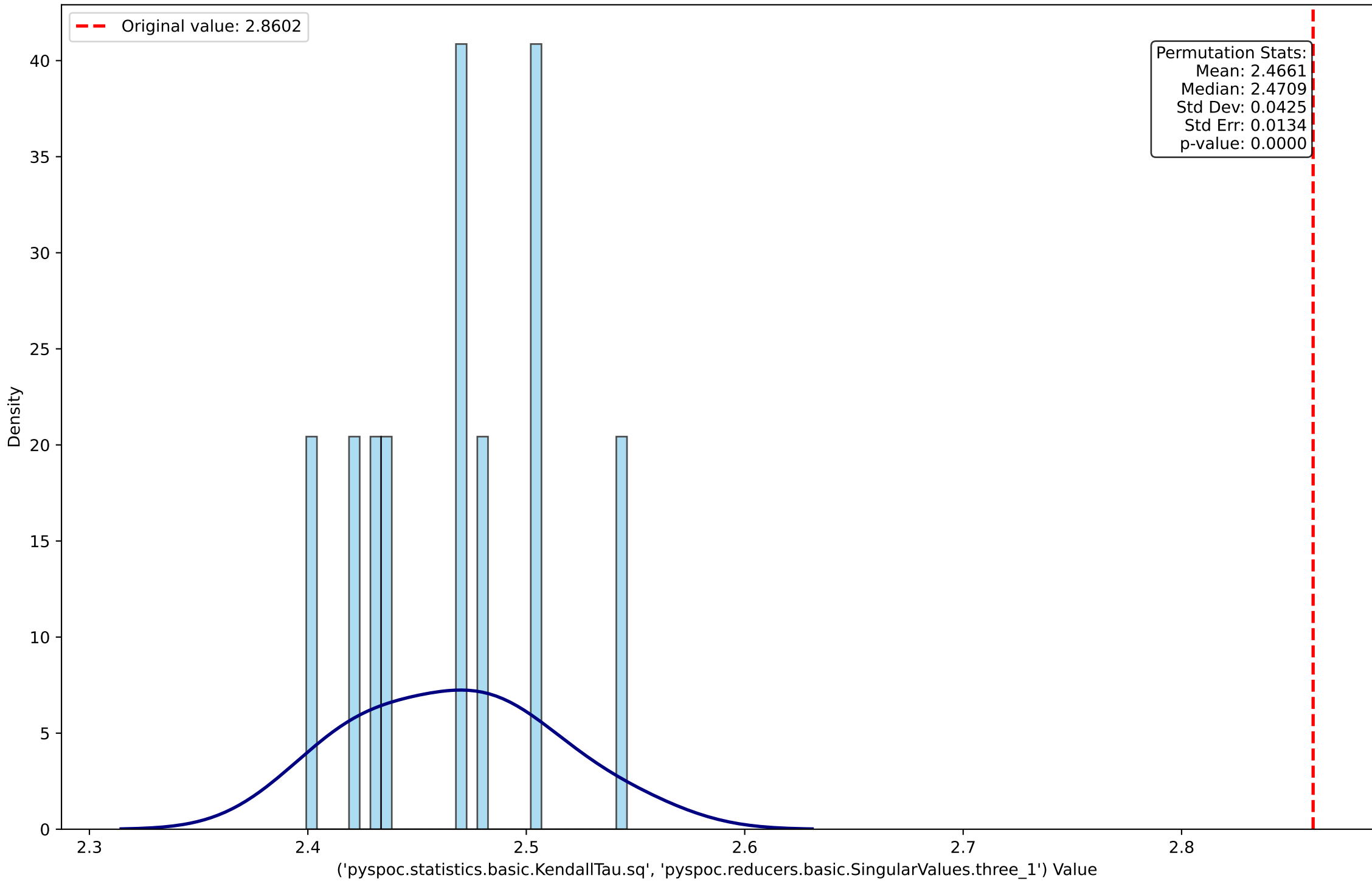p-value: 0.4000

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')

Original value: 2.8602

Permutation Stats:
Mean: 2.4661
Median: 2.4709
Std Dev: 0.0425
Std Err: 0.0134
p-value: 0.0000

('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_1') Value

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

- - - Original value: 0.6962

Permutation Stats:
Mean: 0.8986
Median: 0.8976
Std Dev: 0.0189
Std Err: 0.0060
p-value: 0.0000

Density

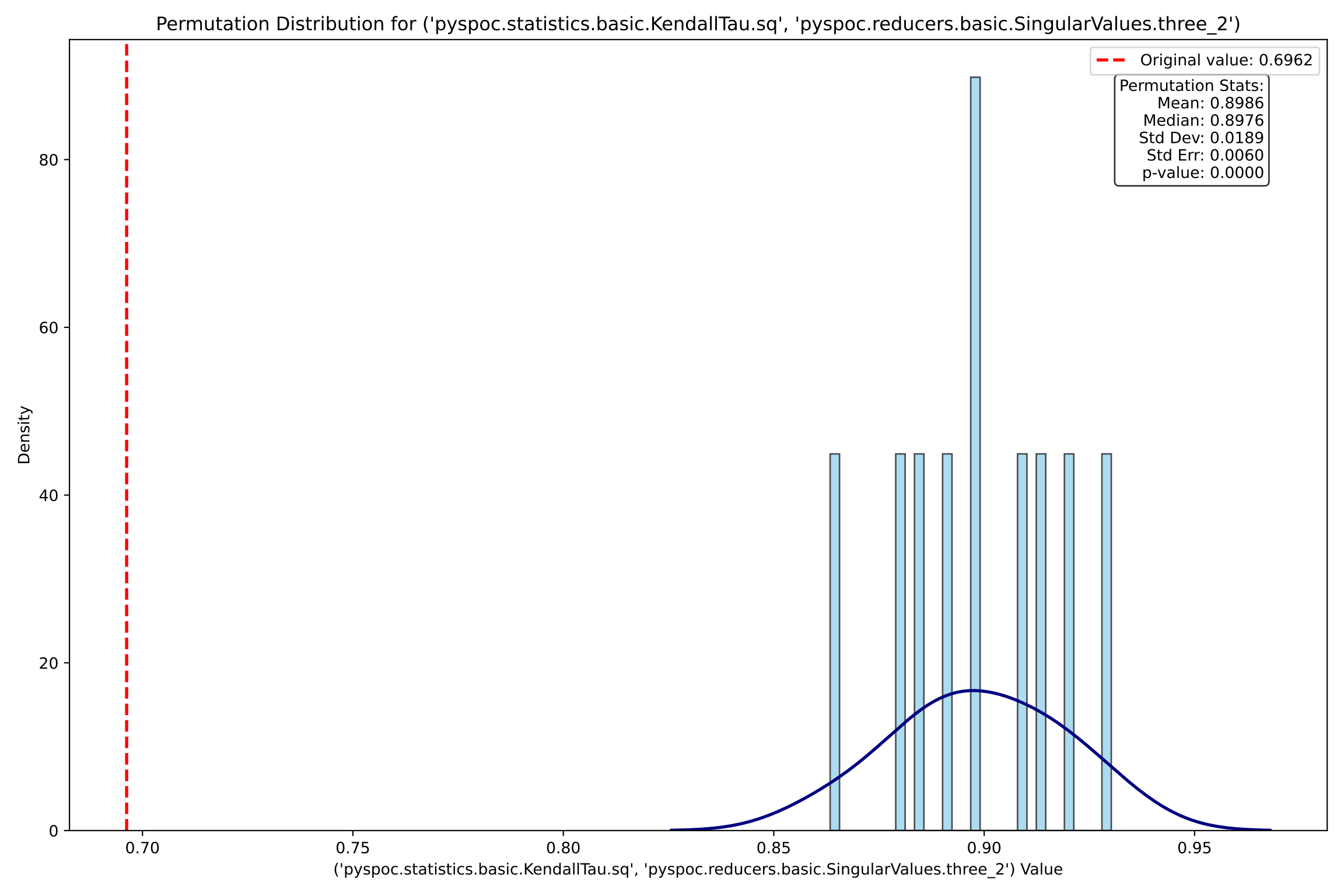('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2') Value

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

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

Original value: 3.3284

Permutation Stats:
Mean: 3.0055
Median: 3.0116
Std Dev: 0.0403
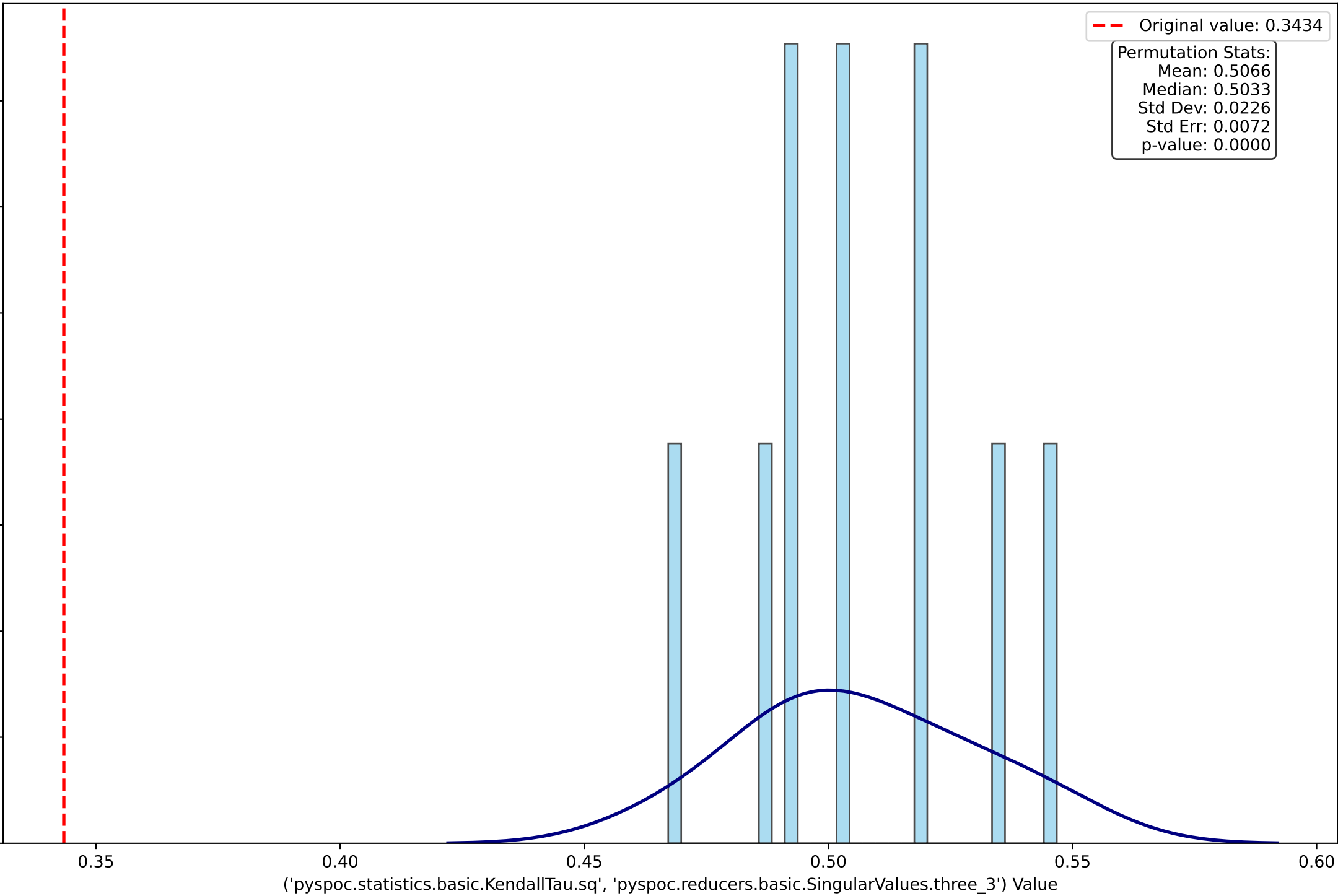Std Err: 0.0128
p-value: 0.0000

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')

Original value: 0.4447

Permutation Stats:
Mean: 0.6717
Median: 0.6675
Std Dev: 0.0290
Std Err: 0.0092
p-value: 0.0000

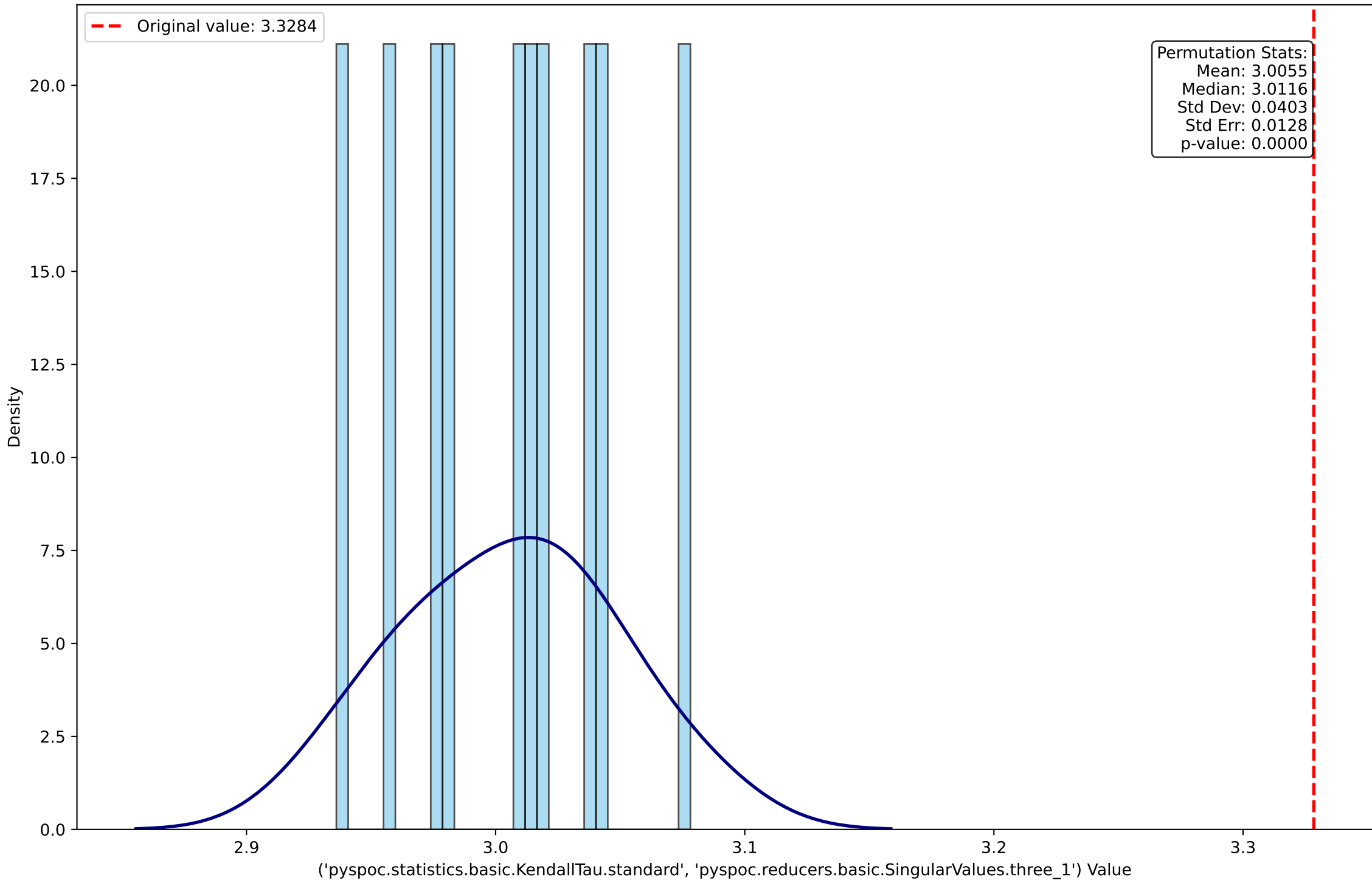Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3')

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

Row Bootstrap samples: 10, Sample fraction: 90.0%

Original value: 0.0462
95% CI: [0.0017, 0.1268]
Mean: 0.0363
Median: 0.0266
Std Dev: 0.0441
Std Err: 0.0140
Bias: -0.0098
CV: 121.46%
Original in CI: True

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

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 0.0007
- 95% CI: [0.0001, 0.0007]
- Mean: 0.0004
- Median: 0.0004
- Std Dev: 0.0003
- Std Err: 0.0001
- Bias: -0.0003
- CV: 83.12%
- Original in CI: True

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

Row Bootstrap samples: 10, Sample fraction: 90.0%

- Original value: 0.0001
- 95% CI: [0.0000, 0.0001]
- Mean: 0.0000
- Median: 0.0000
- Std Dev: 0.0000
- Std Err: 0.0000
- Bias: -0.0000
- CV: 101.00%
- Original in CI: True

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

1e−68

l value: 12789715011599597642031564456549211415196339424722944.0000

[930545439741406130208849631215161515089142170517504.0000, 594490380391240259699289539669240369289231213649581074855418033864704.0000]

Row Bootstrap samples: 10, Sample fraction: 90.0%

Mean: 94416545854679084545594090802915400146278676972403377554548892631040.0000
Median: 105997726680376252086654769503471768025552599221742374311482621952.0000
Std Dev: 213121947214412783970736394277370317387276919161730741411049319170048.0000
Std Err: 67395077256772203979609006704592499091550402558505677174417683120128.0000
Bias: 94416545854679072572972677788158694221692527360612880533149500571648.0000
CV: 225.73%
Original in CI: True

('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled') Value
1e69

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')
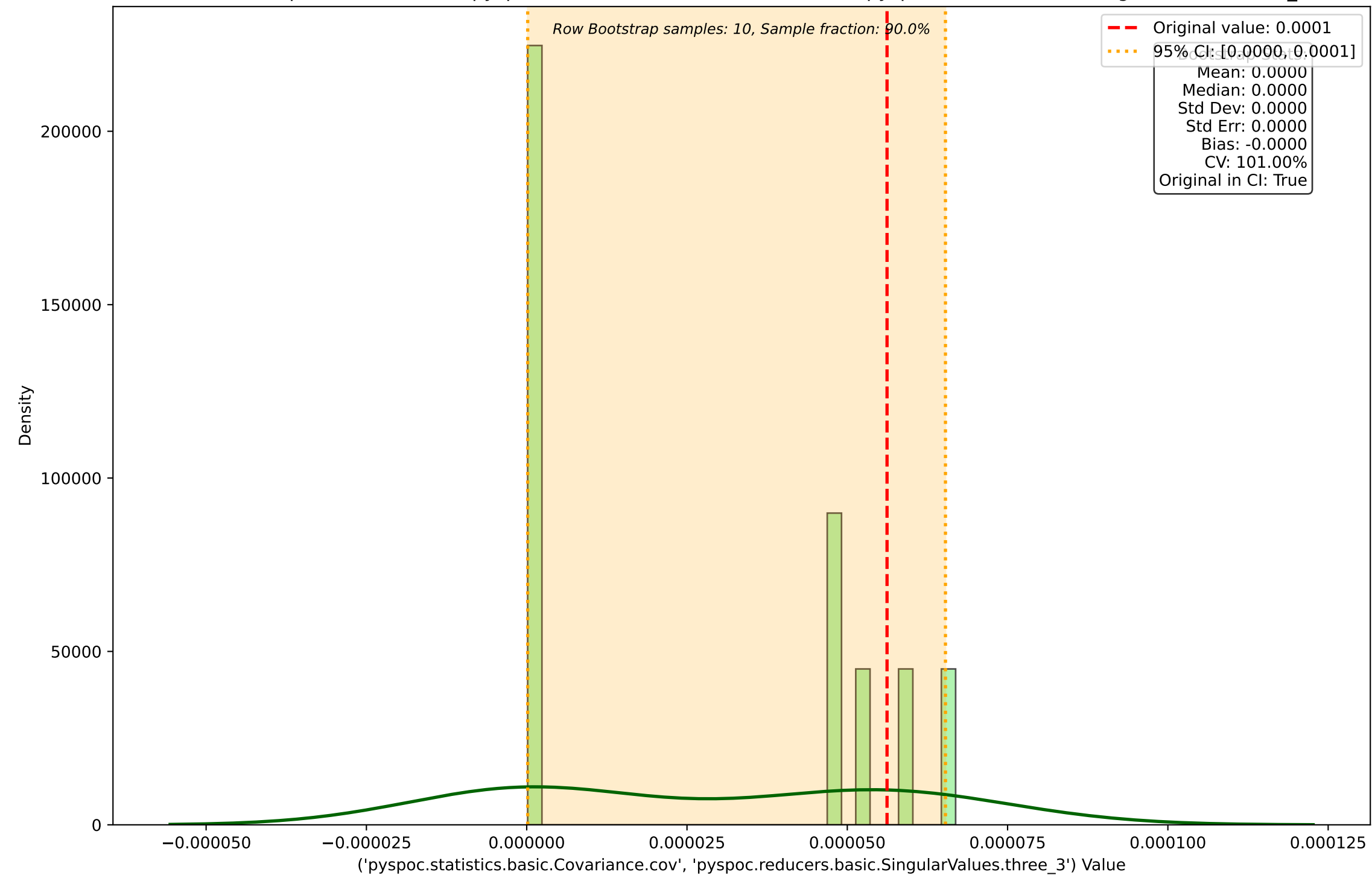
Row Bootstrap samples: 10, Sample fraction: 90.0%

- – – Original value: 2.8602
- ⋯⋯ 95% CI: [2.7912, 3.0197]
- Mean: 2.9023
- Median: 2.8803
- Std Dev: 0.0784
- Std Err: 0.0248
- Bias: 0.0421
- CV: 2.70%
- Original in CI: True

('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')
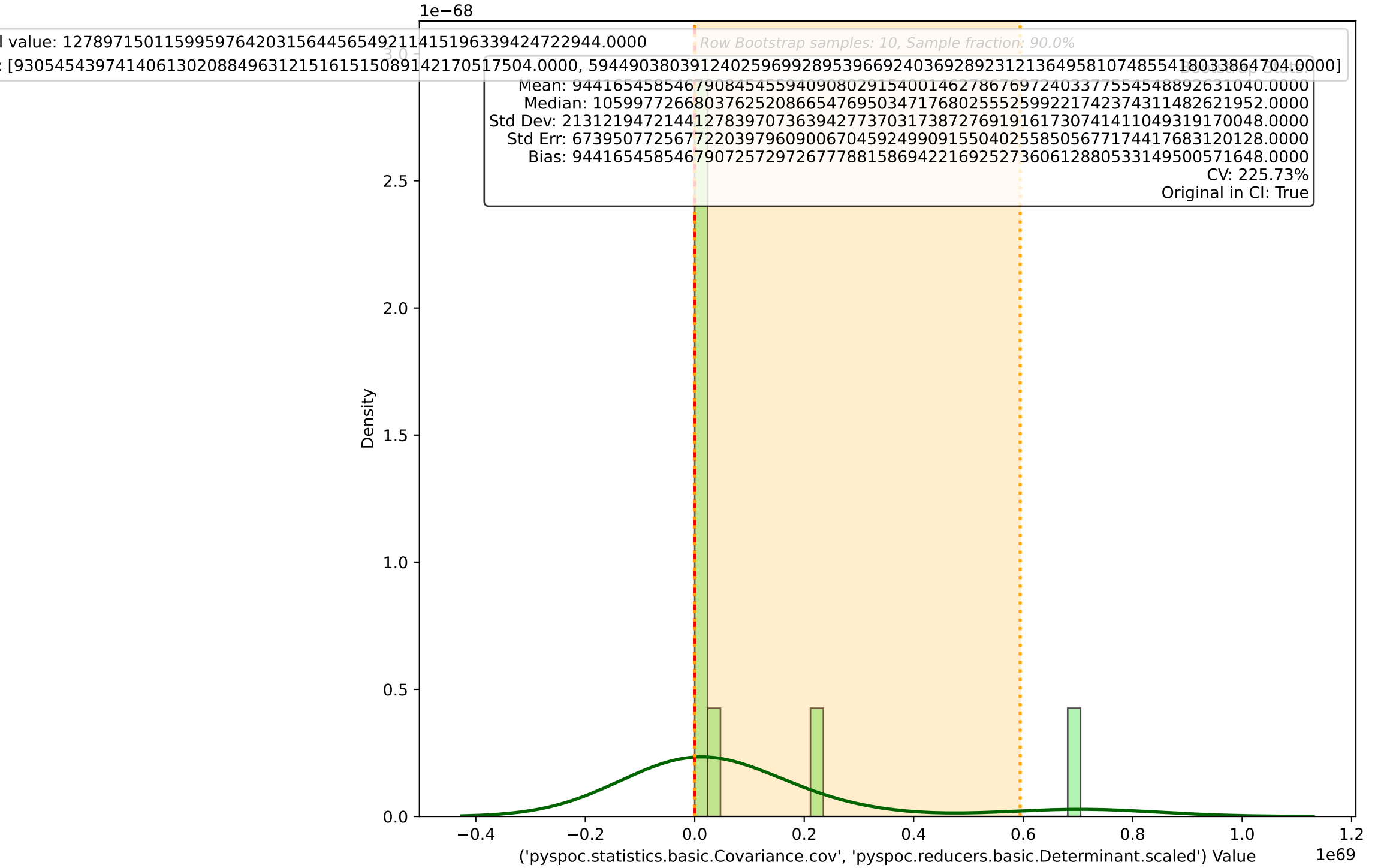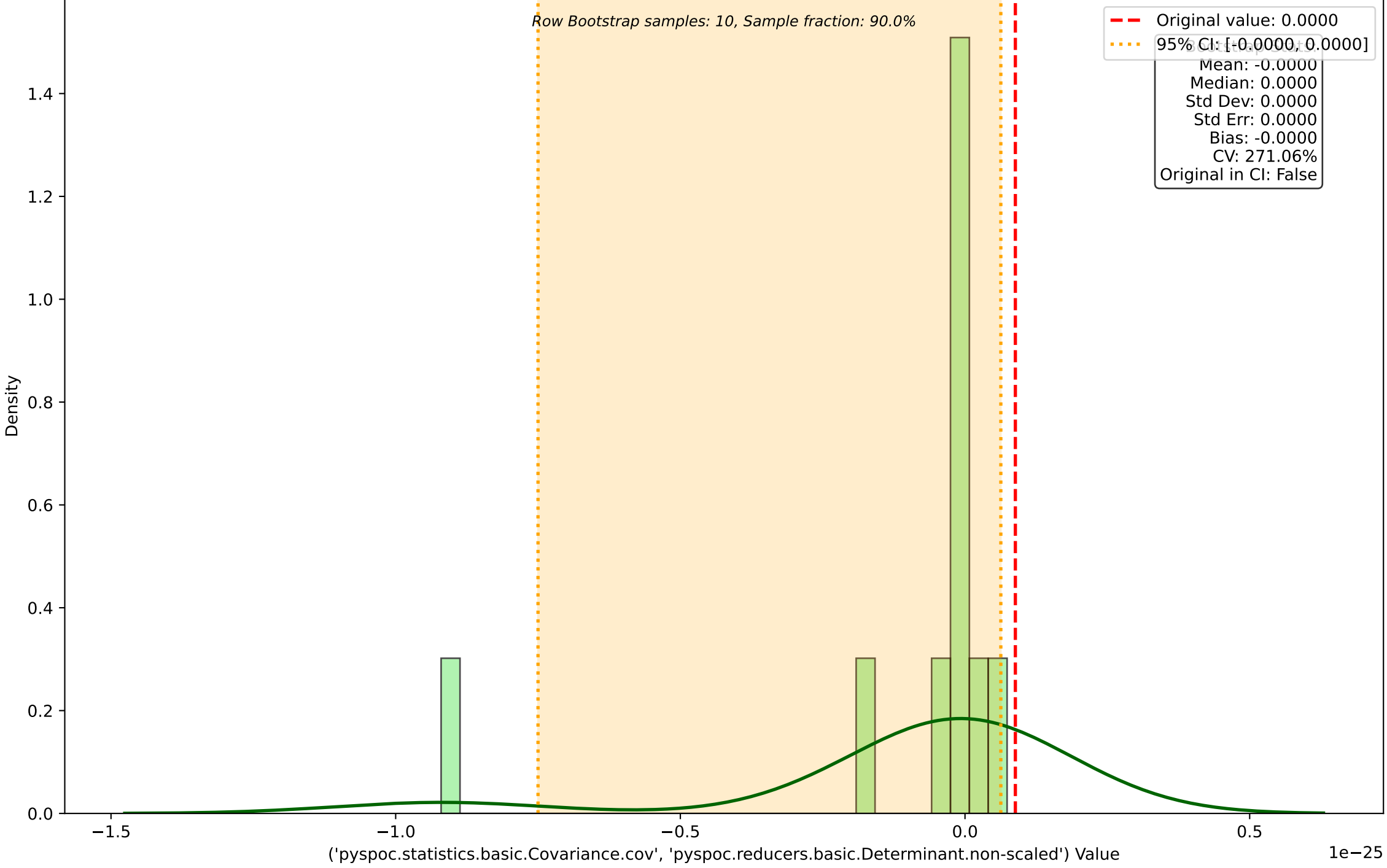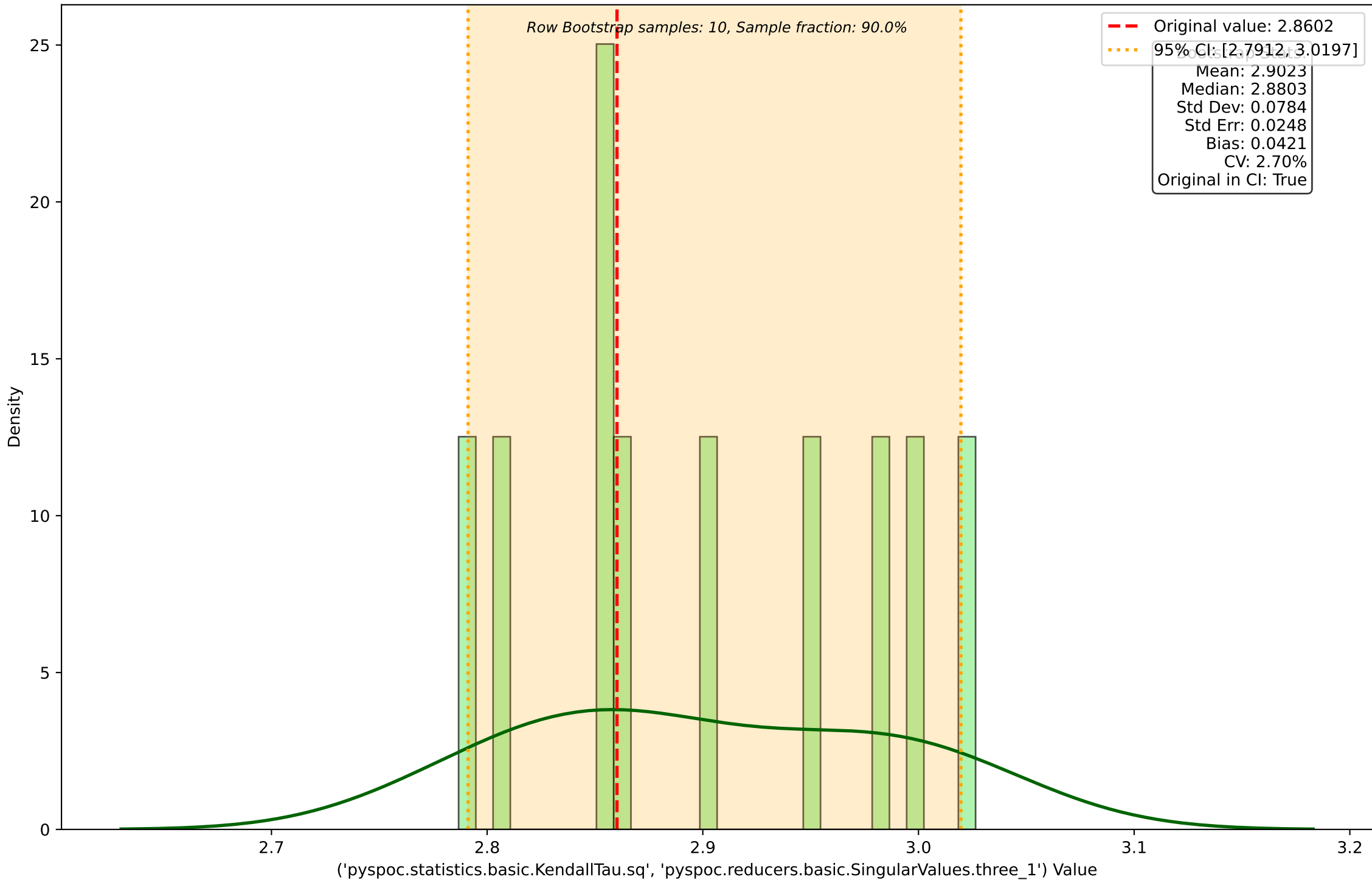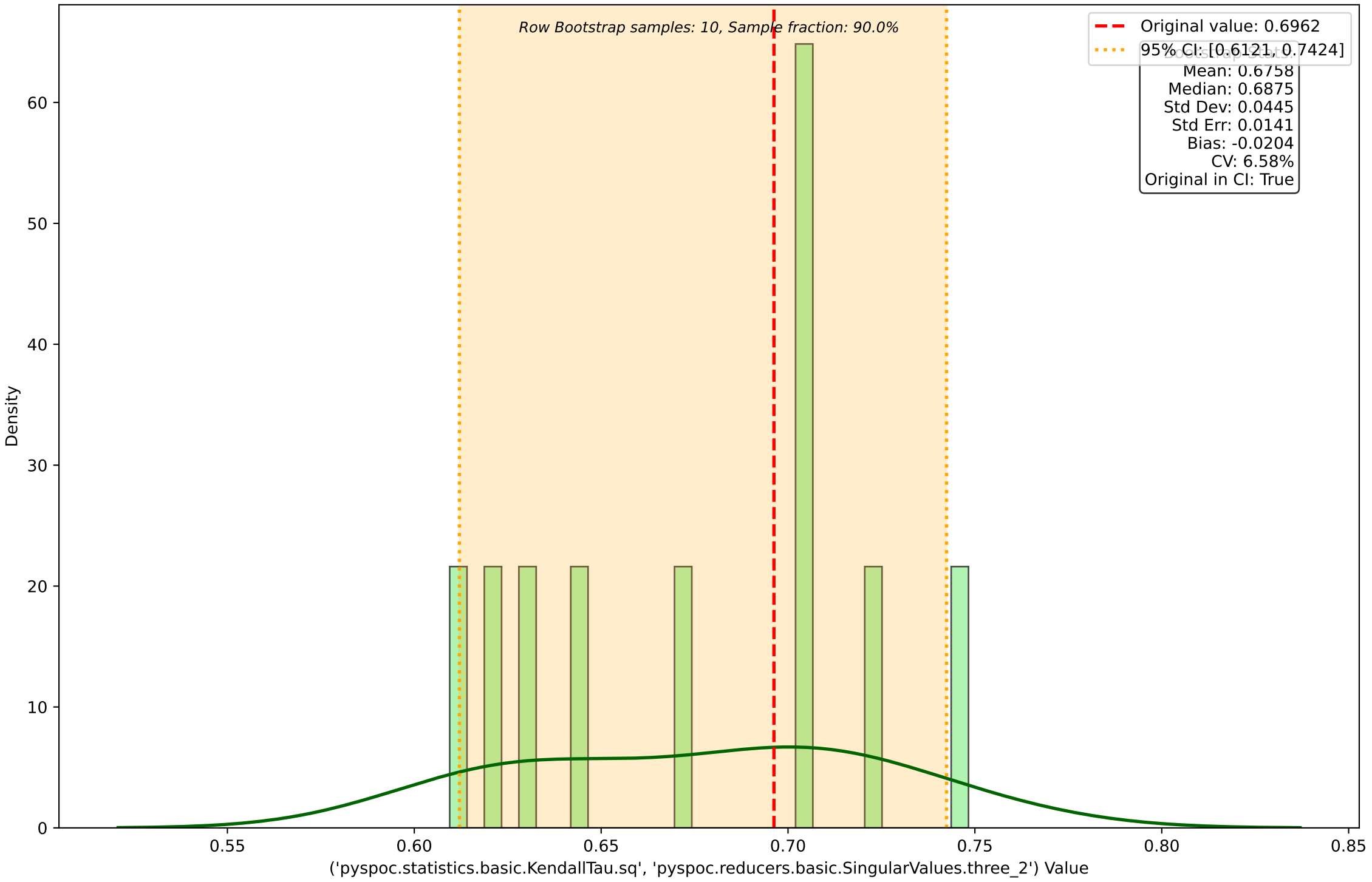
Row Bootstrap samples: 10, Sample fraction: 90.0%

- Original value: 0.6962
- 95% CI: [0.6121, 0.7424]
- Mean: 0.6758
- Median: 0.6875
- Std Dev: 0.0445
- Std Err: 0.0141
- Bias: -0.0204
- CV: 6.58%
- Original in CI: True

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

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 0.3434
- 95% CI: [0.3004, 0.3680]
- Mean: 0.3315
- Median: 0.3302
- Std Dev: 0.0234
- Std Err: 0.0074
- Bias: -0.0119
- CV: 7.07%
- Original in CI: True

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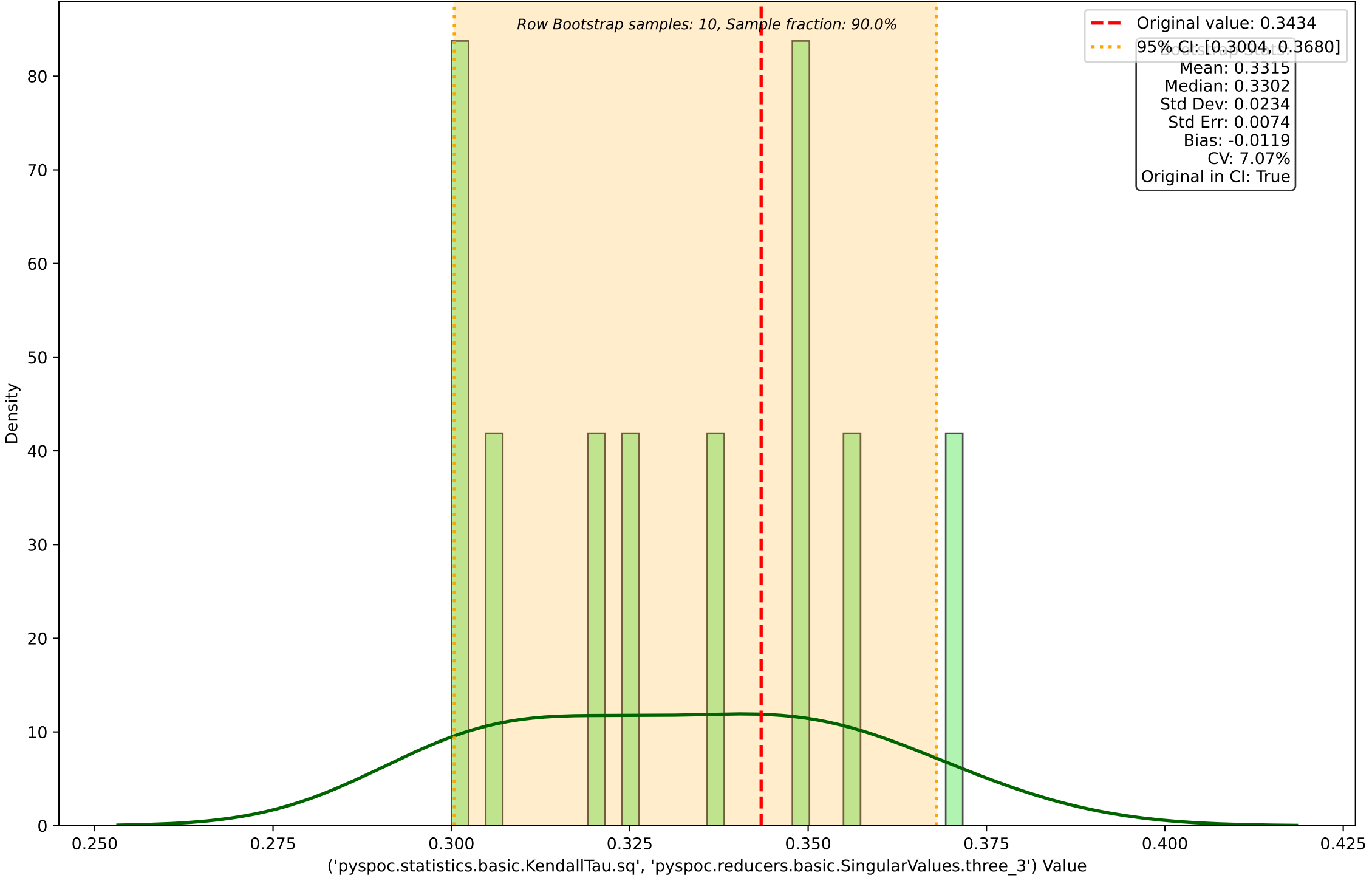
Y-axis: Density

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: 3.3284
- 95% CI: [3.2771, 3.4343]
- Mean: 3.3560
- Median: 3.3423
- Std Dev: 0.0546
- Std Err: 0.0173
- Bias: 0.0276
- CV: 1.63%
- Original in CI: True

Y-axis: Density

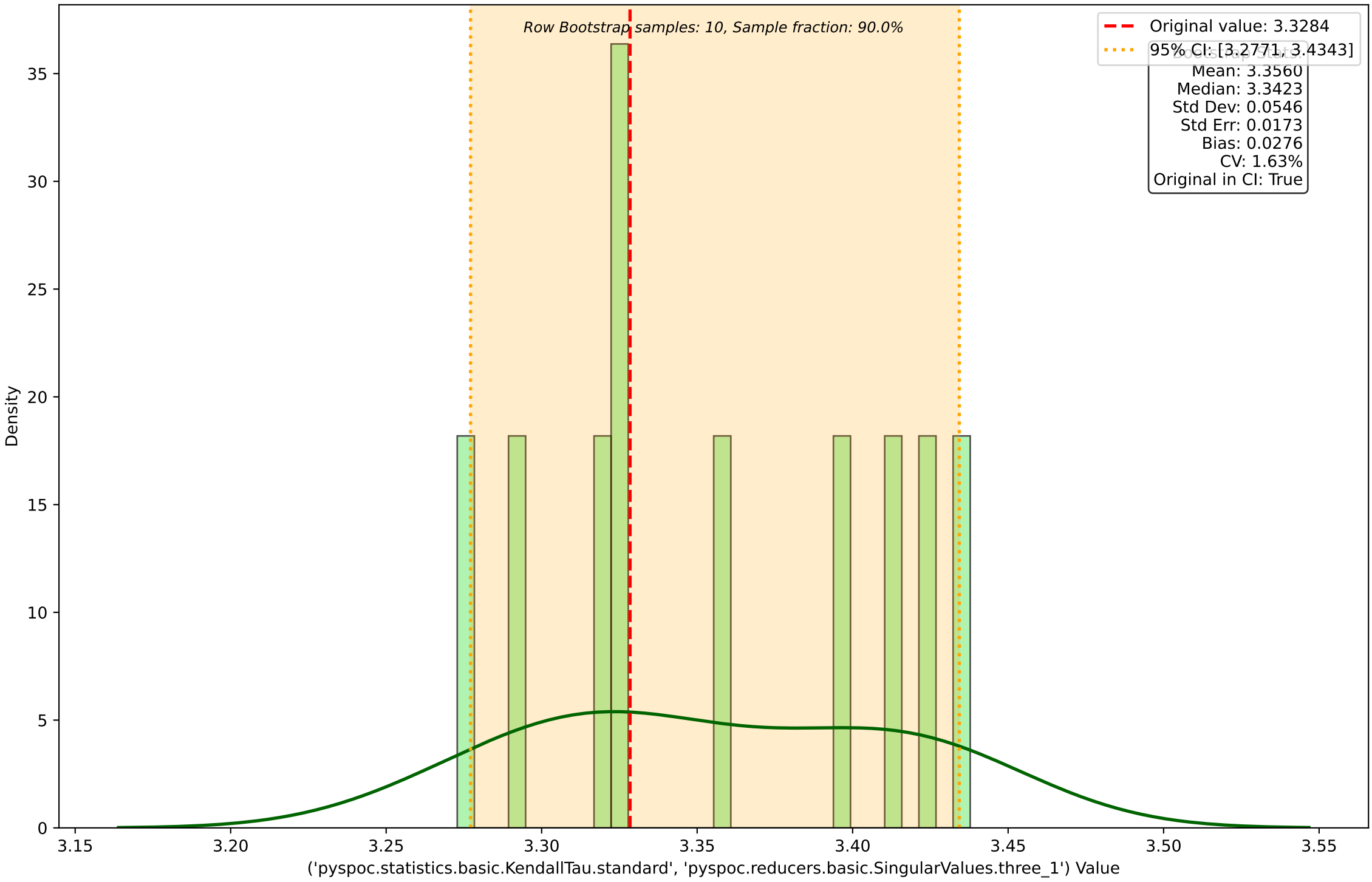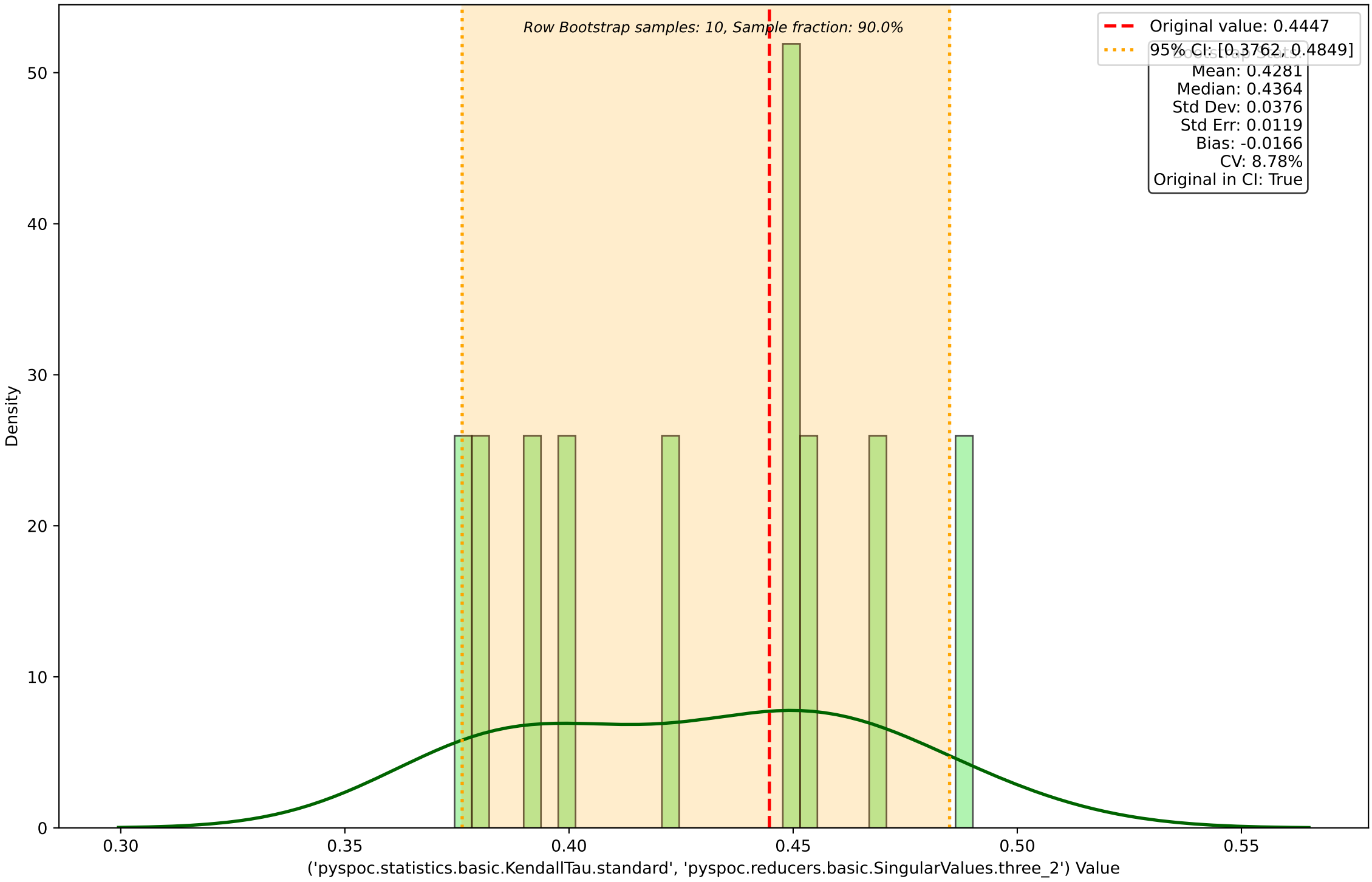X-axis: ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1') Value

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

Row Bootstrap samples: 10, Sample fraction: 90.0%

Legend:
- Original value: 0.4447
- 95% CI: [0.3762, 0.4849]
- Mean: 0.4281
- Median: 0.4364
- Std Dev: 0.0376
- Std Err: 0.0119
- Bias: -0.0166
- CV: 8.78%
- Original in CI: True

X-axis: ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2') Value
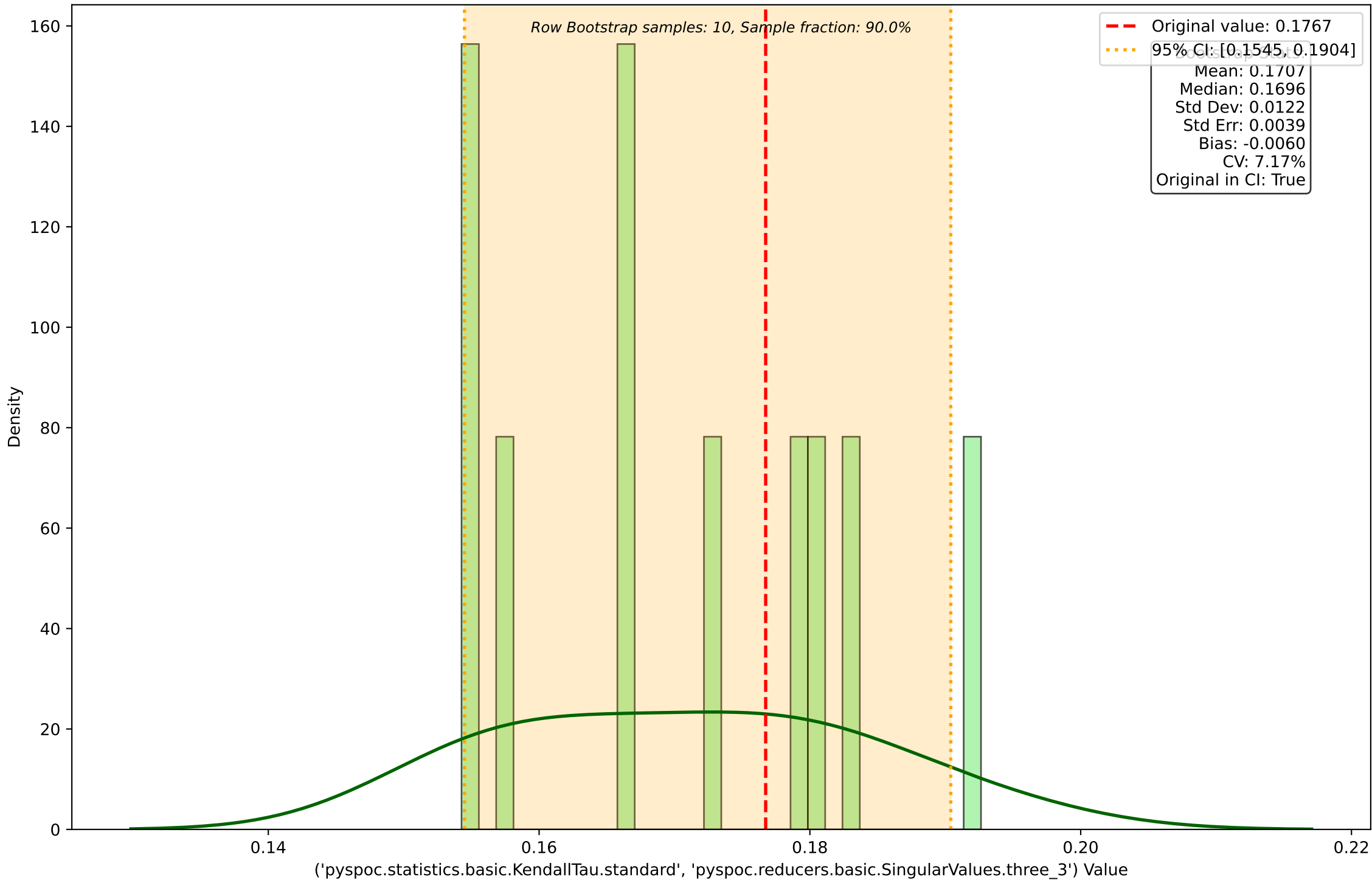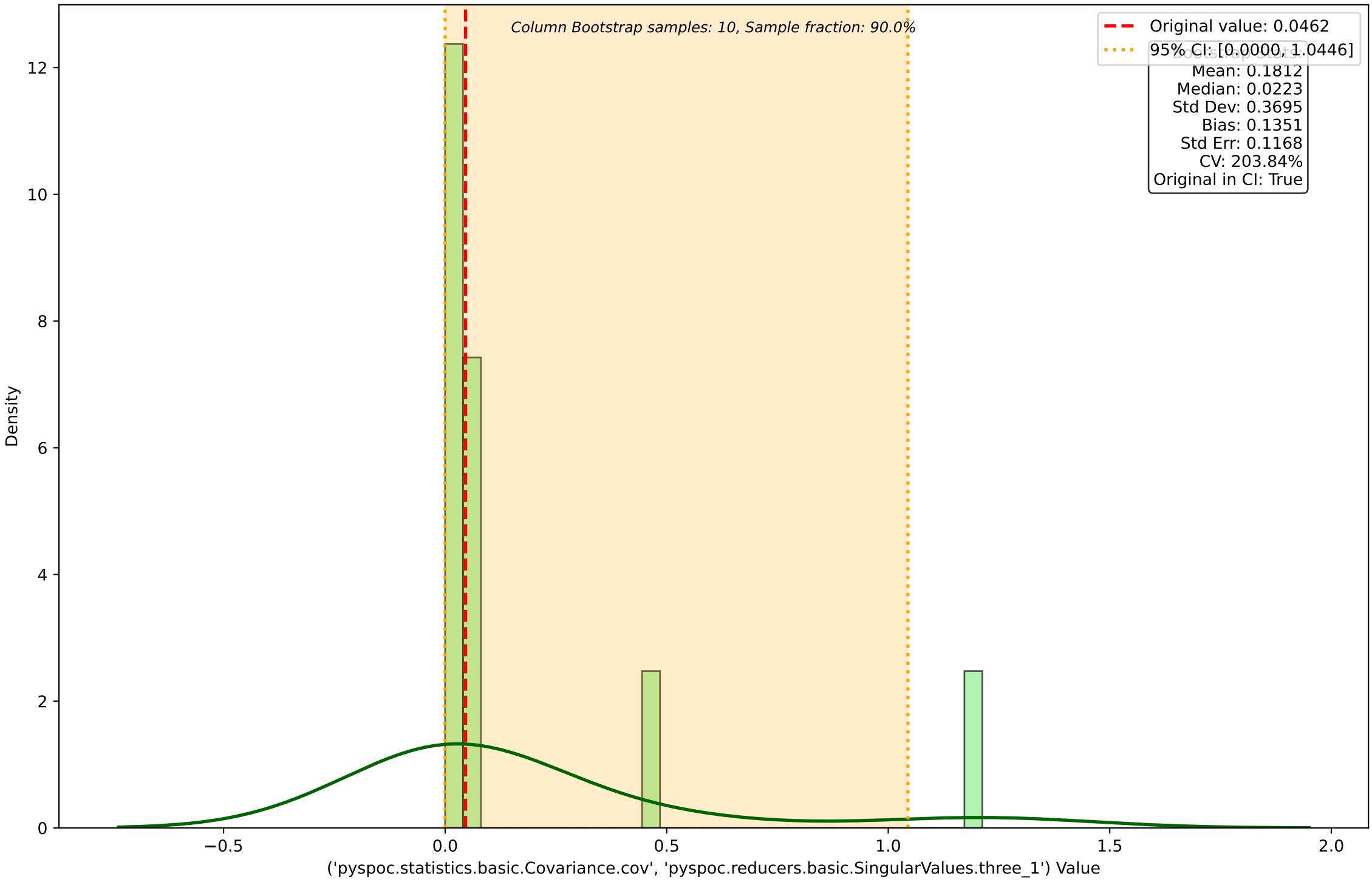
Y-axis: Density

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

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: 0.0462
...... 95% CI: [0.0000, 1.0446]
Mean: 0.1812
Median: 0.0223
Std Dev: 0.3695
Bias: 0.1351
Std Err: 0.1168
CV: 203.84%
Original in CI: True

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: 0.0007
- 95% CI: [0.0000, 0.0264]
  - Mean: 0.0036
  - Median: 0.0000
  - Std Dev: 0.0101
  - Bias: 0.0029
  - Std Err: 0.0032
  - CV: 283.64%
  - Original in CI: True

Y-axis: Density

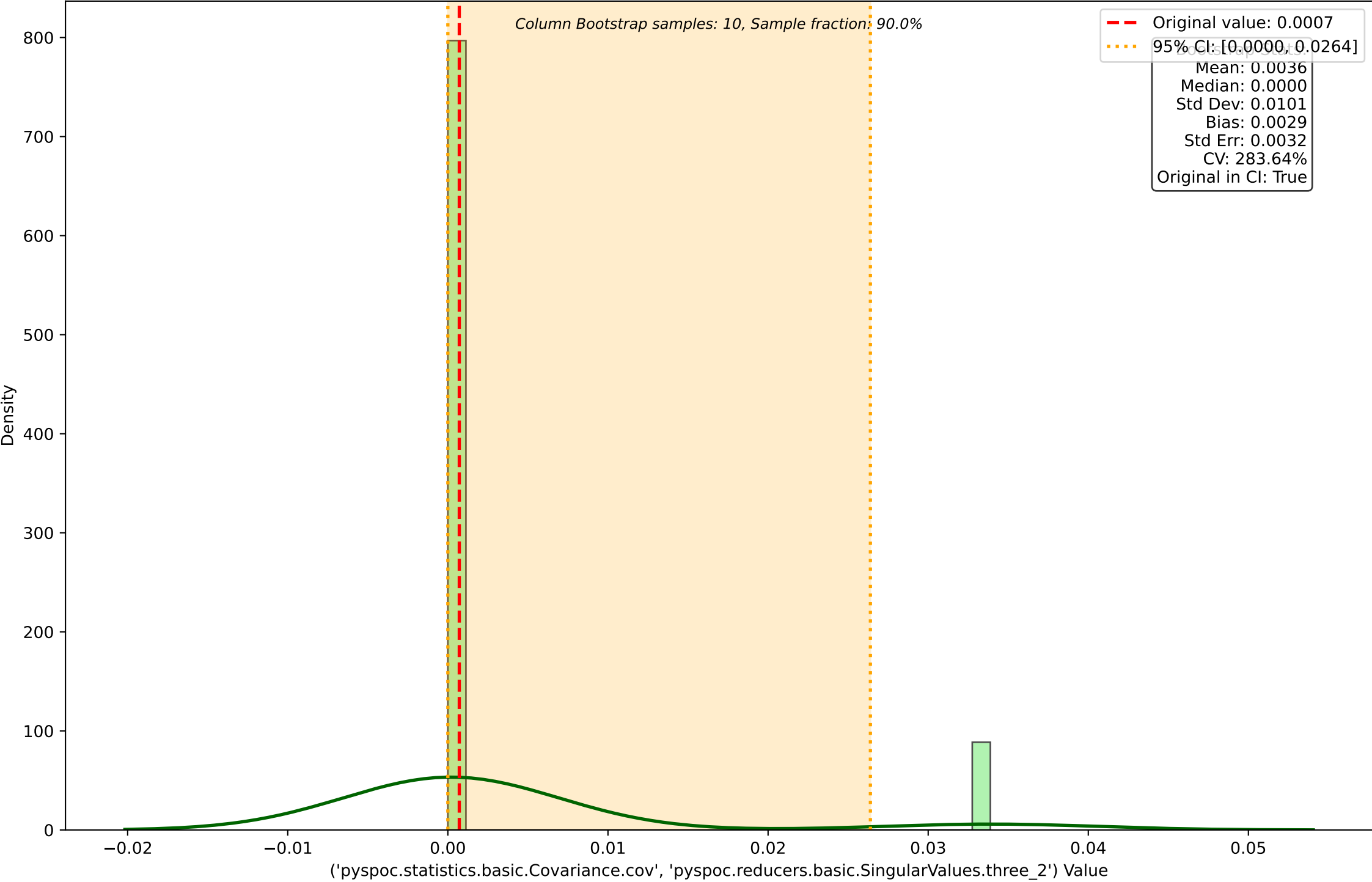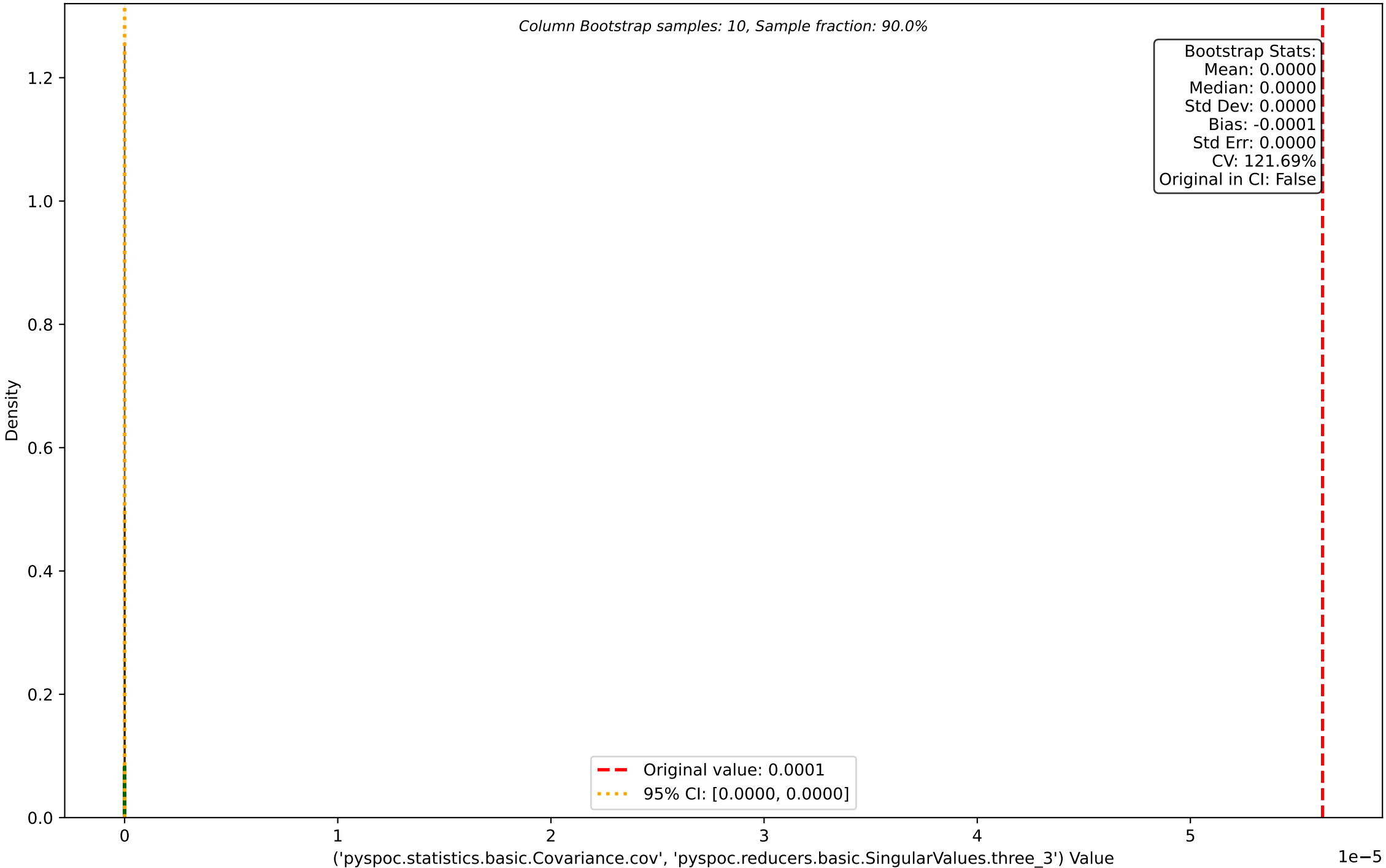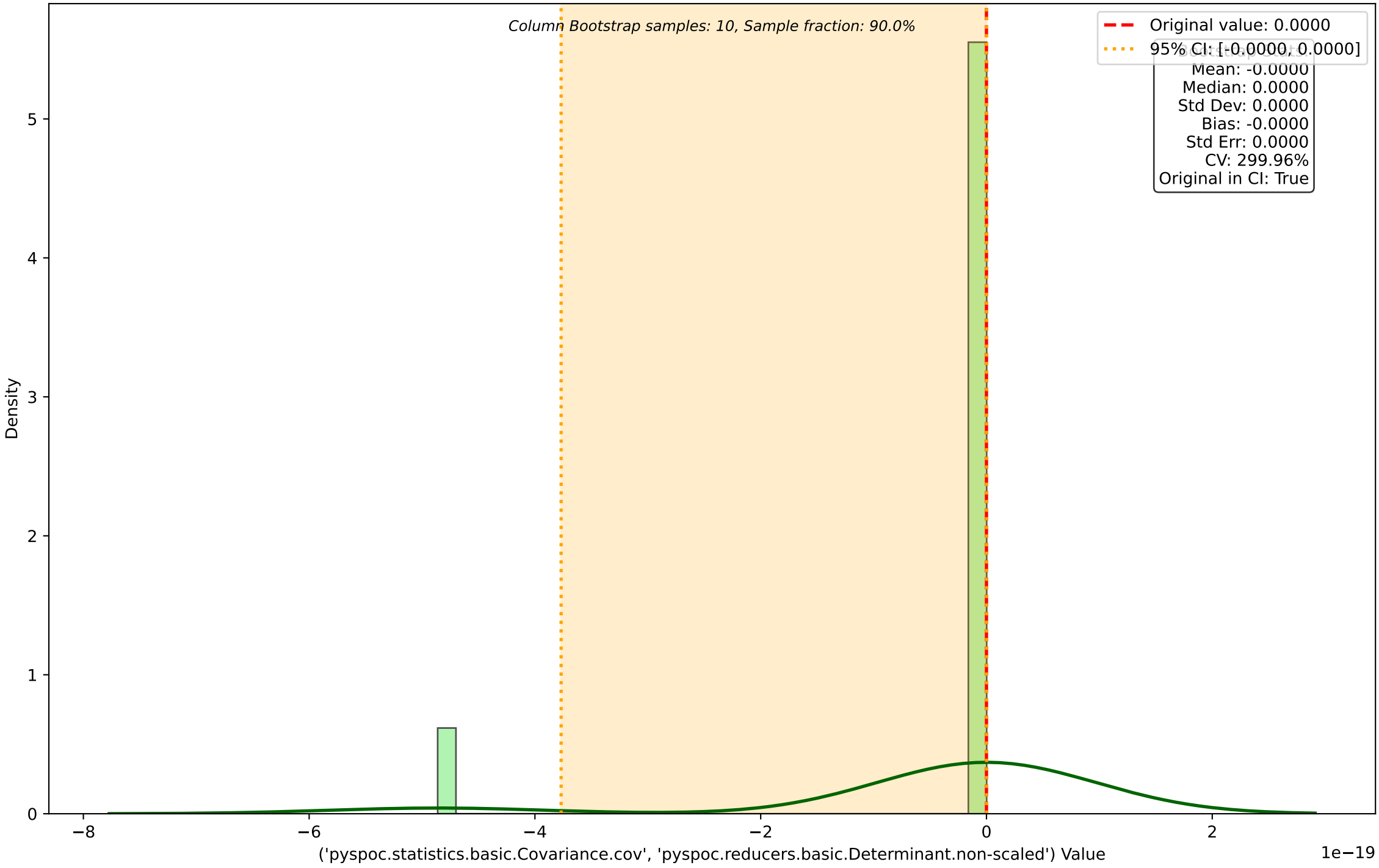X-axis: ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_2') Value

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

Column Bootstrap samples: 10, Sample fraction: 90.0%

Bootstrap Stats:
Mean: 0.0000
Median: 0.0000
Std Dev: 0.0000
Bias: -0.0001
Std Err: 0.0000
CV: 121.69%
Original in CI: False

Original value: 0.0001
95% CI: [0.0000, 0.0000]

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

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

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')
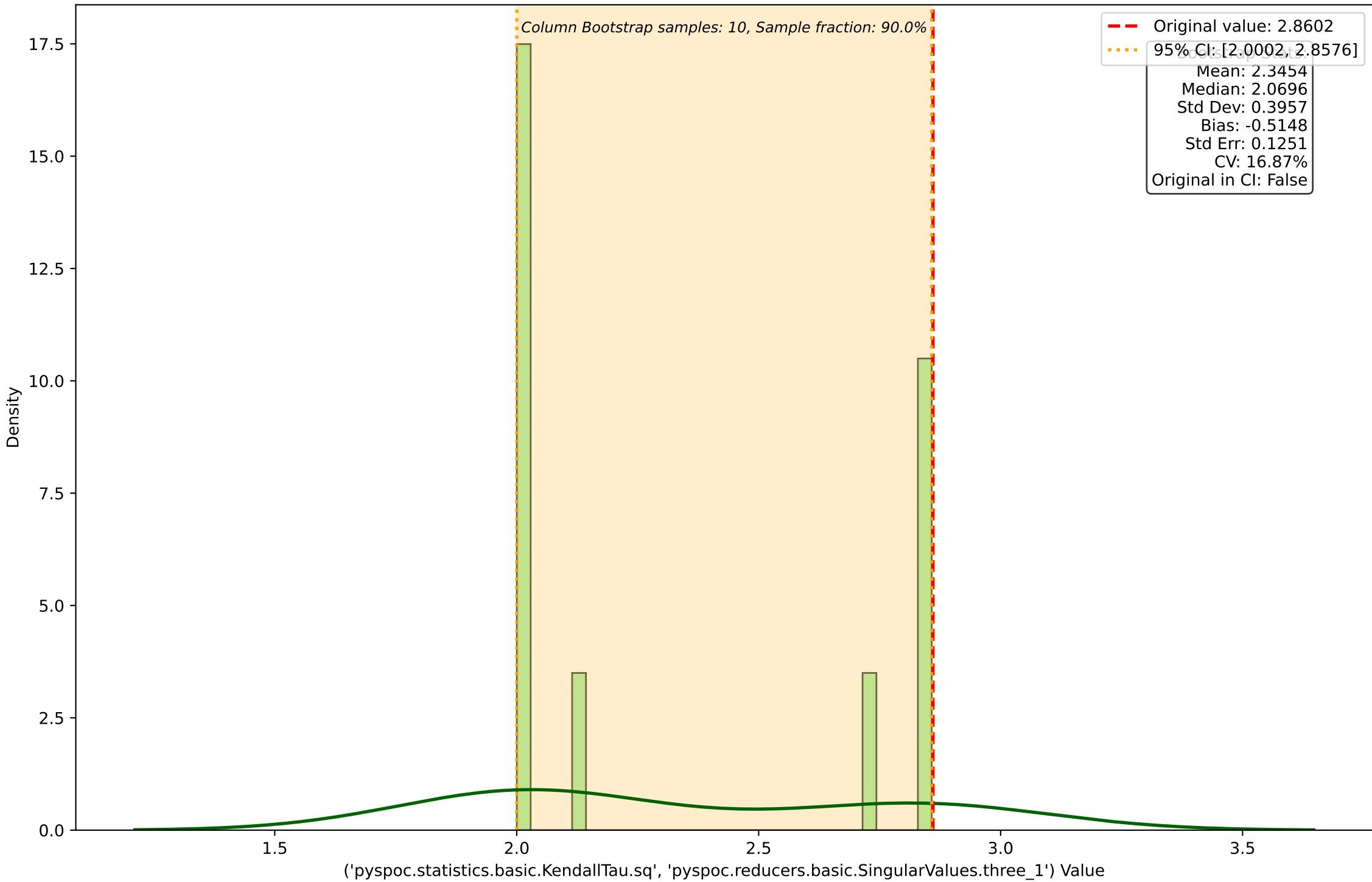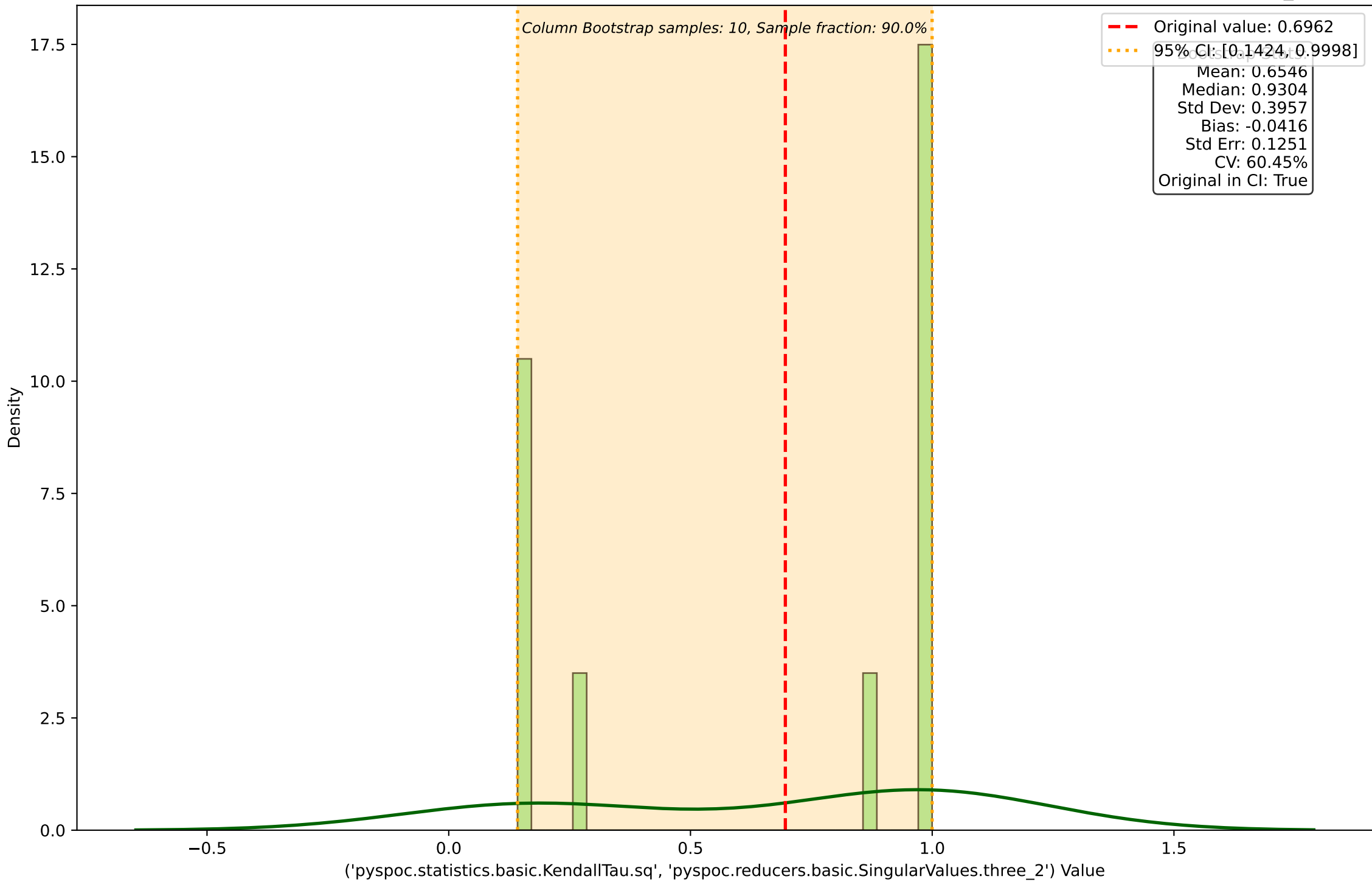
Column Bootstrap samples: 10, Sample fraction: 90.0%

Original value: 0.6962
95% CI: [0.1424, 0.9998]
Mean: 0.6546
Median: 0.9304
Std Dev: 0.3957
Bias: -0.0416
Std Err: 0.1251
CV: 60.45%
Original in CI: True

Density

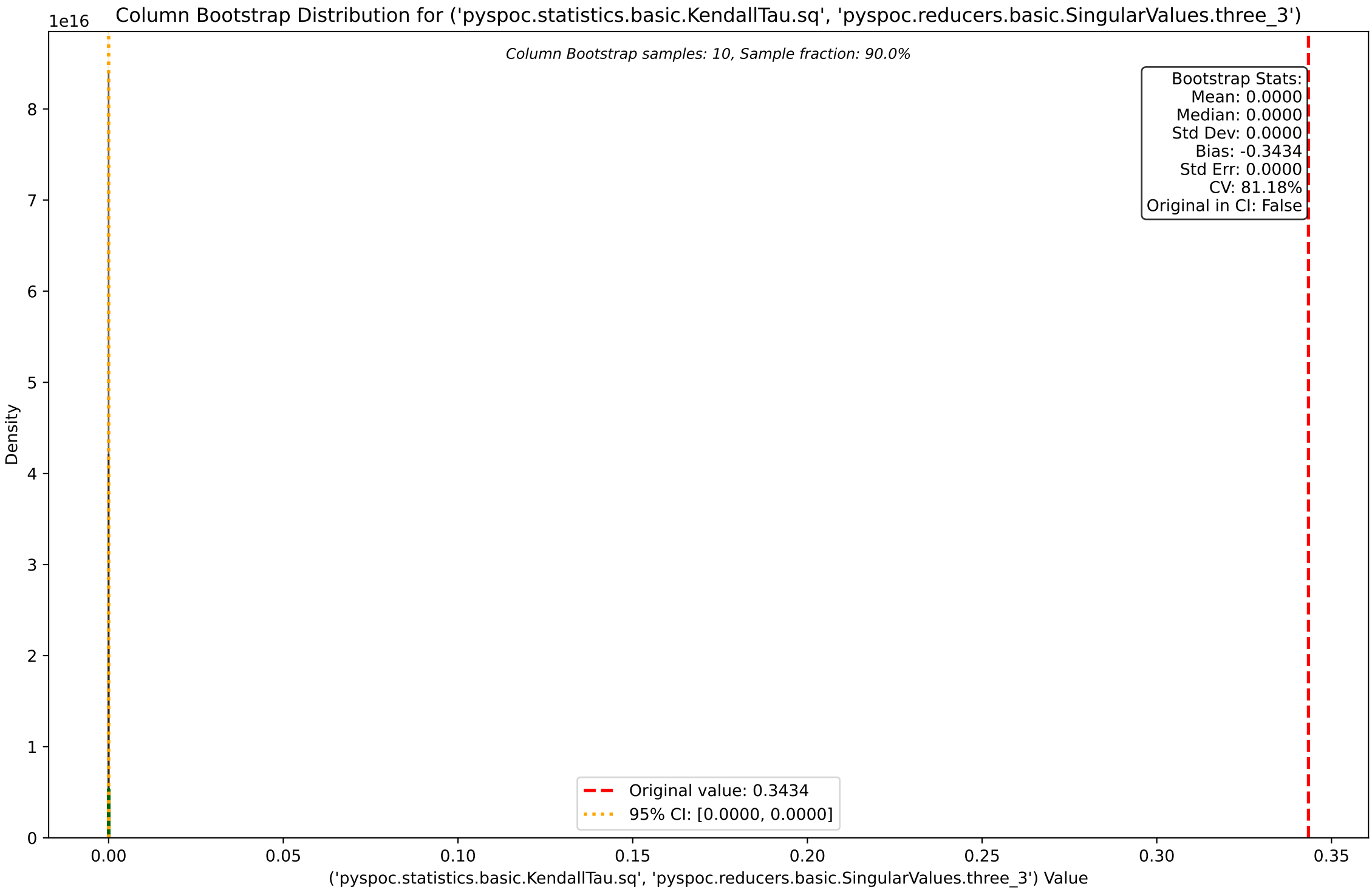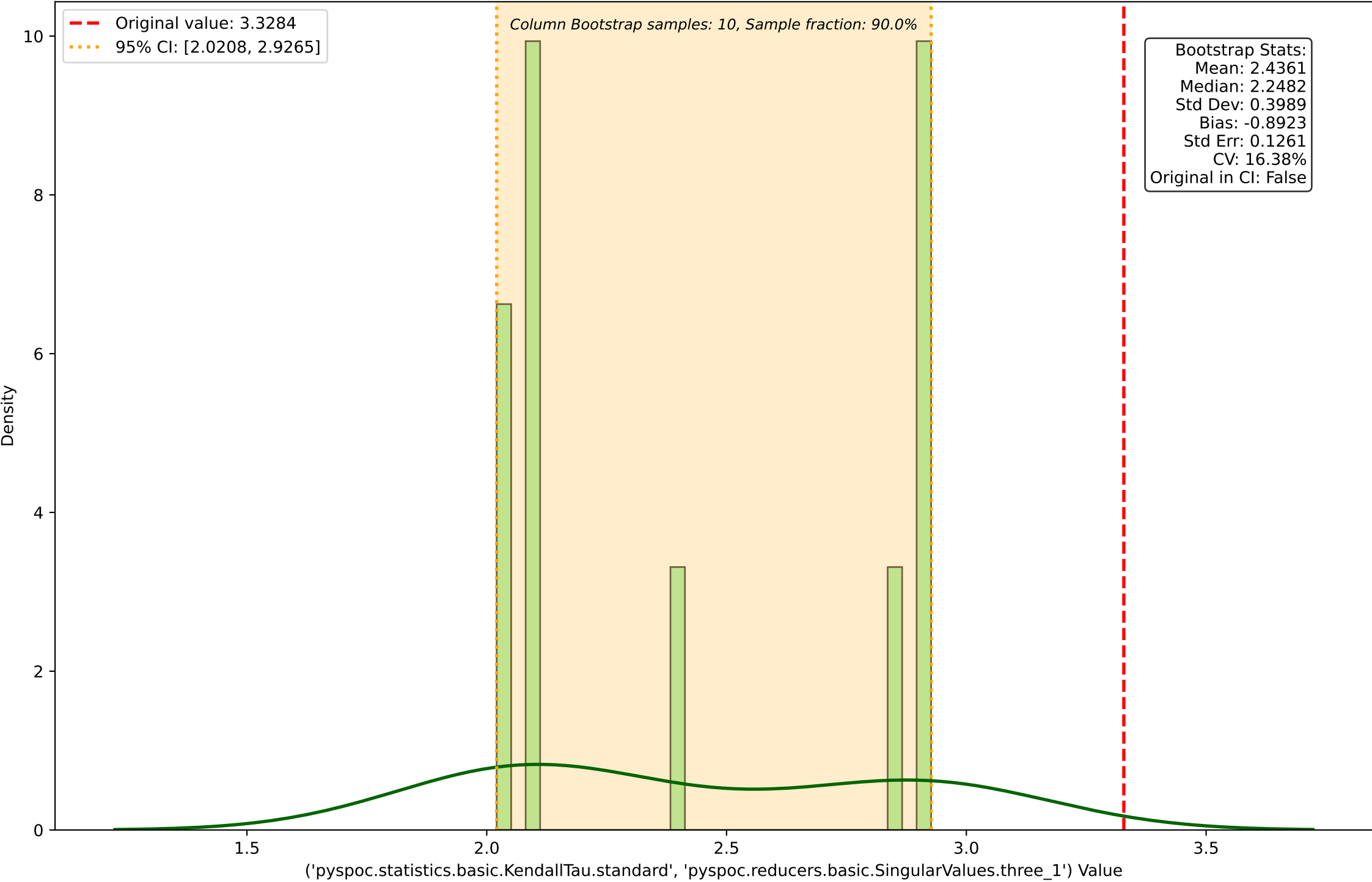('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2') Value

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

Column Bootstrap samples: 10, Sample fraction: 90.0%

Bootstrap Stats:
Mean: 0.0000
Median: 0.0000
Std Dev: 0.0000
Bias: -0.3434
Std Err: 0.0000
CV: 81.18%
Original in CI: False

Density

('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3') Value

Original value: 0.3434
95% CI: [0.0000, 0.0000]

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

- - - Original value: 3.3284
- - - - - 95% CI: [2.0208, 2.9265]

Column Bootstrap samples: 10, Sample fraction: 90.0%

Bootstrap Stats:
Mean: 2.4361
Median: 2.2482
Std Dev: 0.3989
Bias: -0.8923
Std Err: 0.1261
CV: 16.38%
Original in CI: False

Density

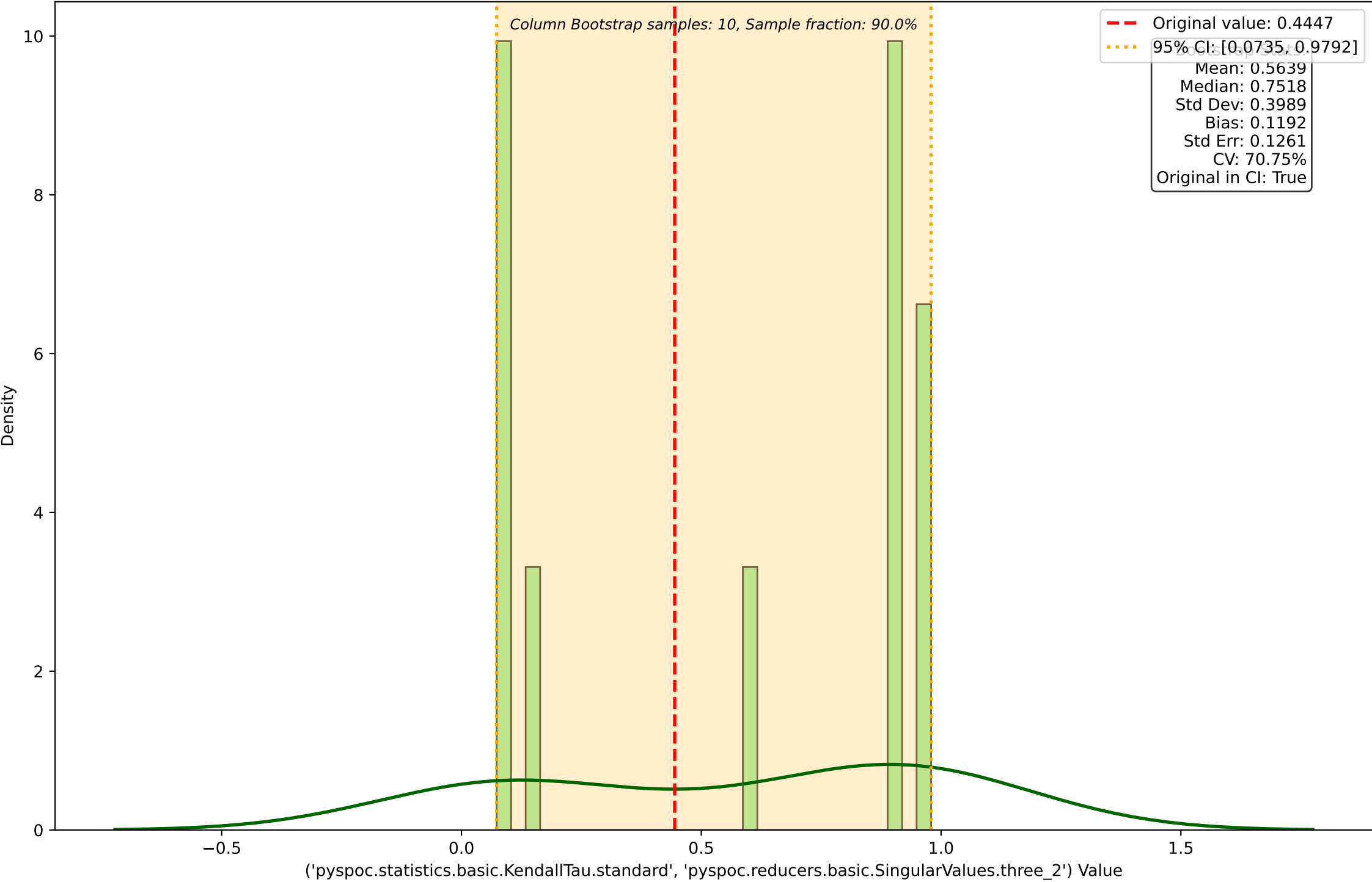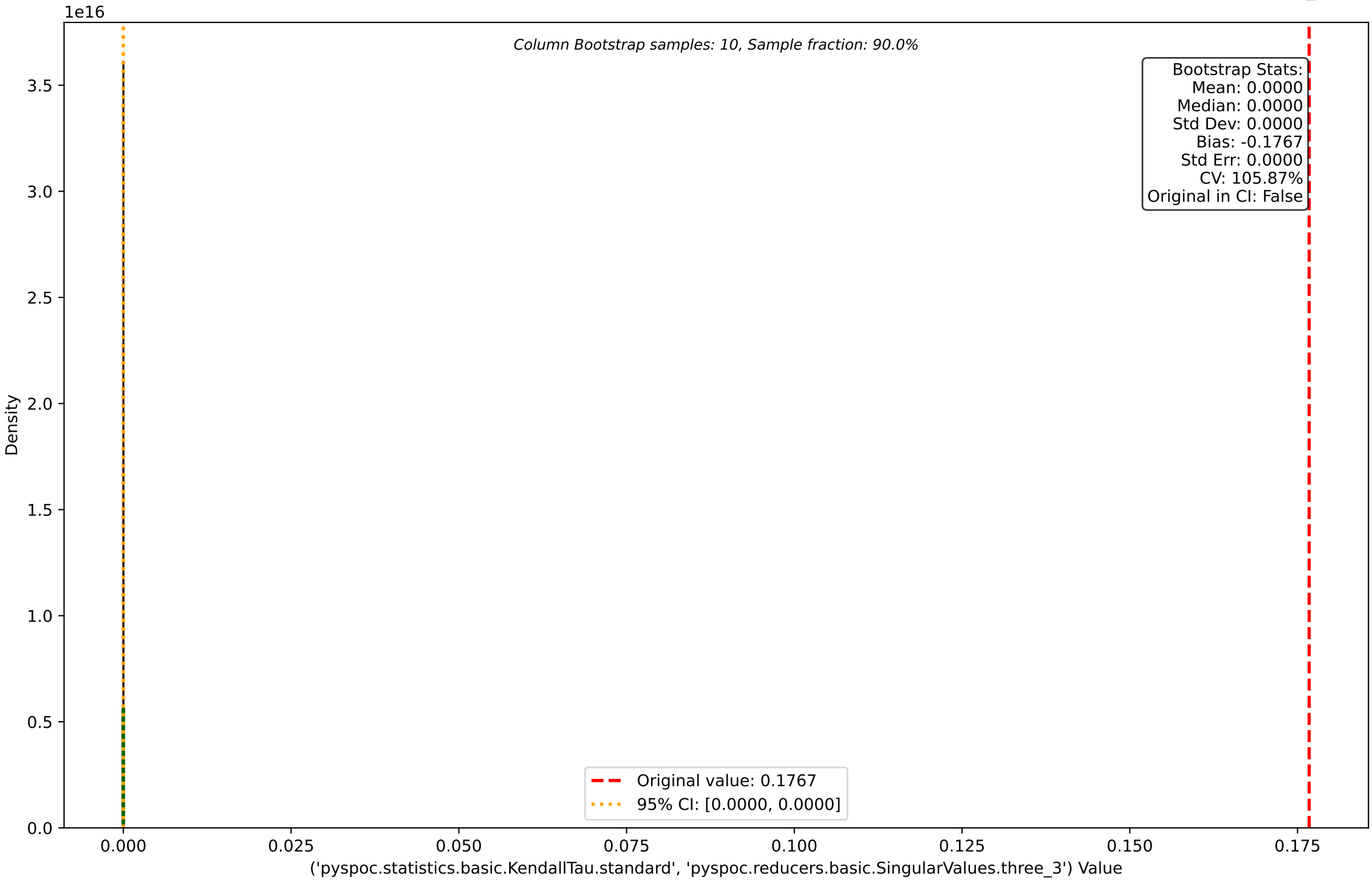('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_1') Value

Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_2')
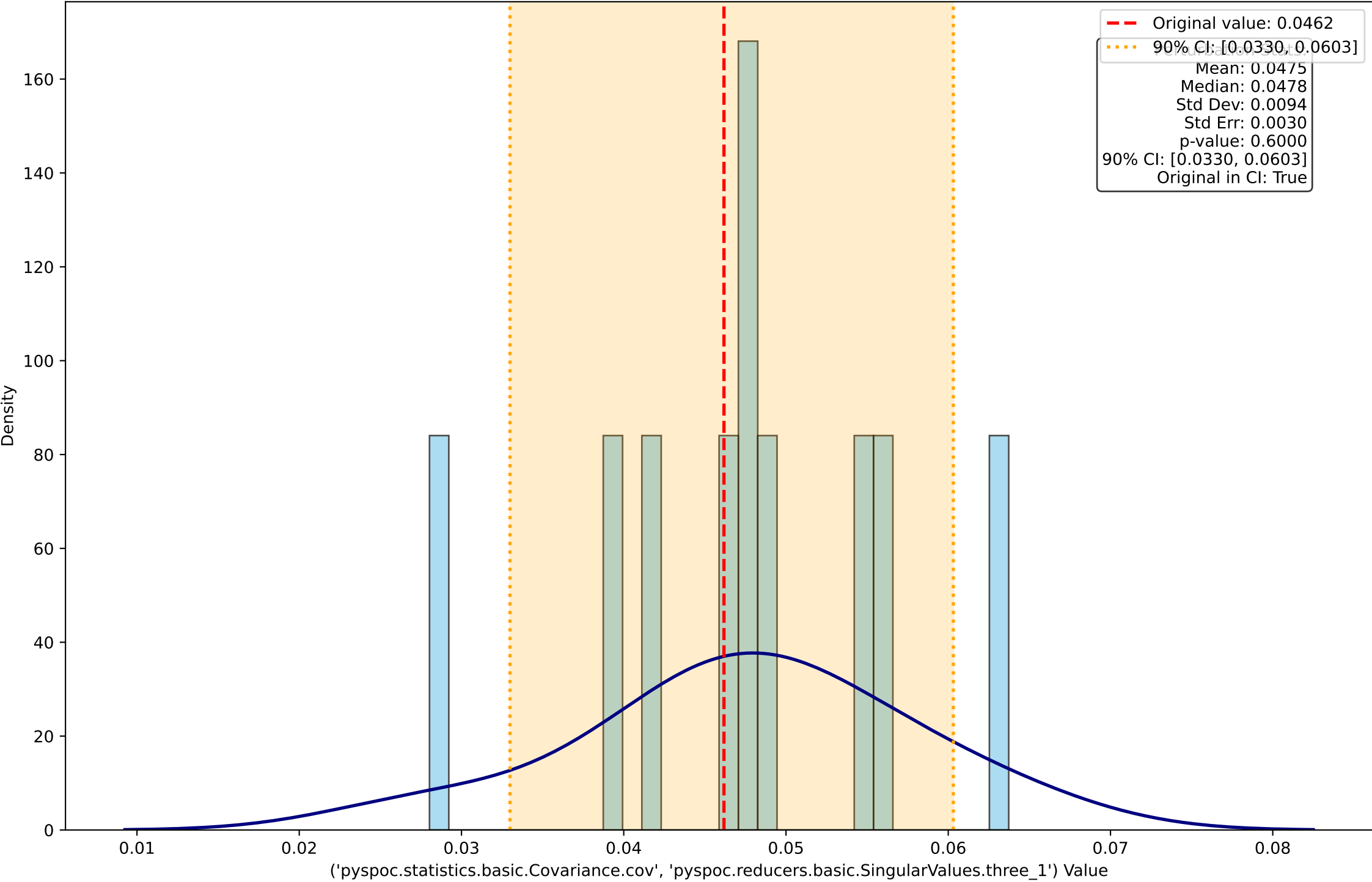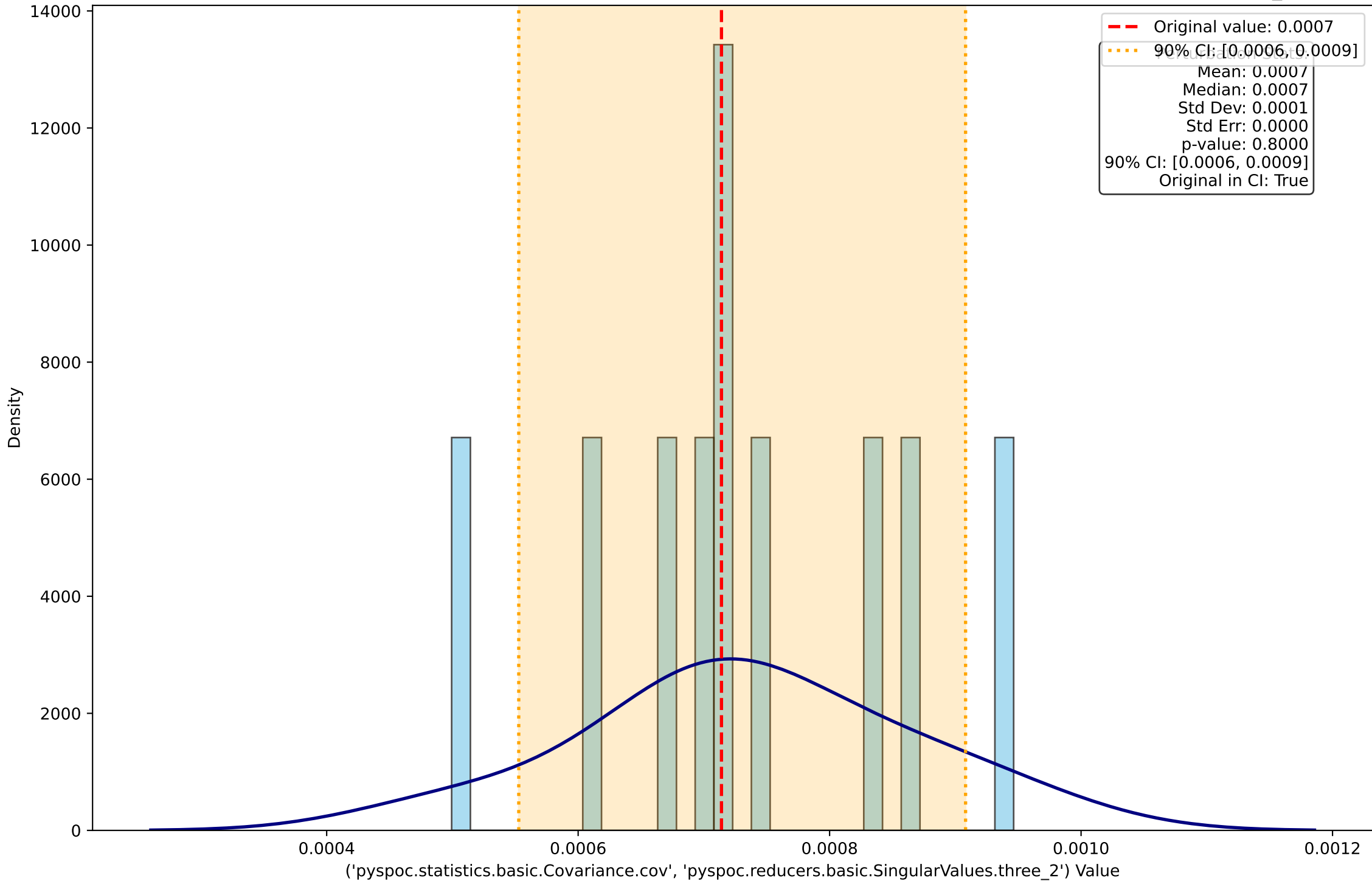
Column Bootstrap samples: 10, Sample fraction: 90.0%

- Original value: 0.4447
- 95% CI: [0.0735, 0.9792]
- Mean: 0.5639
- Median: 0.7518
- Std Dev: 0.3989
- Bias: 0.1192
- Std Err: 0.1261
- CV: 70.75%
- Original in CI: True

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

1e16

Column Bootstrap samples: 10, Sample fraction: 90.0%

Bootstrap Stats:
Mean: 0.0000
Median: 0.0000
Std Dev: 0.0000
Bias: -0.1767
Std Err: 0.0000
CV: 105.87%
Original in CI: False

Density

- - - Original value: 0.1767
······ 95% CI: [0.0000, 0.0000]

('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three_3') Value
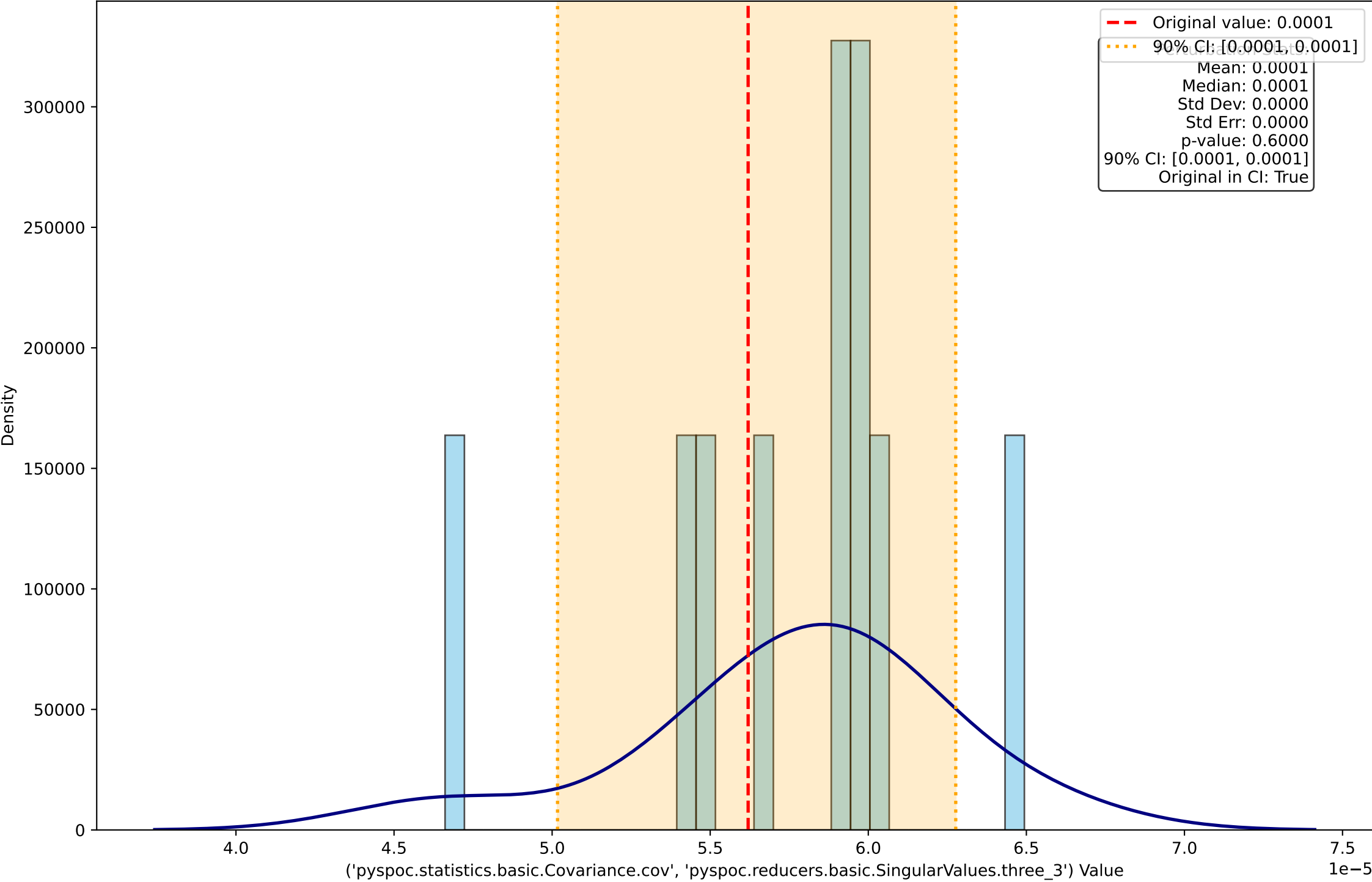
Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three_1')

Original value: 0.0462
90% CI: [0.0330, 0.0603]
Mean: 0.0475
Median: 0.0478
Std Dev: 0.0094
Std Err: 0.0030
p-value: 0.6000
90% CI: [0.0330, 0.0603]
Original in CI: True

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

Legend:
- Original value: 0.0007
- 90% CI: [0.0006, 0.0009]
- Mean: 0.0007
- Median: 0.0007
- Std Dev: 0.0001
- Std Err: 0.0000
- p-value: 0.8000
- 90% CI: [0.0006, 0.0009]
- Original in CI: True

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

Legend:
- Original value: 0.0001
- 90% CI: [0.0001, 0.0001]
- Mean: 0.0001
- Median: 0.0001
- Std Dev: 0.0000
- Std Err: 0.0000
- p-value: 0.6000
- 90% CI: [0.0001, 0.0001]
- Original in CI: True

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

Original value: 12789715011599597642031564456549211415196339424722944.0000

90% CI: [24023669671889519664205831637196191791284449569669112.0000, 85966139263702796678824080831487694466191971472061235

Mean: 22413124113540267570731391599684783051218487387095040000.0000
Median: 4659345462783735141425497248089400081111210851827712000.0000
Std Dev: 36690770940357503545637367233570847692605605406362828800.0000
Std Err: 11602640527904769286600247395722794661065160832267059200.0000
p-value: 0.8000
90% CI: [24023669671889519664205831637196191791284449569669112.0000, 85966139263702796678824080831487694466191971472061235
Original in CI: True

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: 0.6000
- 90% CI: [-0.0000, 0.0000]
- Original in CI: True

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

Legend:
- Original value: 2.8602
- 90% CI: [2.8419, 2.8817]
- Mean: 2.8636
- Median: 2.8683
- Std Dev: 0.0144
- Std Err: 0.0045
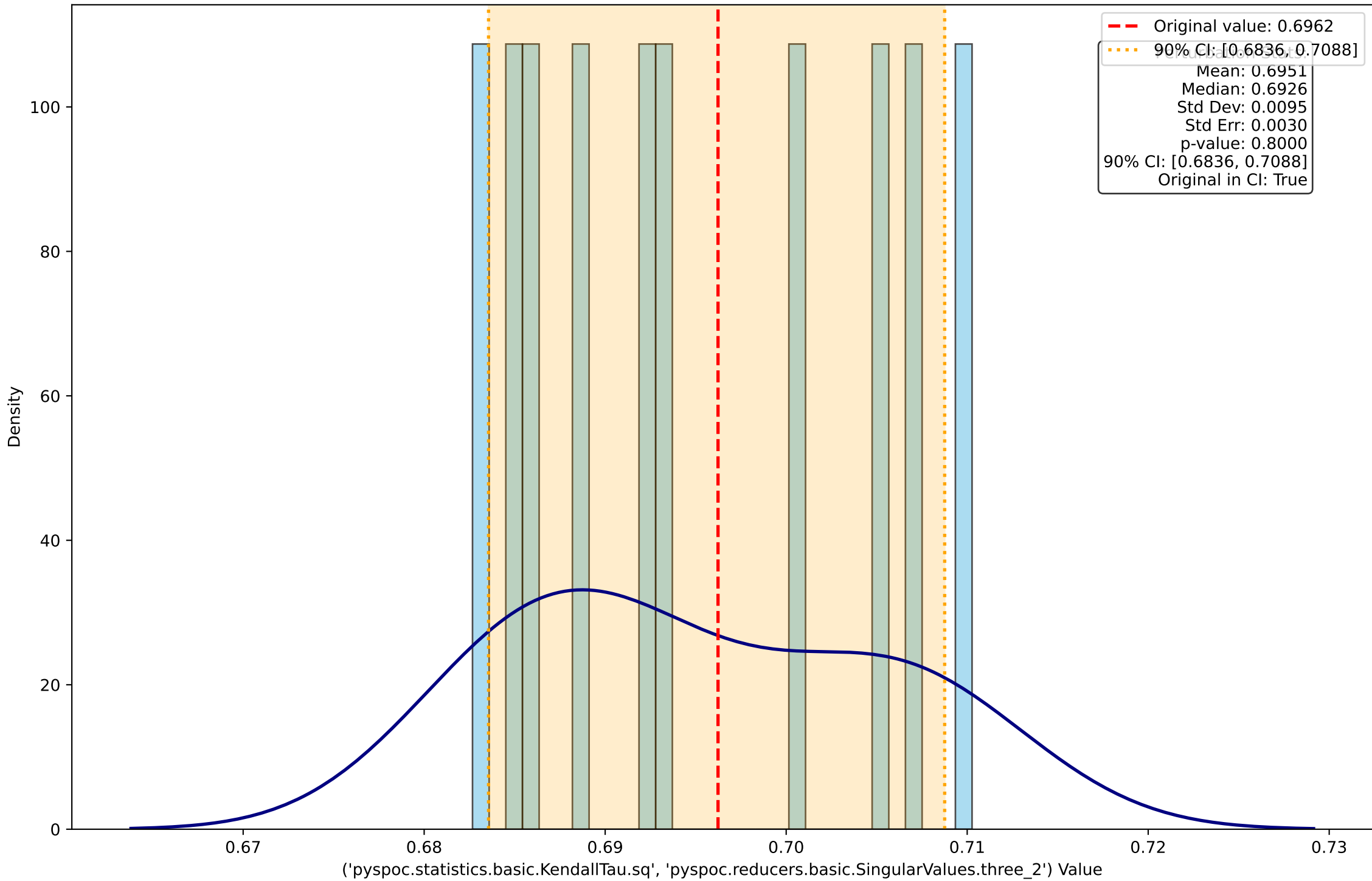- p-value: 0.8000
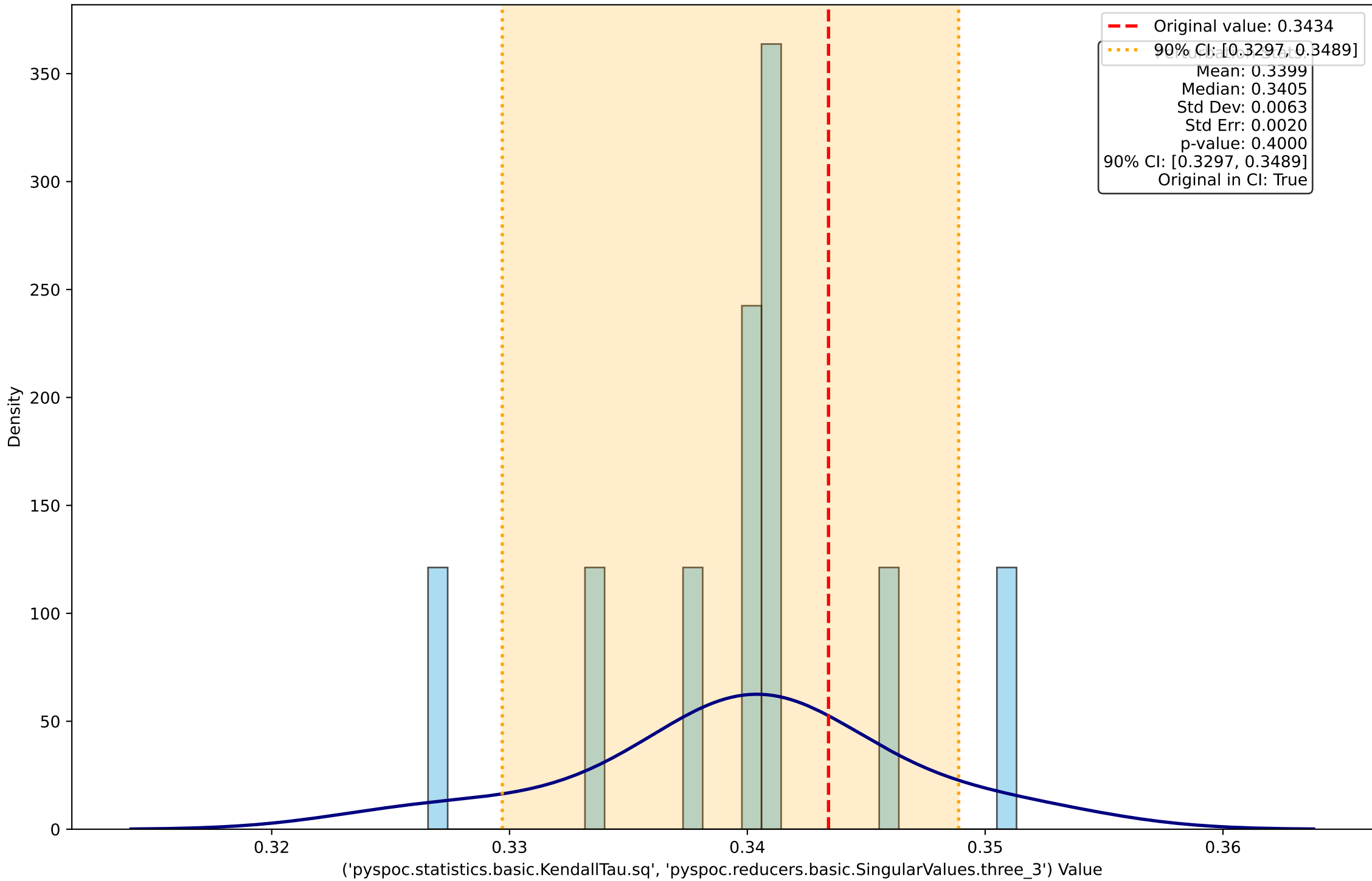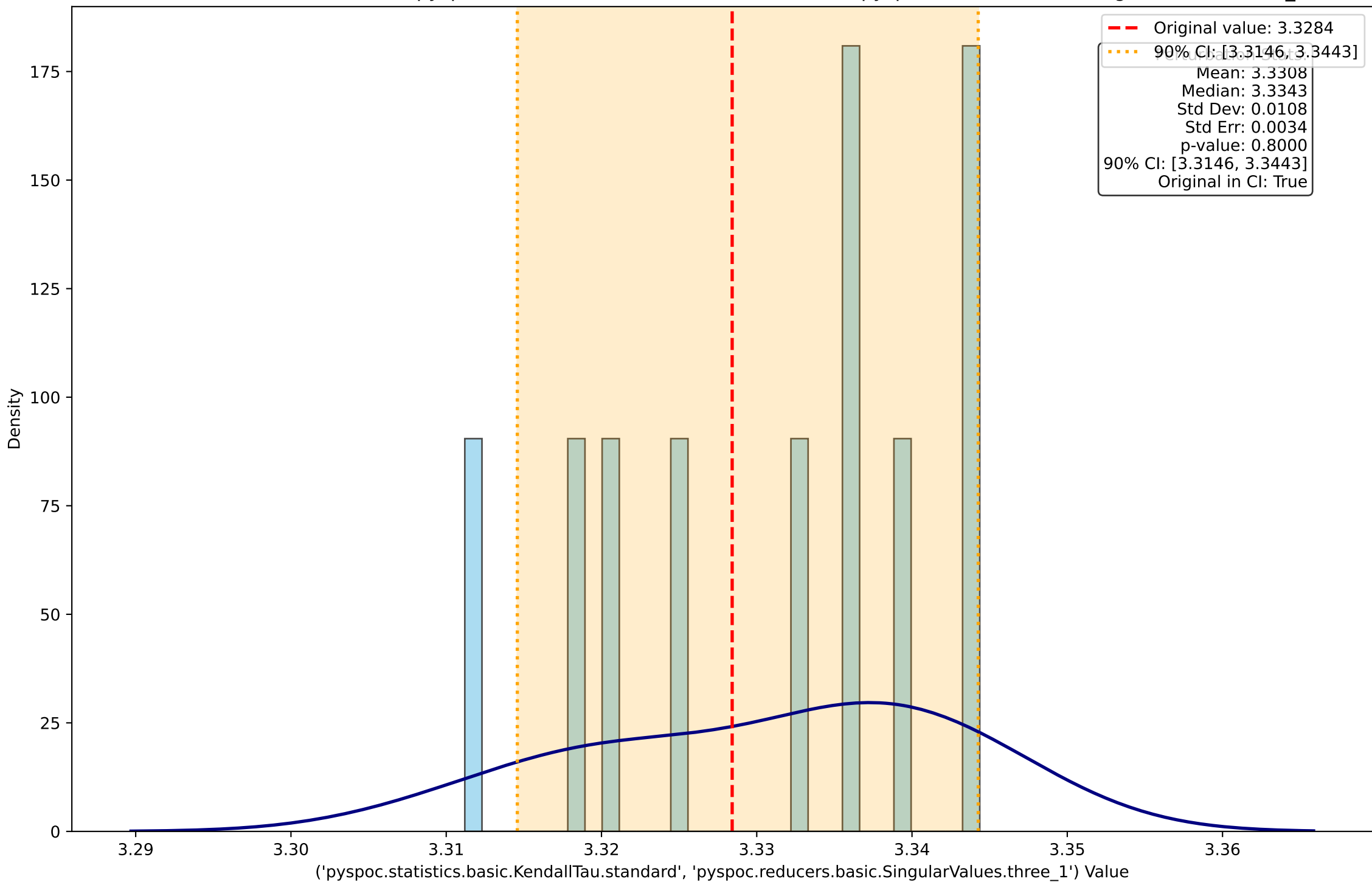- 90% CI: [2.8419, 2.8817]
- Original in CI: True
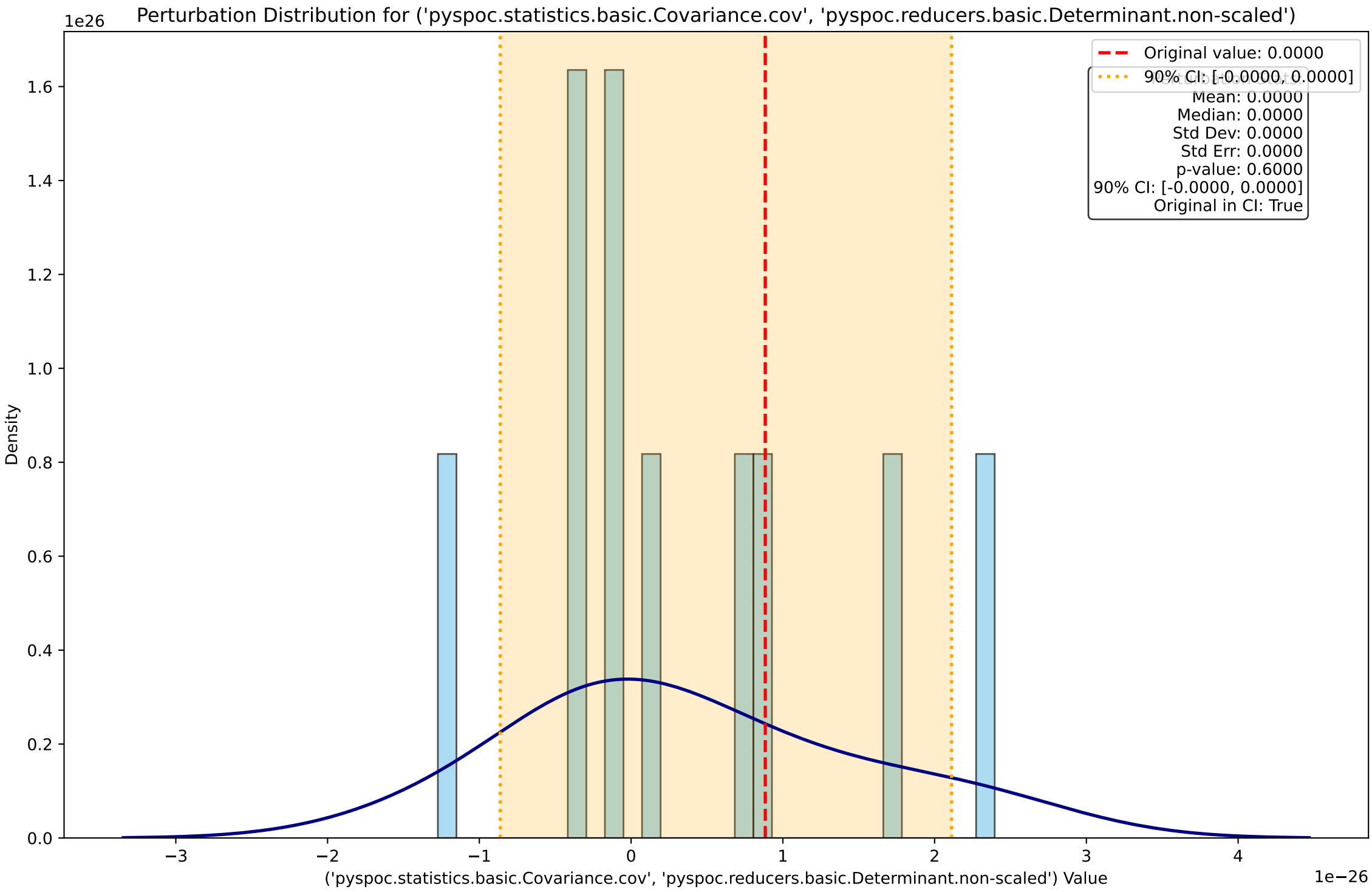
Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_2')

Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three_3')
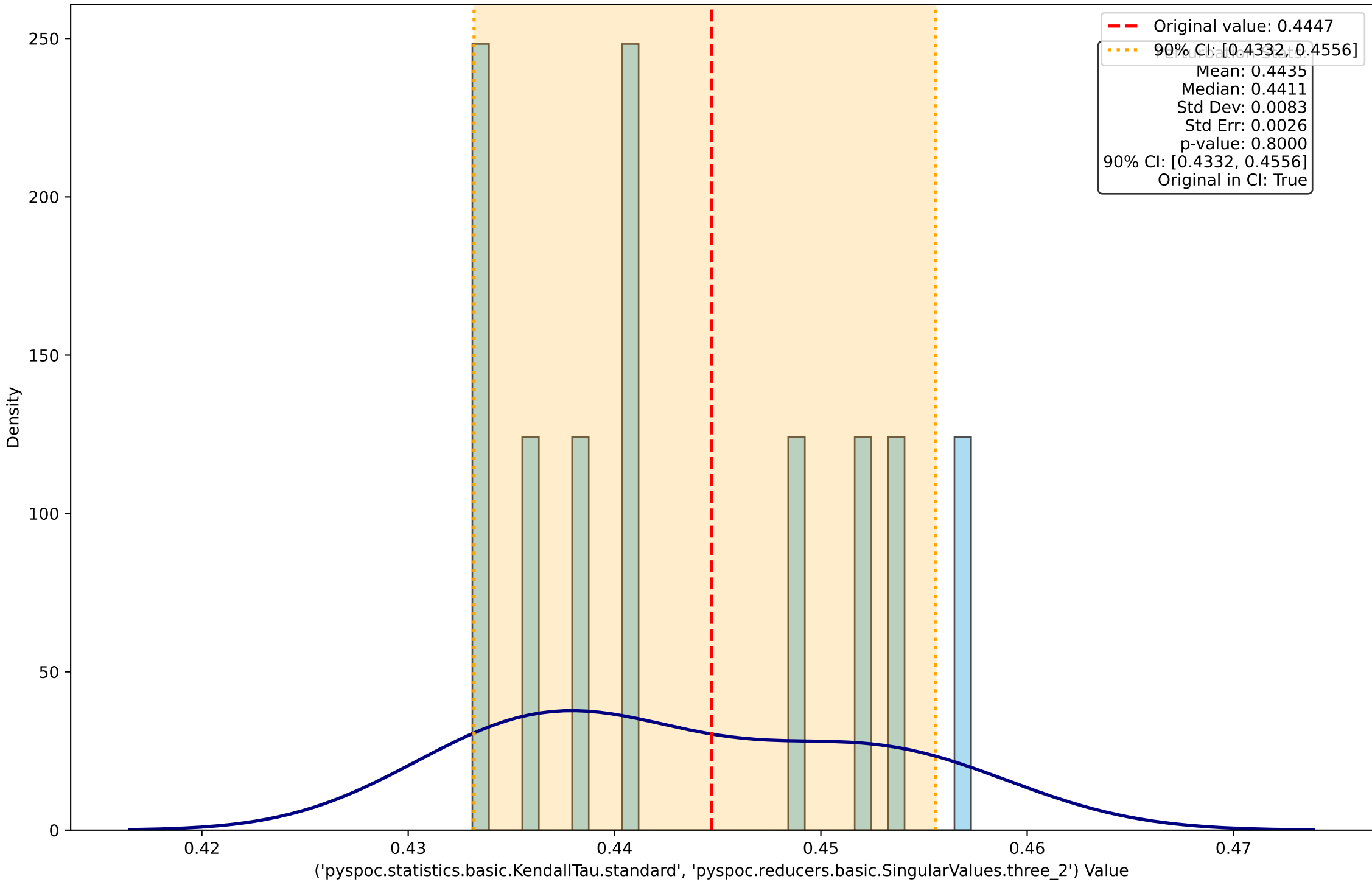
- - - Original value: 0.3434
······· 90% CI: [0.3297, 0.3489]
Mean: 0.3399
Median: 0.3405
Std Dev: 0.0063
Std Err: 0.0020
p-value: 0.4000
90% CI: [0.3297, 0.3489]
Original in CI: True

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

Legend:
- Original value: 3.3284
- 90% CI: [3.3146, 3.3443]
- Mean: 3.3308
- Median: 3.3343
- Std Dev: 0.0108
- Std Err: 0.0034
- p-value: 0.8000
- 90% CI: [3.3146, 3.3443]
- Original in CI: True

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

Legend:
- Original value: 0.4447
- 90% CI: [0.4332, 0.4556]
- Mean: 0.4435
- Median: 0.4411
- Std Dev: 0.0083
- Std Err: 0.0026
- p-value: 0.8000
- 90% CI: [0.4332, 0.4556]
- Original in CI: True

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