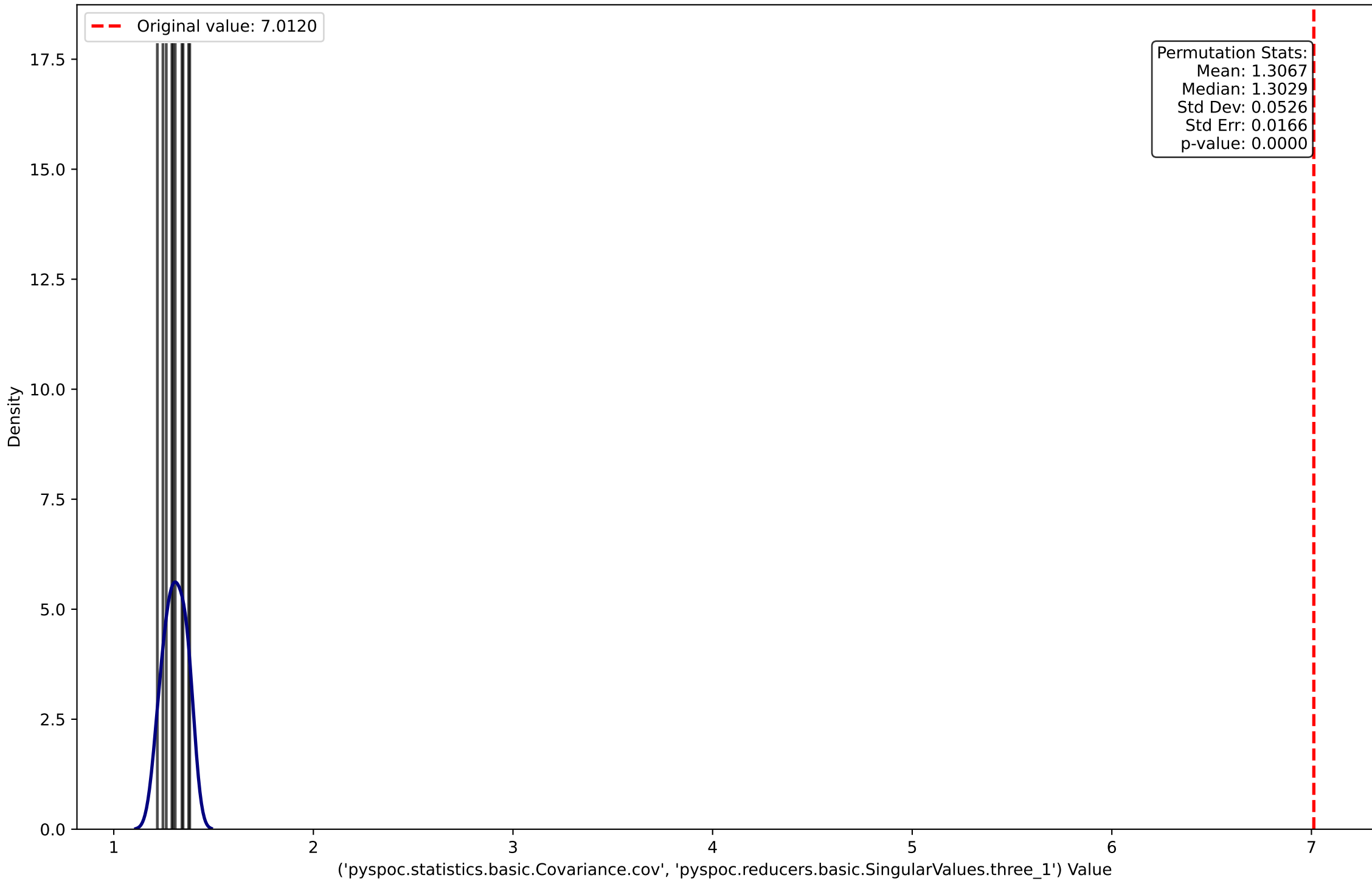
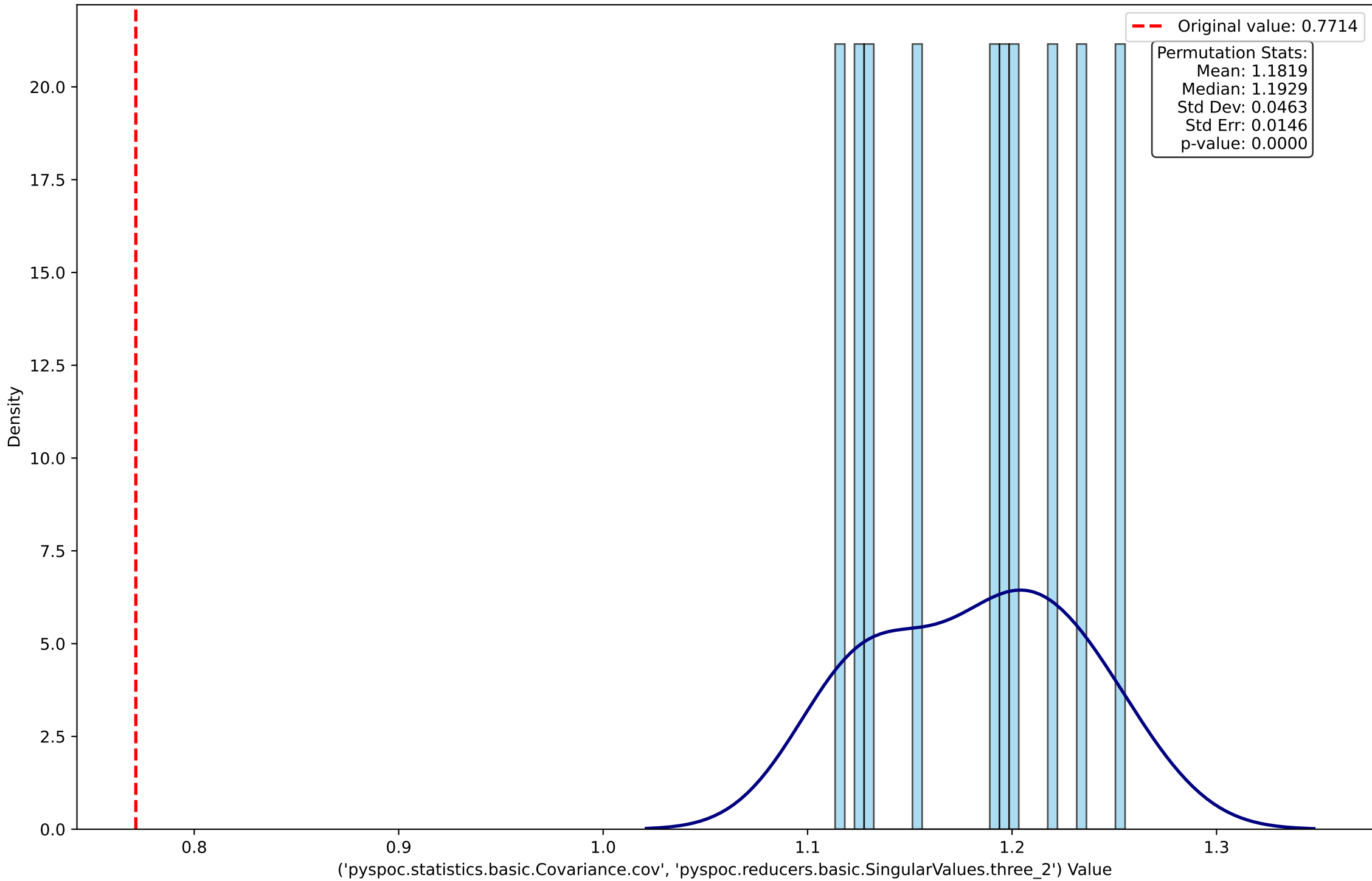


Number of permutations: 10  
Number of bootstrap samples: 10  
Row bootstrap sample fraction: 90.0%  
Column bootstrap sample fraction: 90.0%  
Number of perturbations: 10  
Scale factor for perturbations: 0.1  
Normalization: z-score  
Random seed: 42

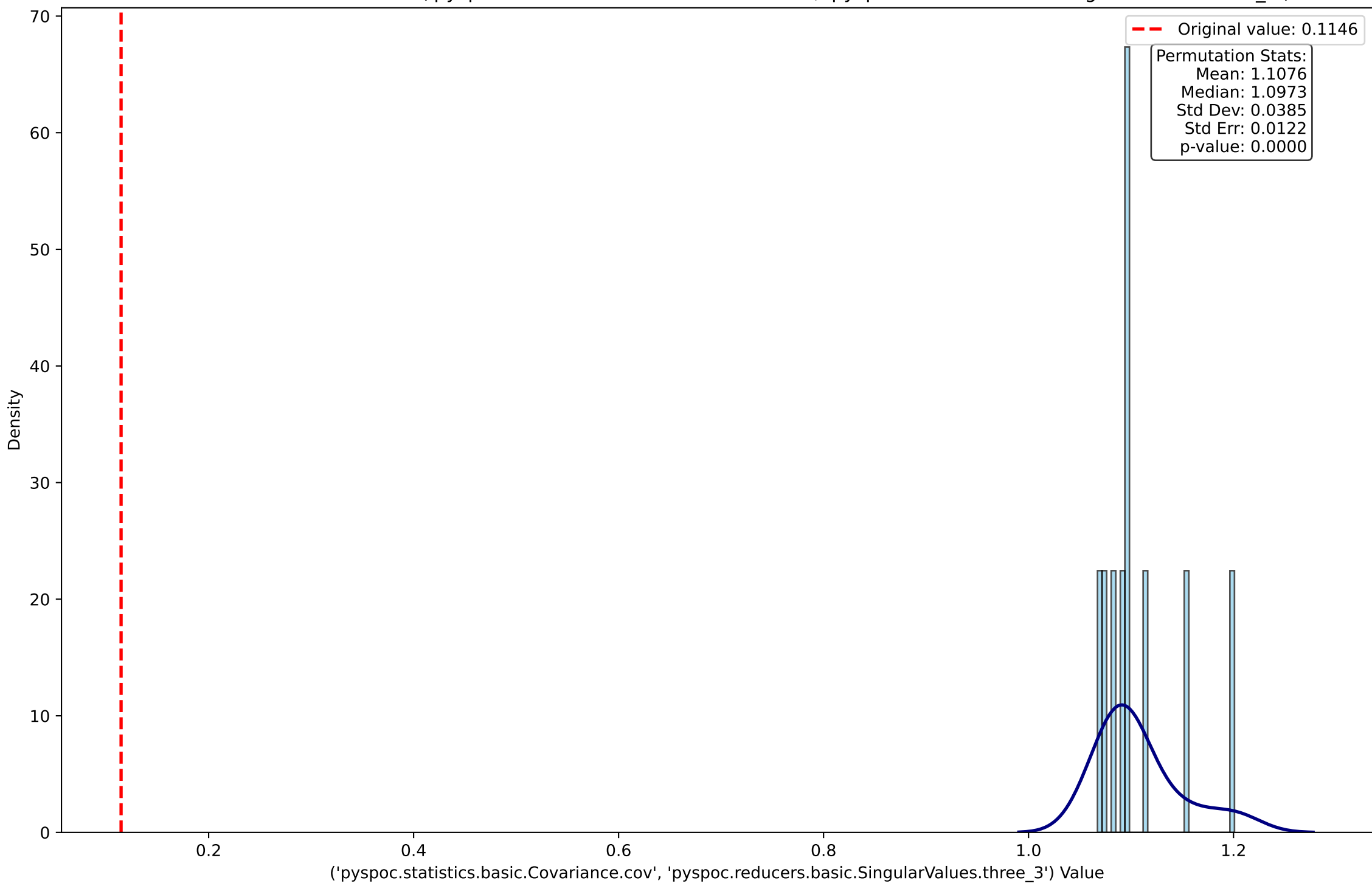
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_1')



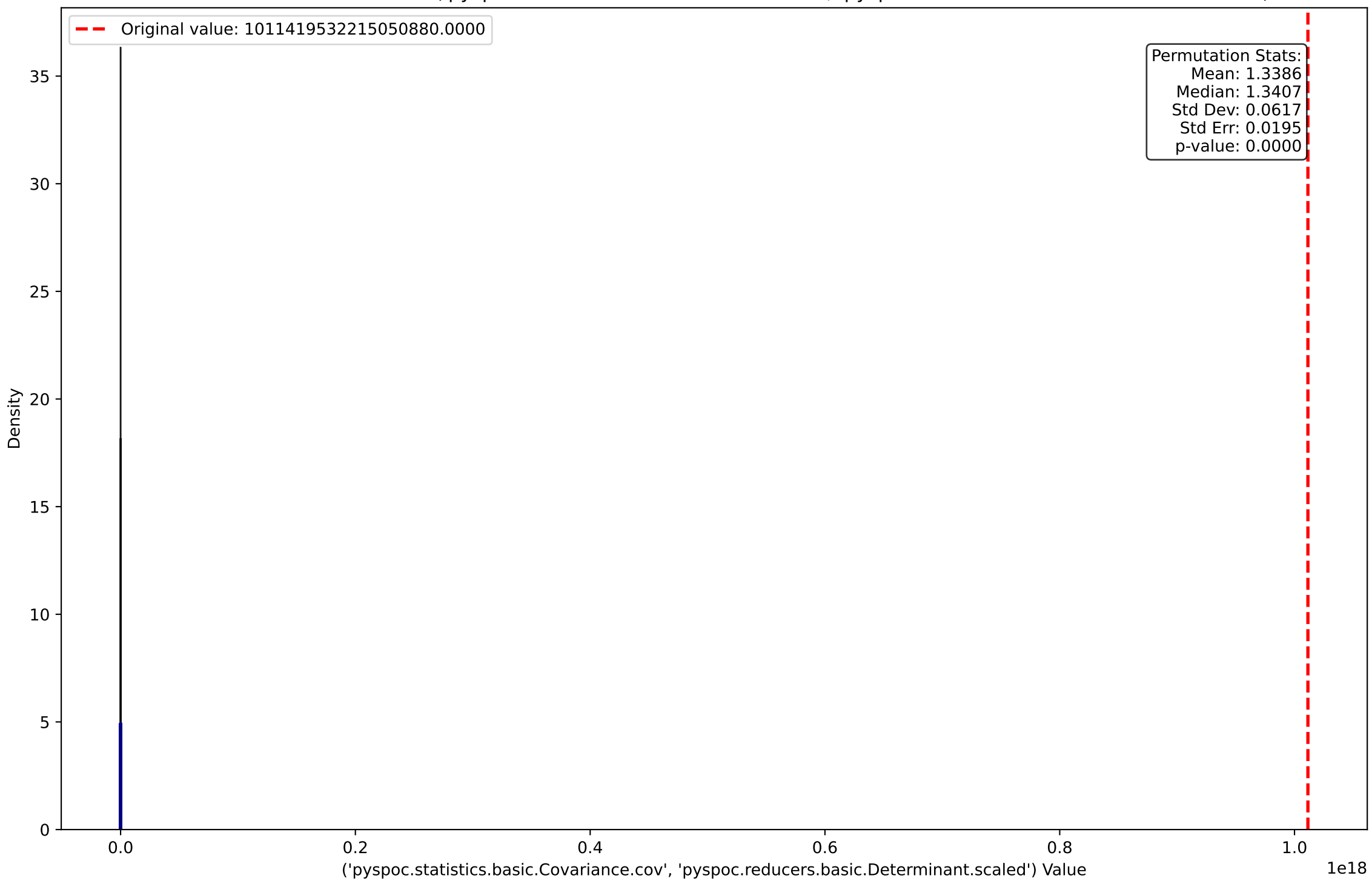
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_2')



Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_3')



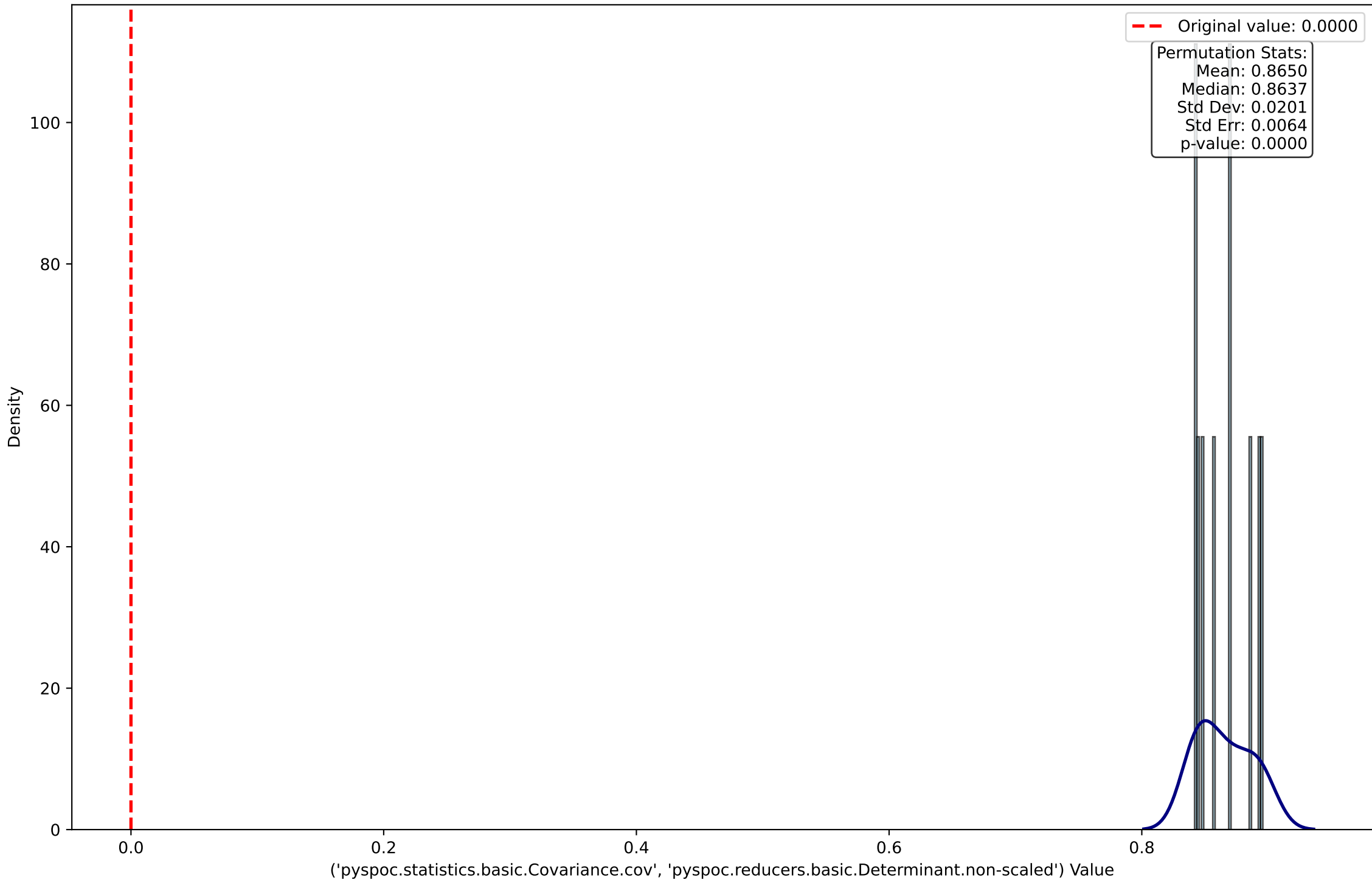
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.scaled')



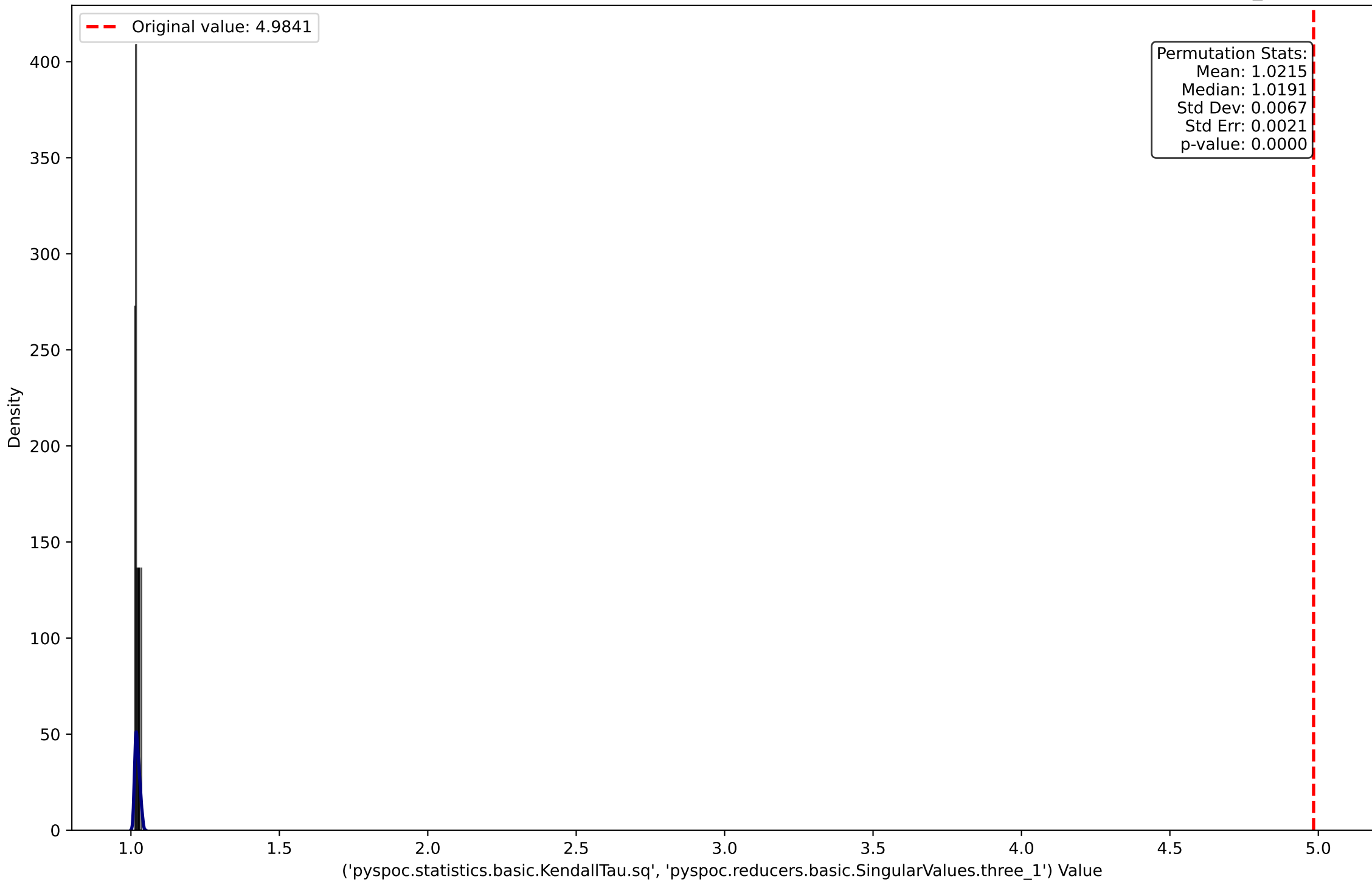
Permutation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

Original value: 0.0000

Permutation Stats:  
Mean: 0.8650  
Median: 0.8637  
Std Dev: 0.0201  
Std Err: 0.0064  
p-value: 0.0000



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: 1.0154

Permutation Stats:  
Mean: 1.0088  
Median: 1.0076  
Std Dev: 0.0035  
Std Err: 0.0011  
p-value: 0.2000

Density

800  
700  
600  
500  
400  
300  
200  
100  
0

1.000

1.005

1.010

1.015

1.020

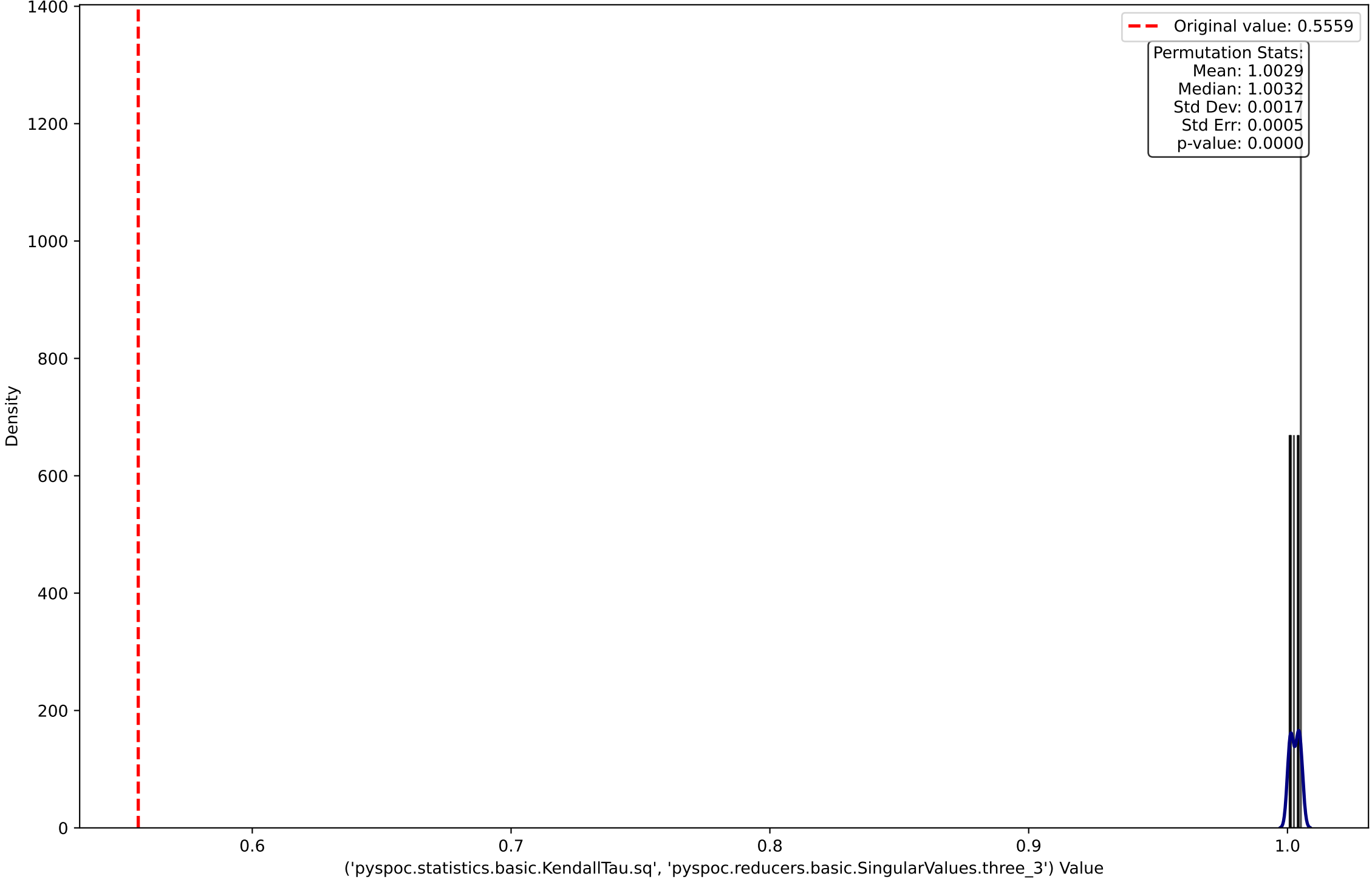
('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three\_2') Value



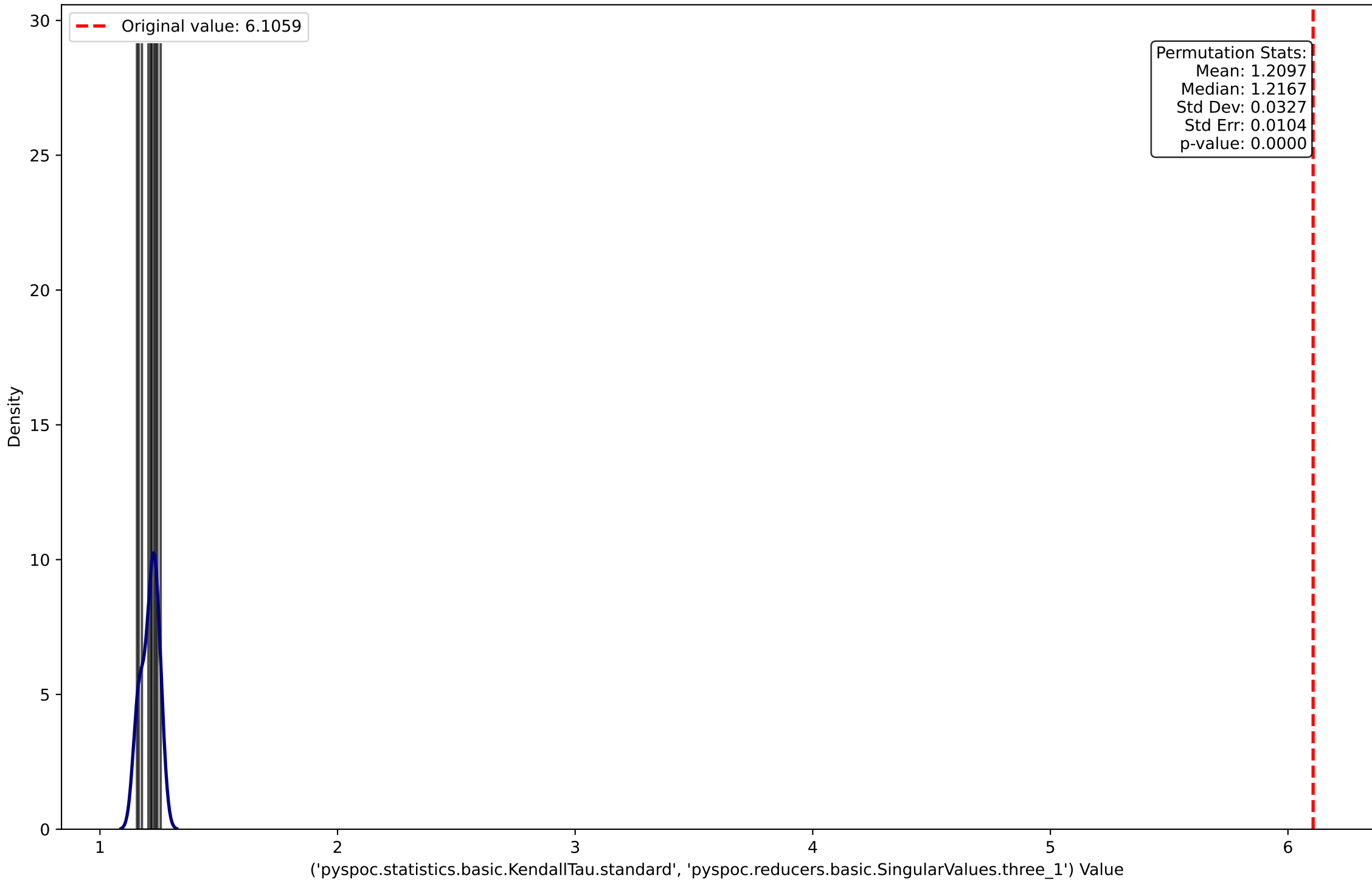
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three\_3')

Original value: 0.5559

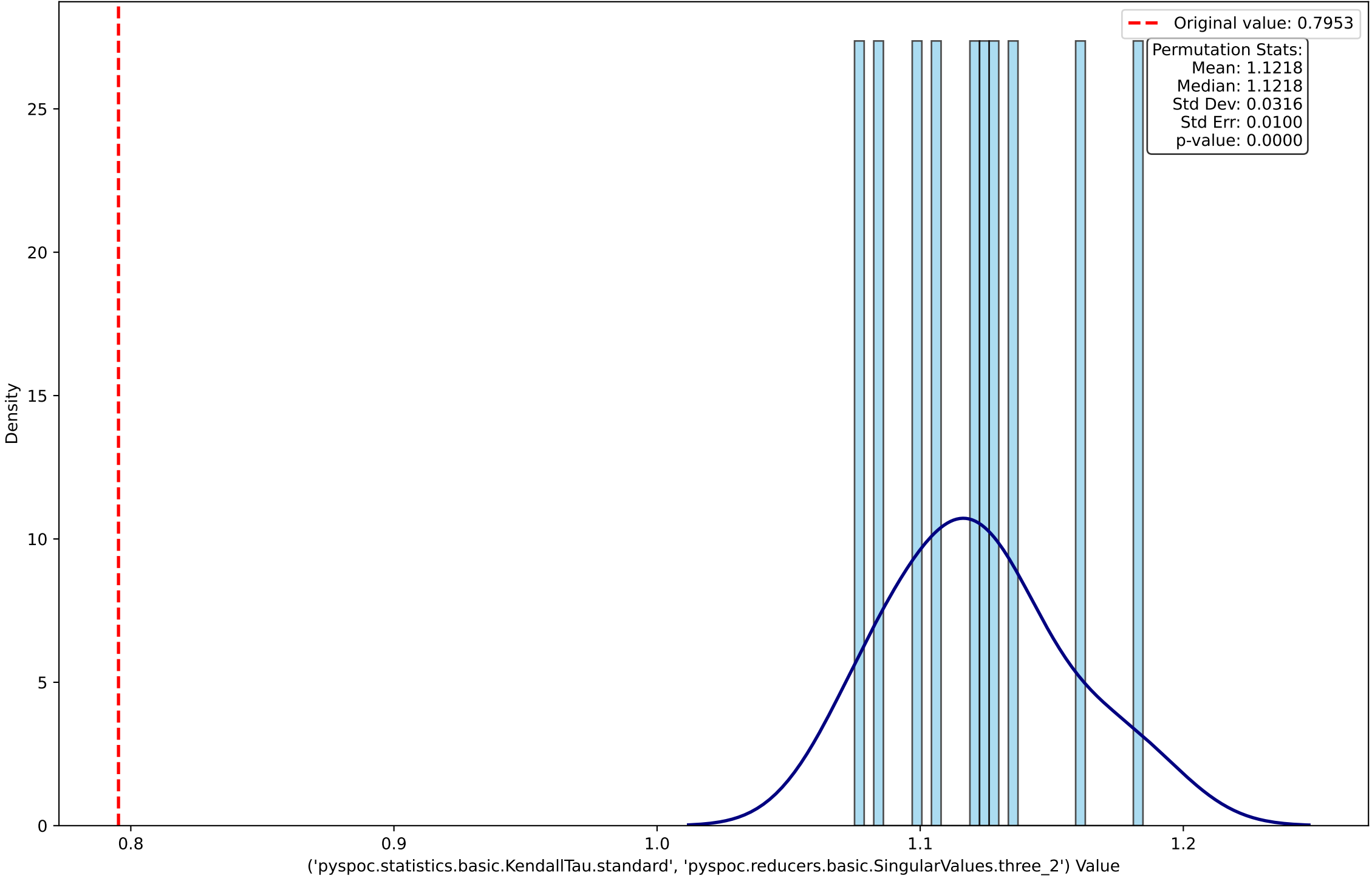
Permutation Stats:  
Mean: 1.0029  
Median: 1.0032  
Std Dev: 0.0017  
Std Err: 0.0005  
p-value: 0.0000



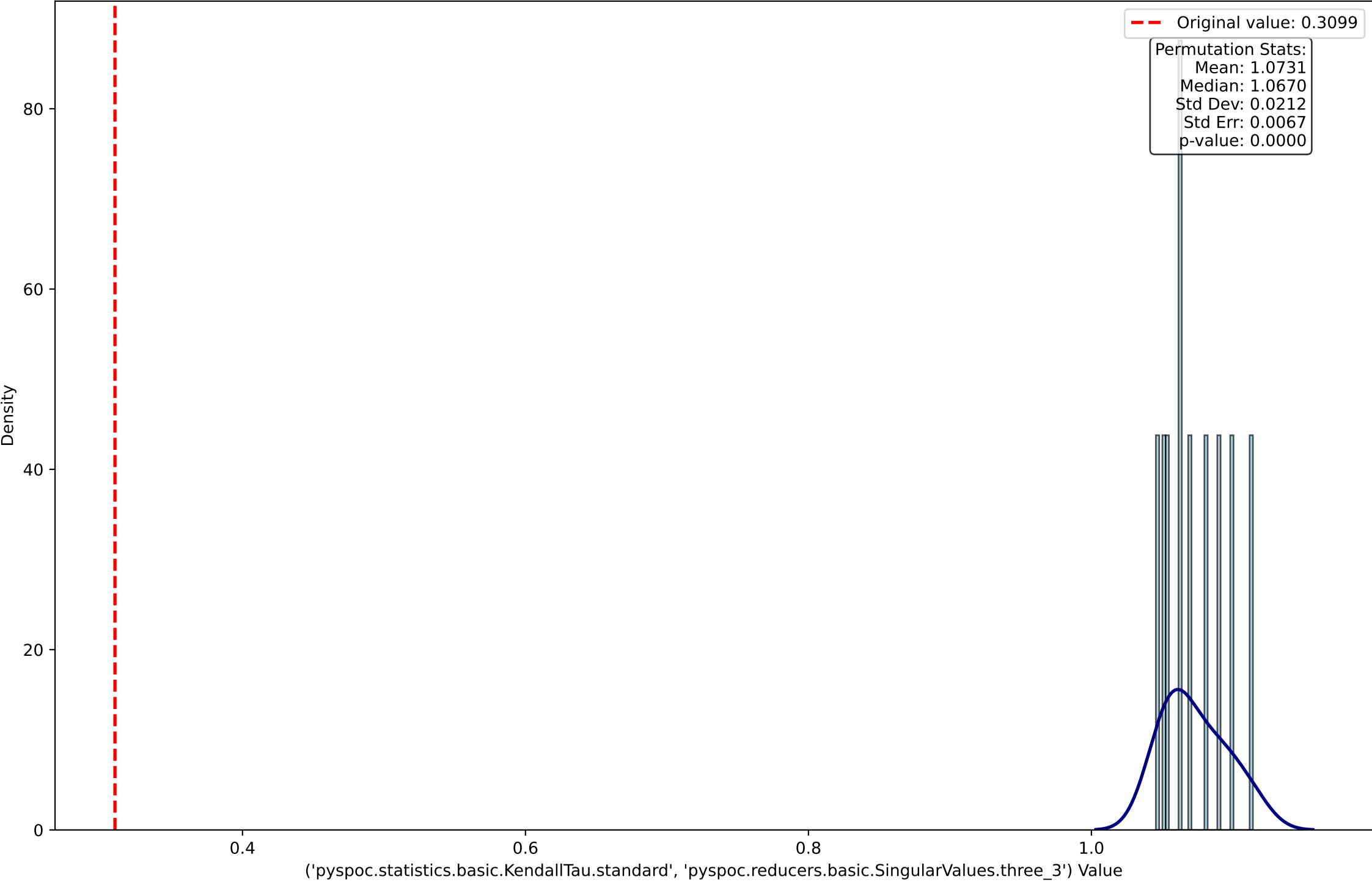
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_1')



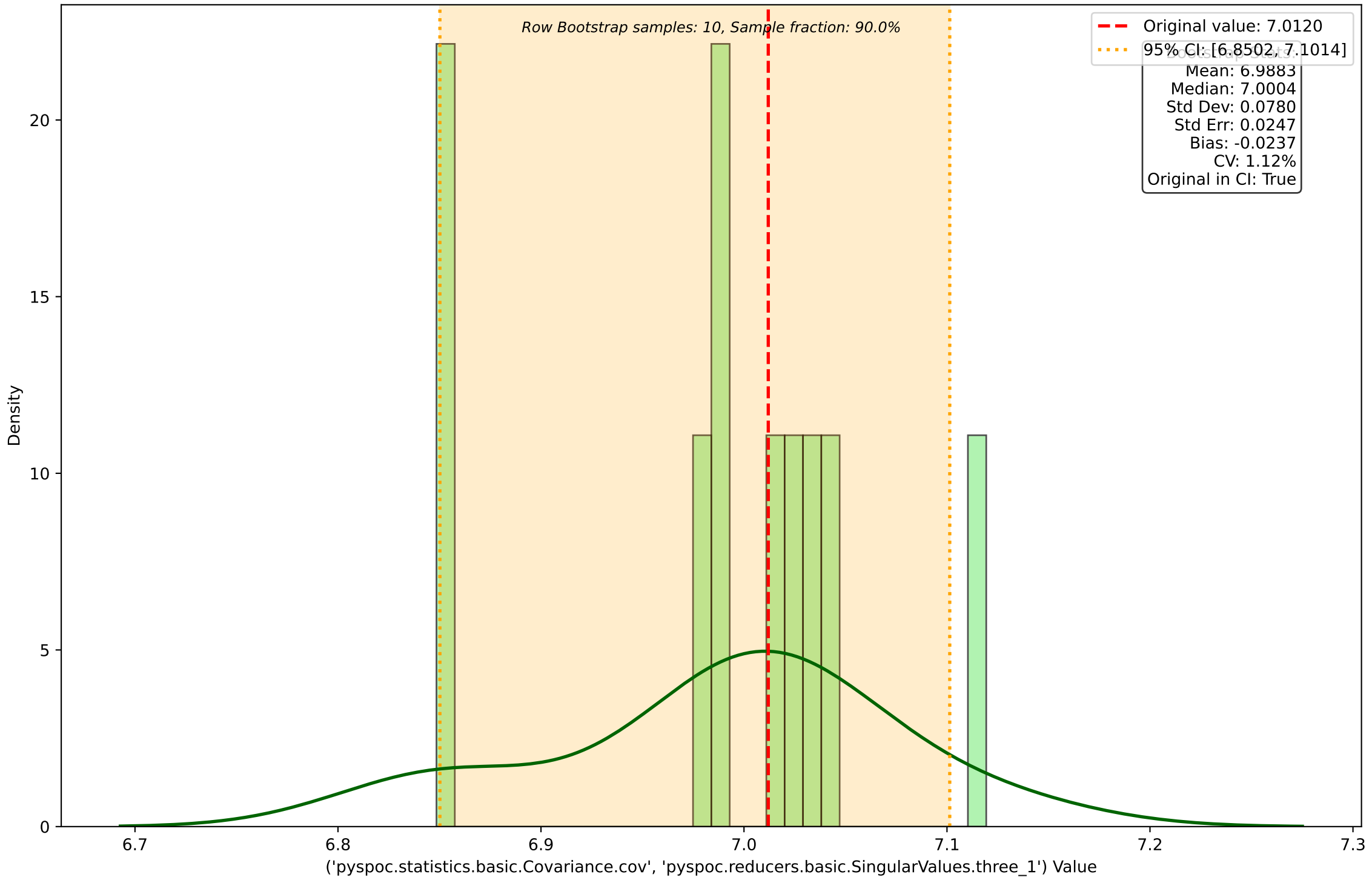
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_2')



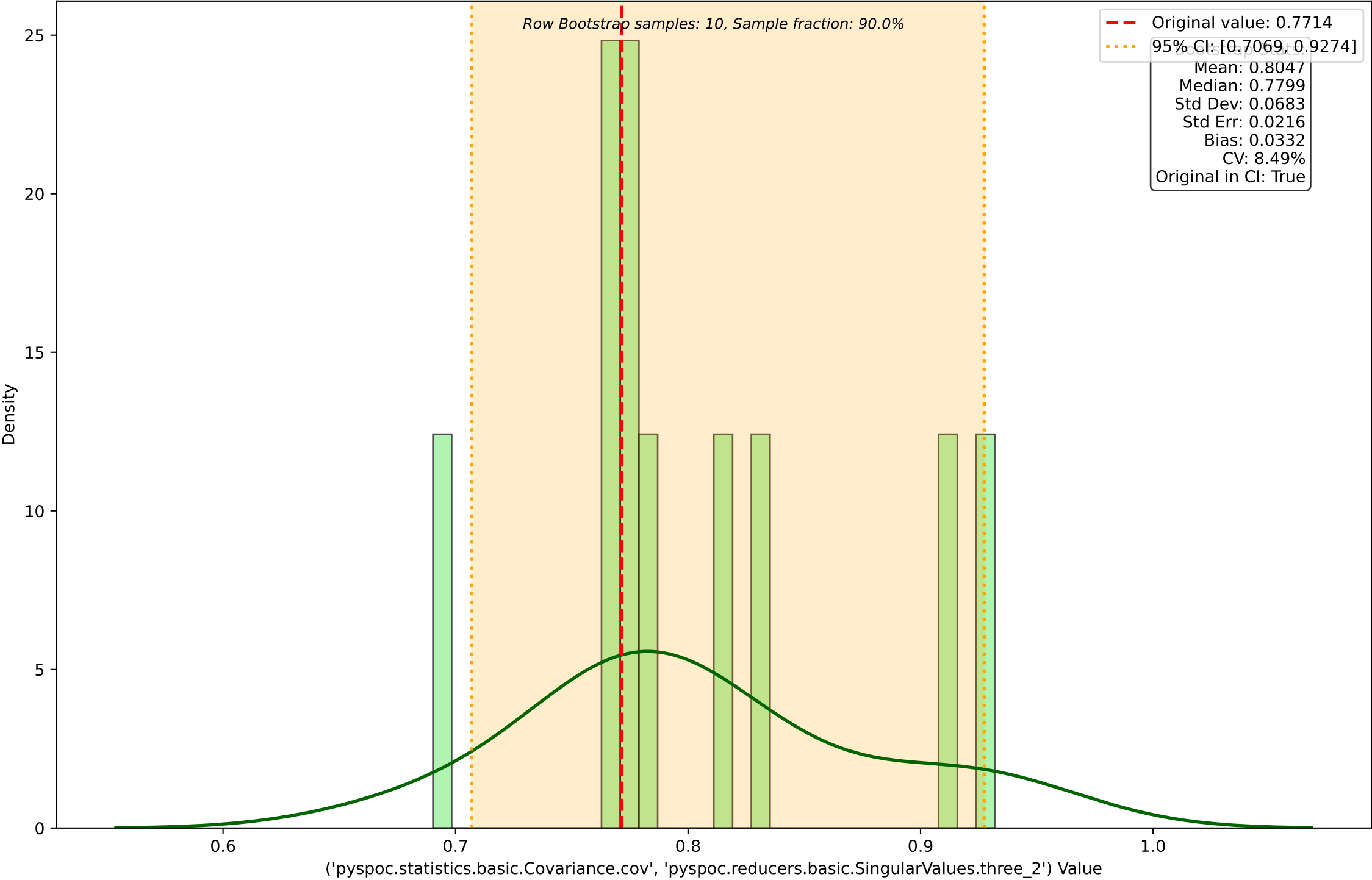
Permutation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_3')



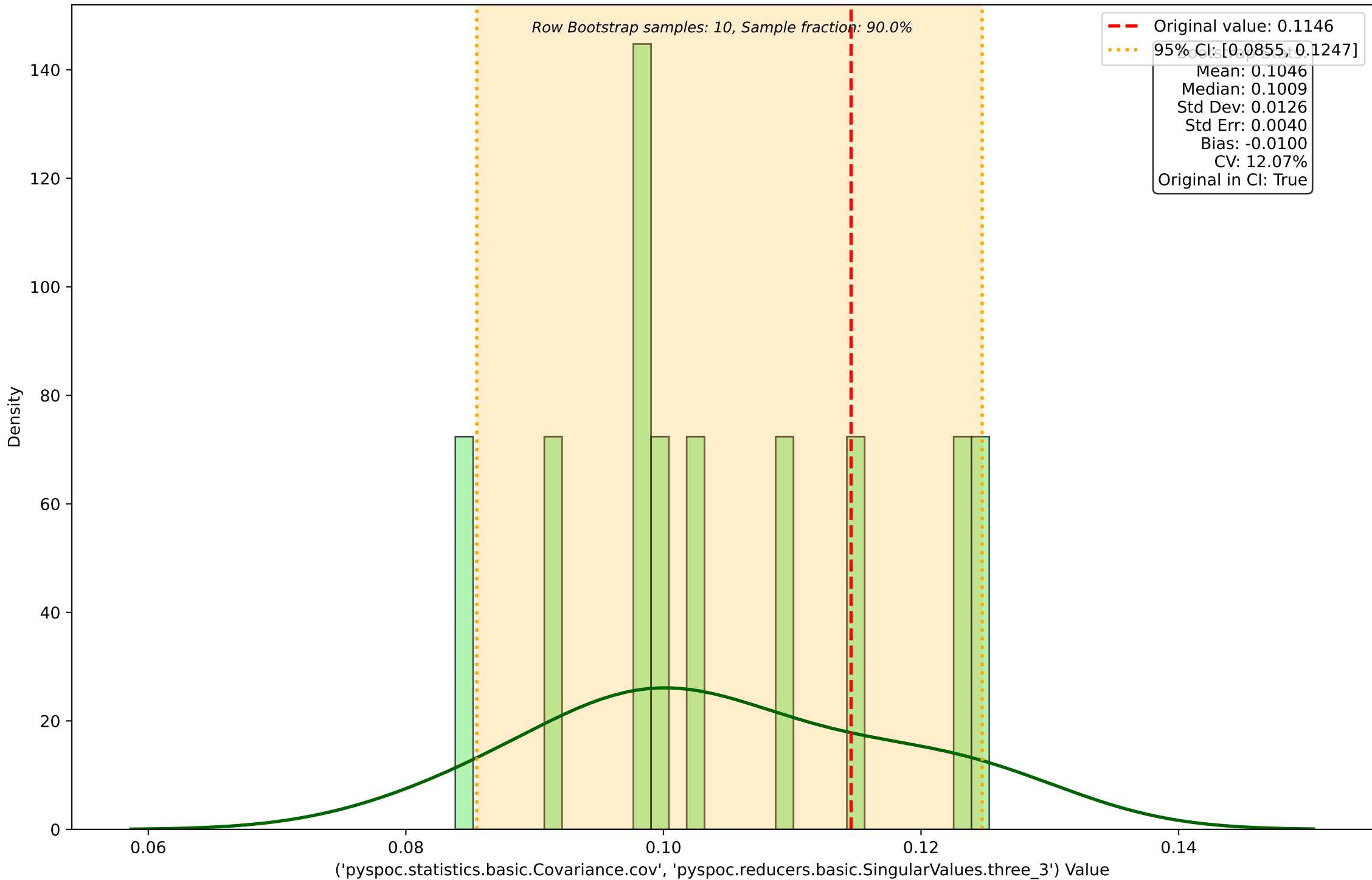
Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_1')

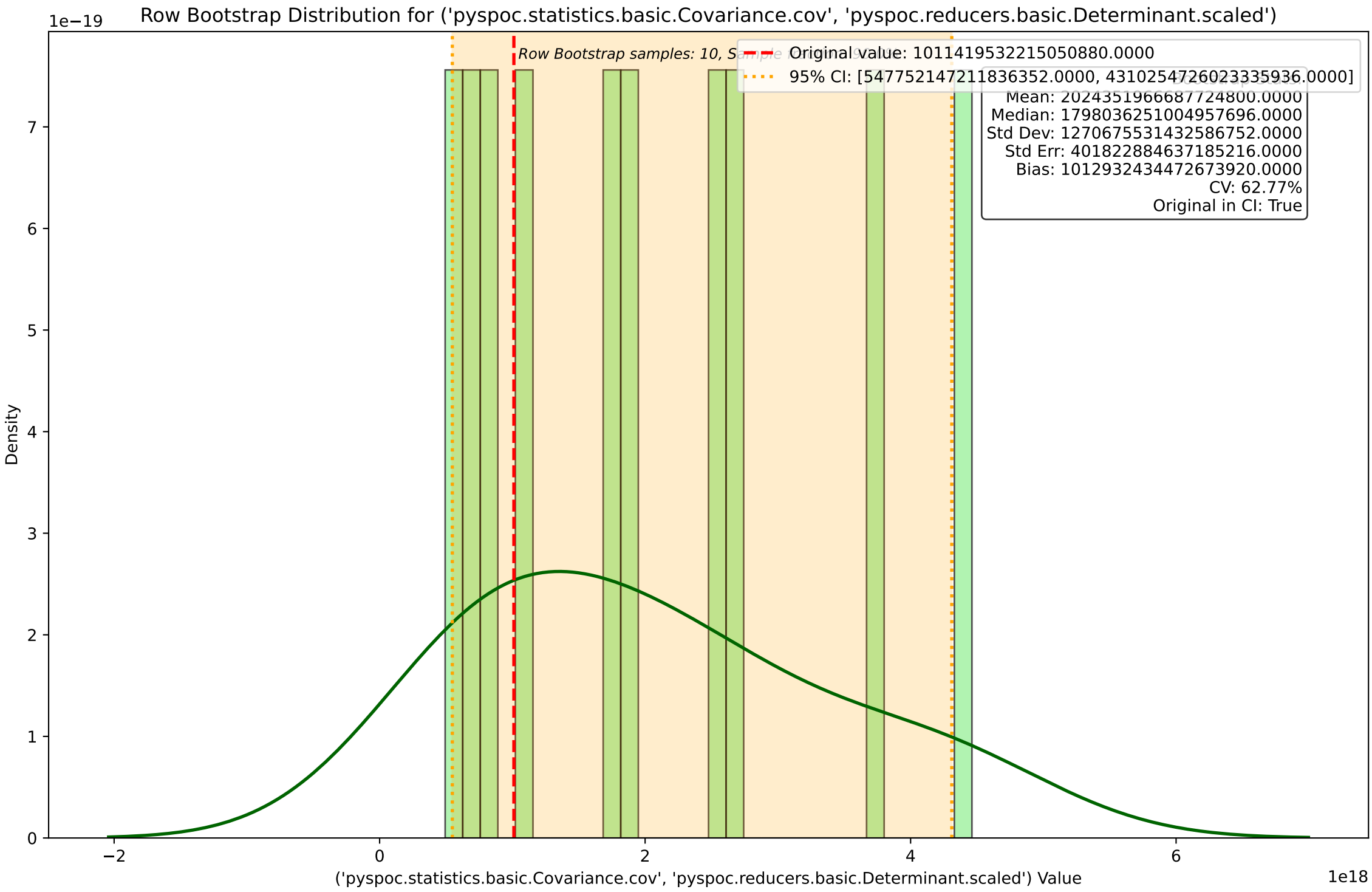


Row Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_2')

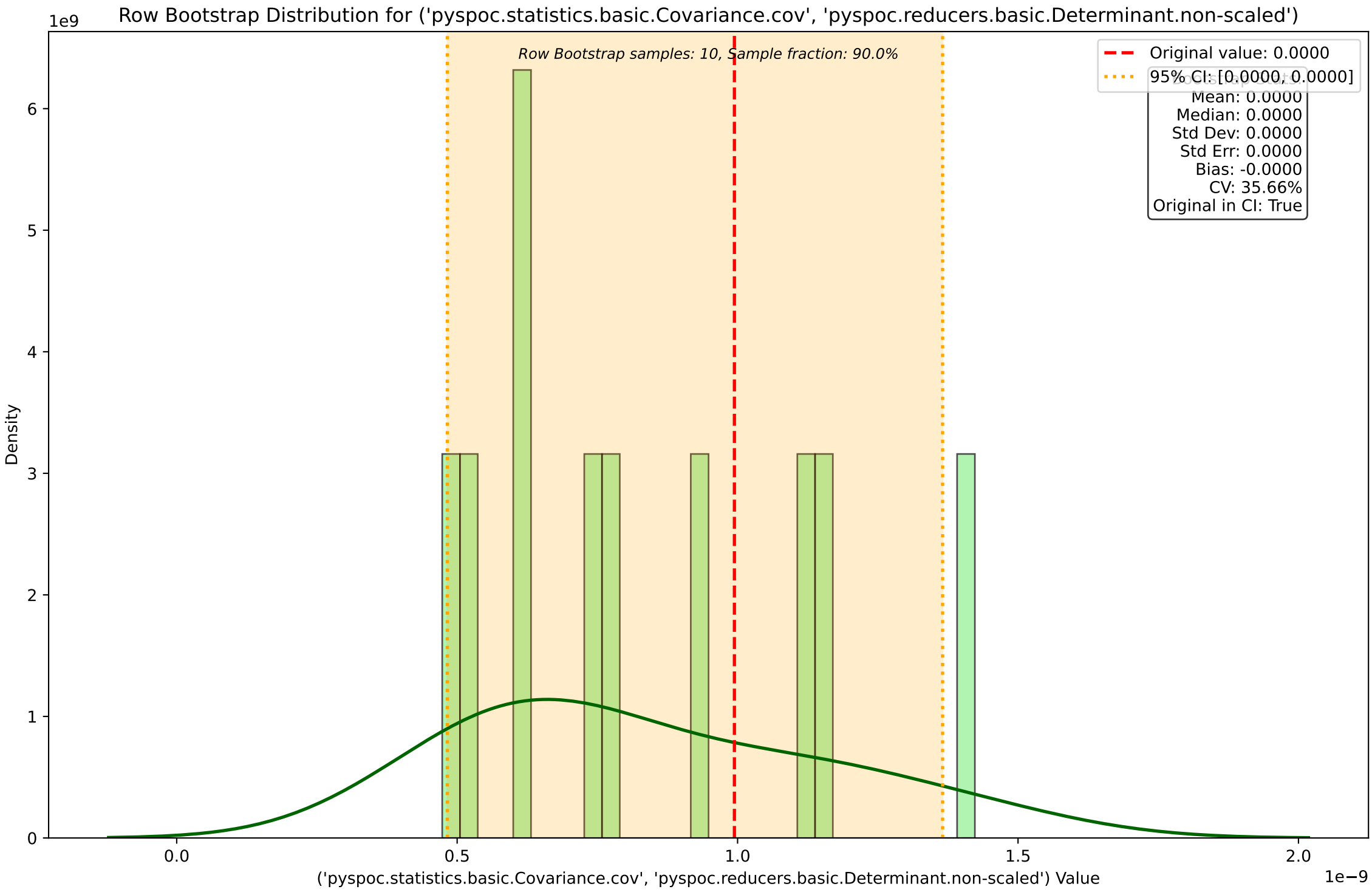


Row Bootstrap Distribution for ('pypoc.statistics.basic.Covariance.cov', 'pypoc.reducers.basic.SingularValues.three\_3')

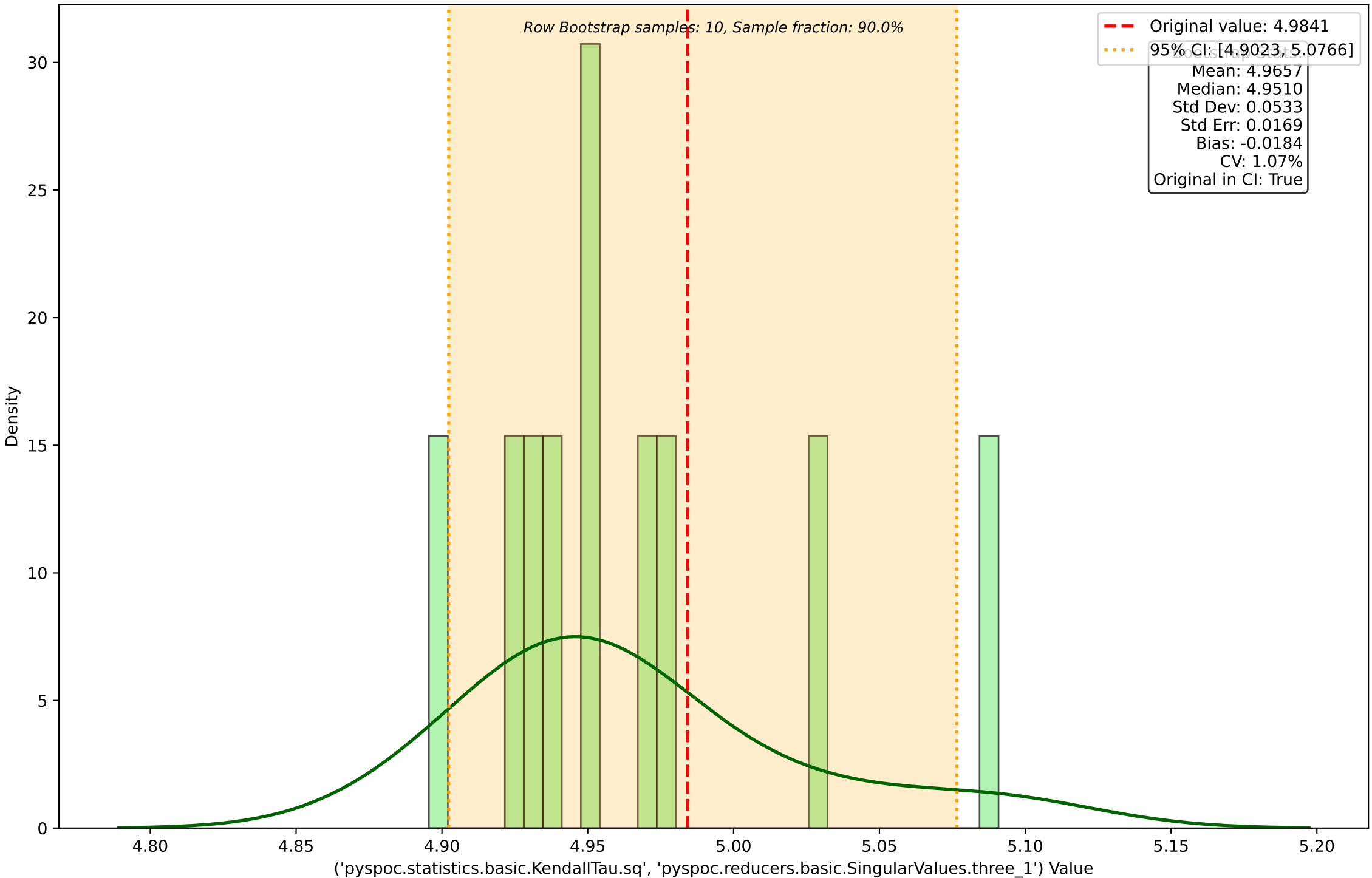




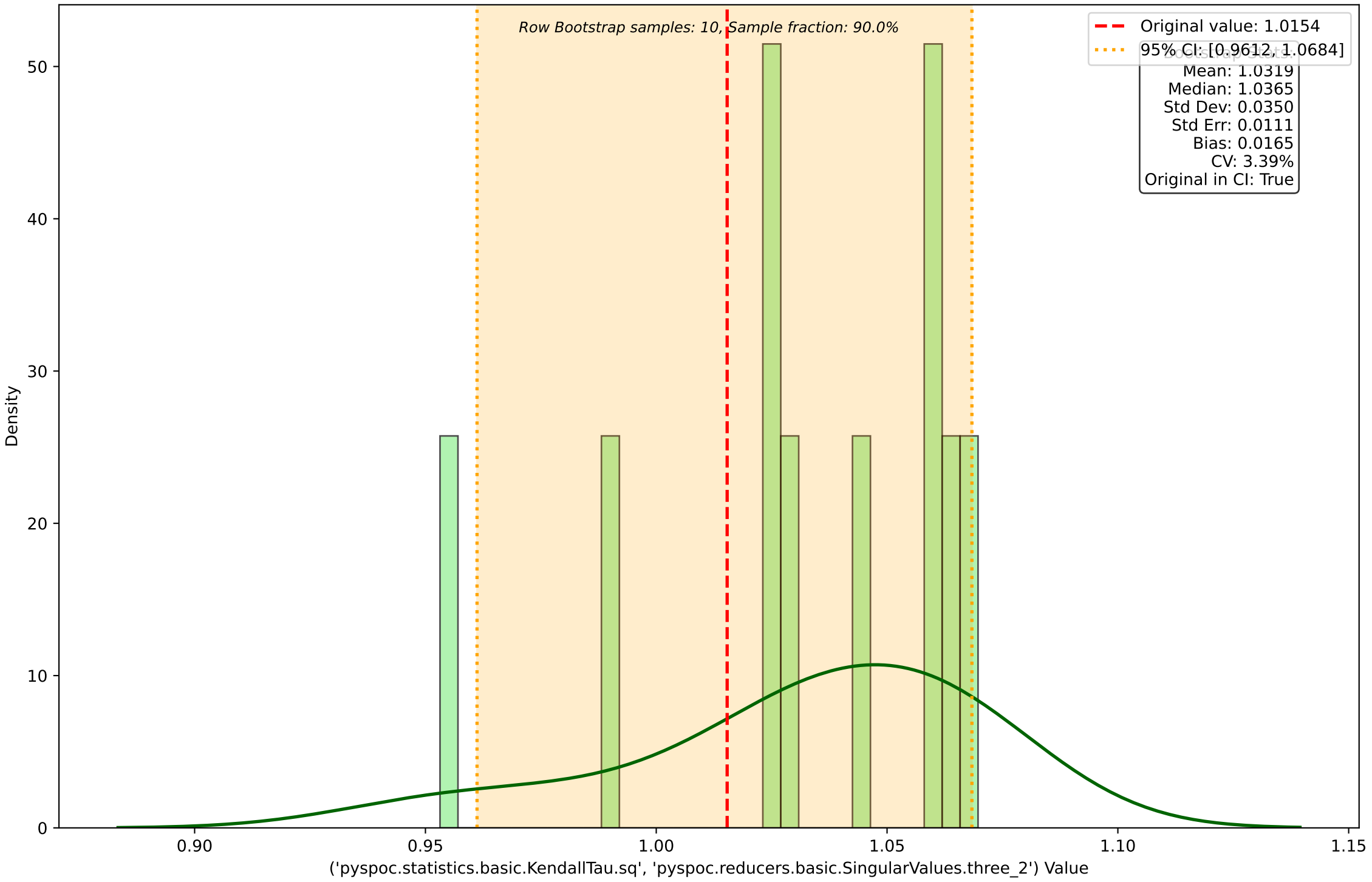




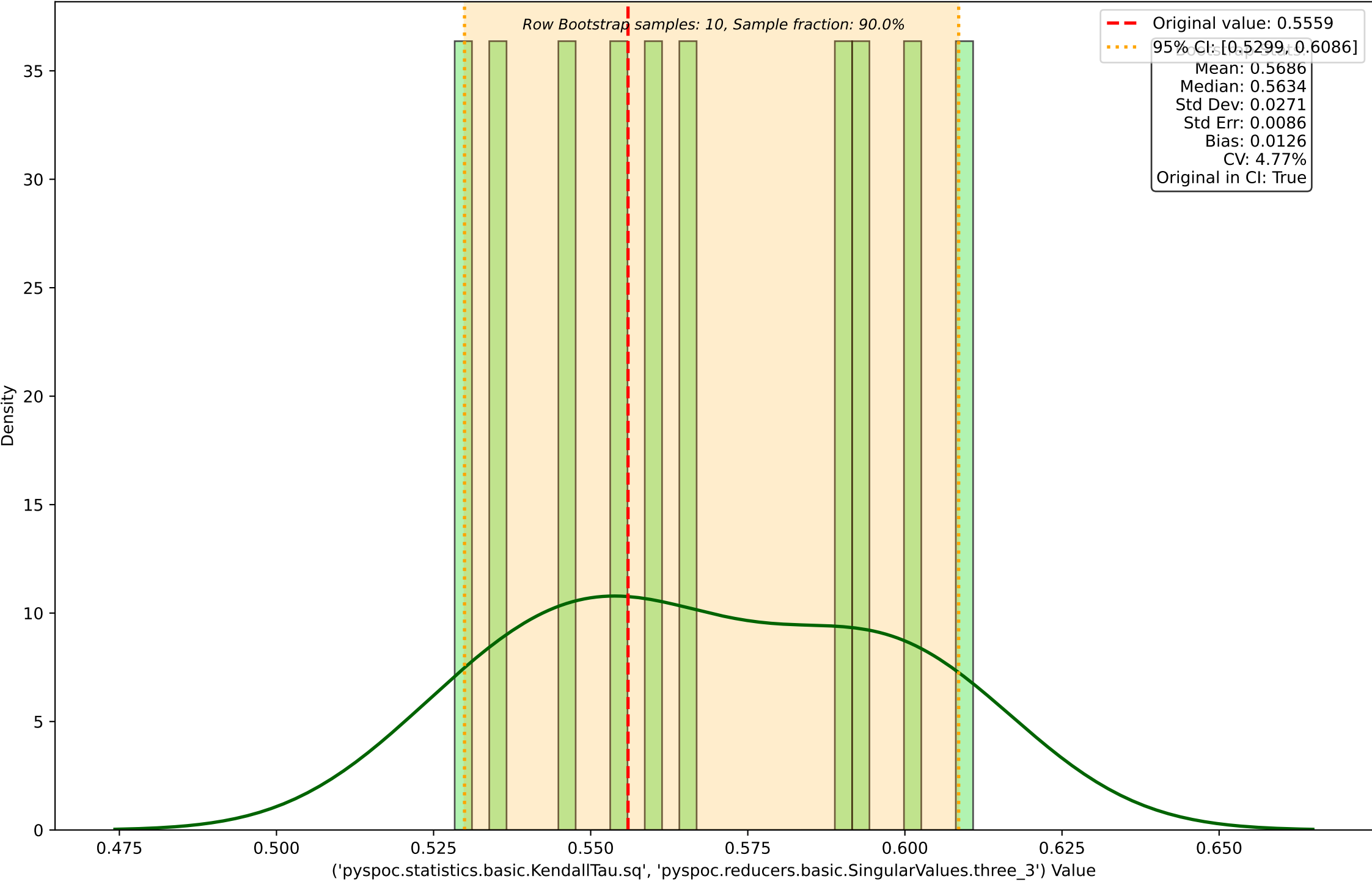
Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three\_1')



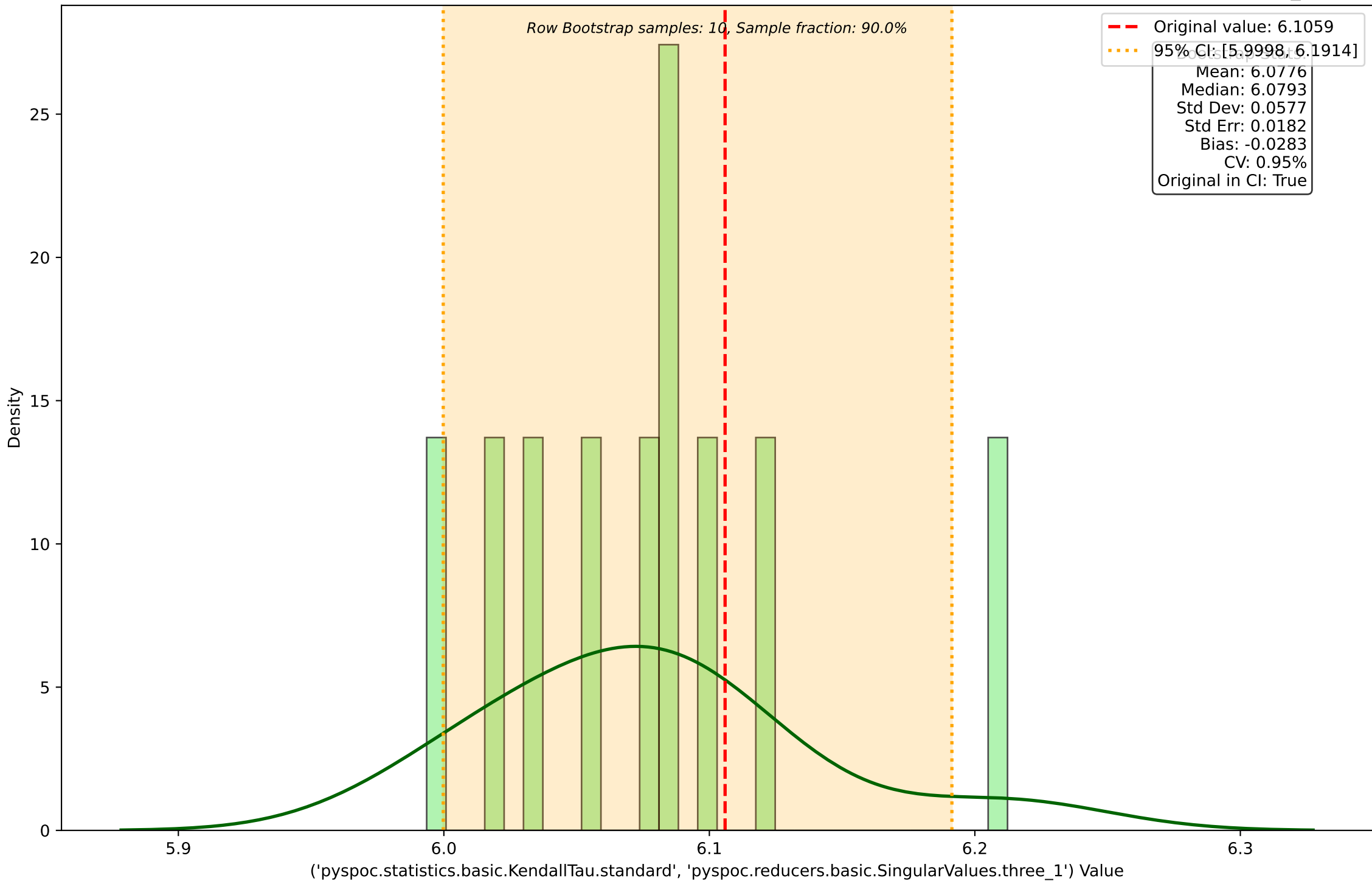
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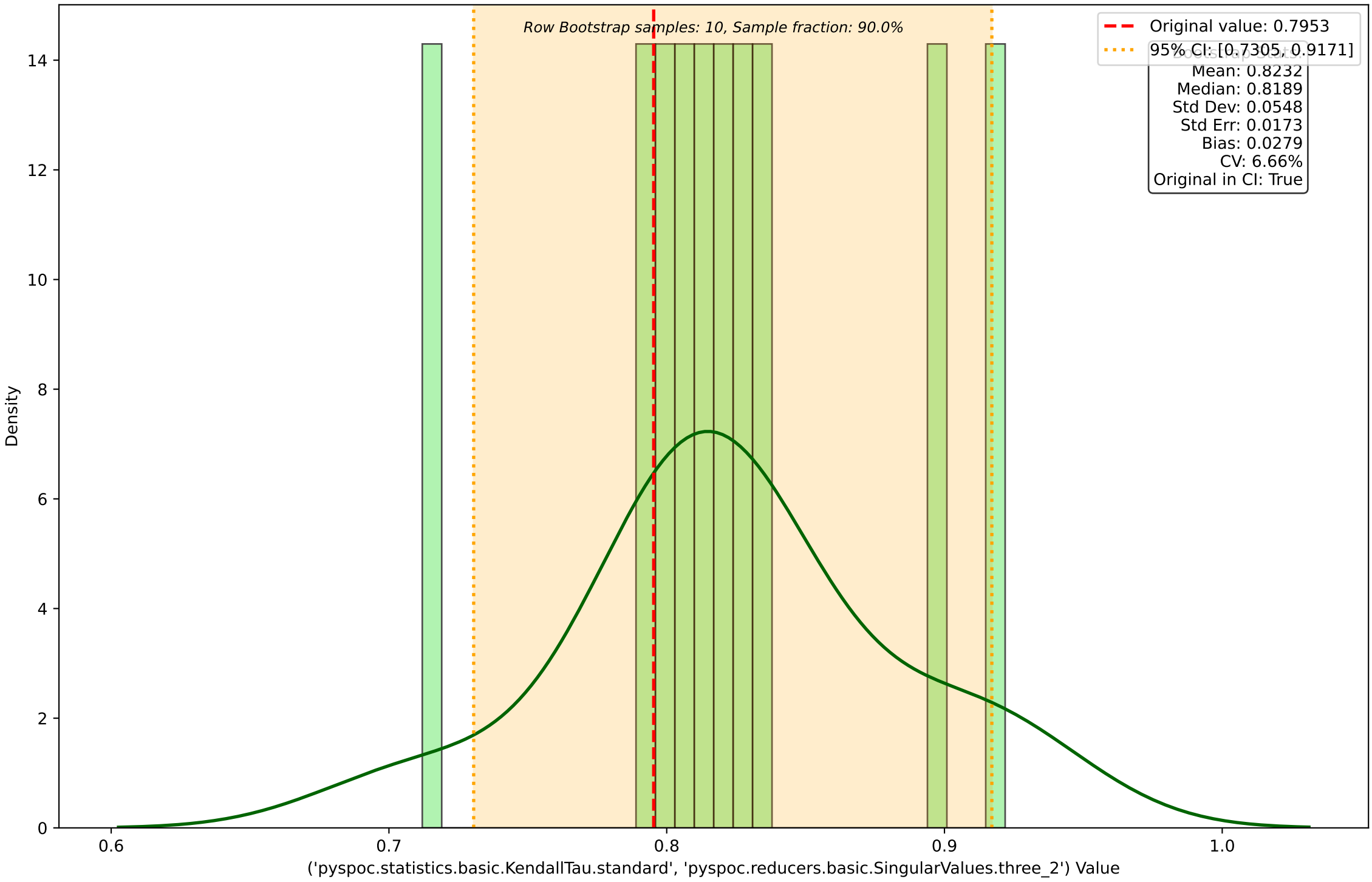
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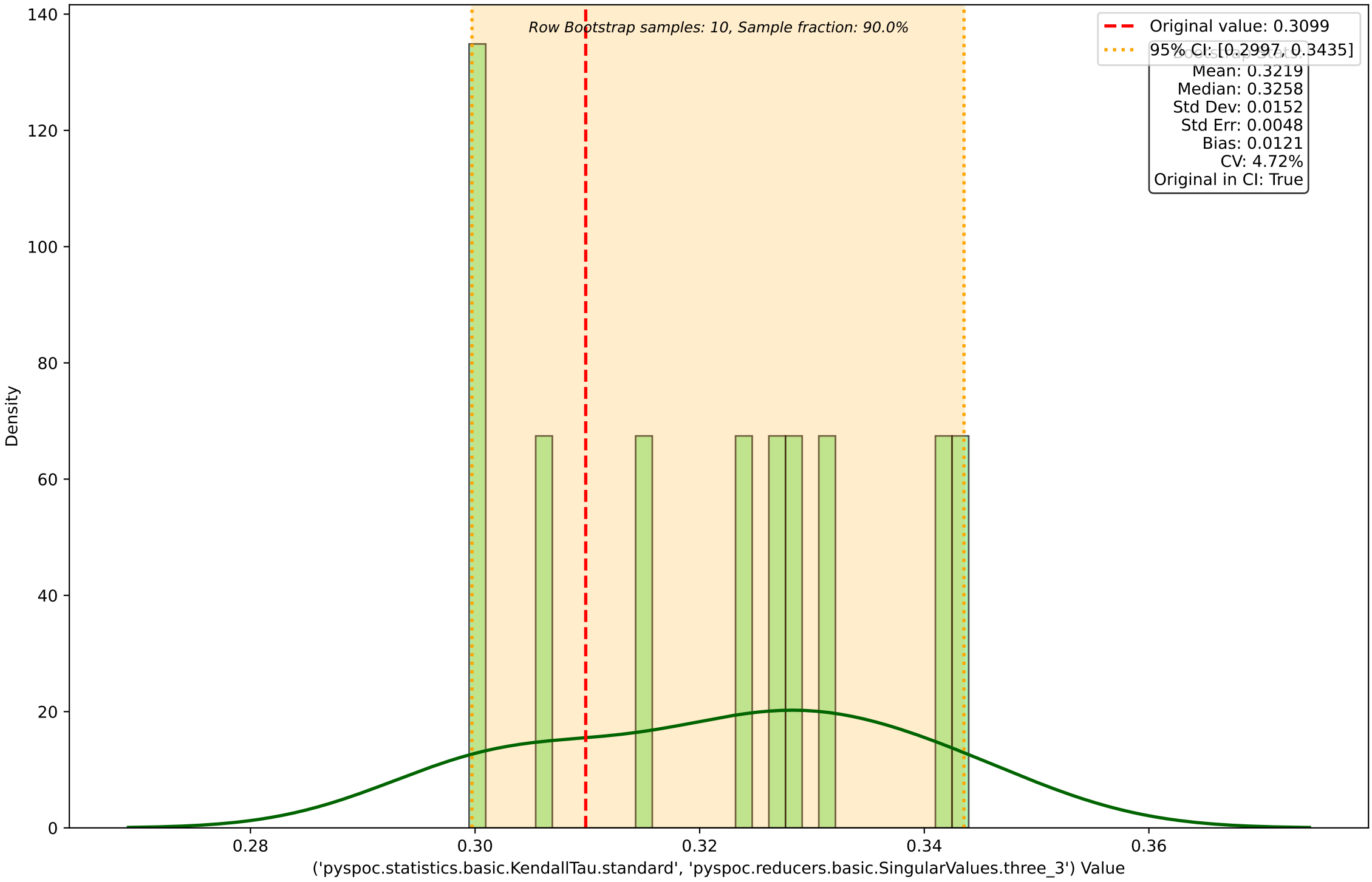
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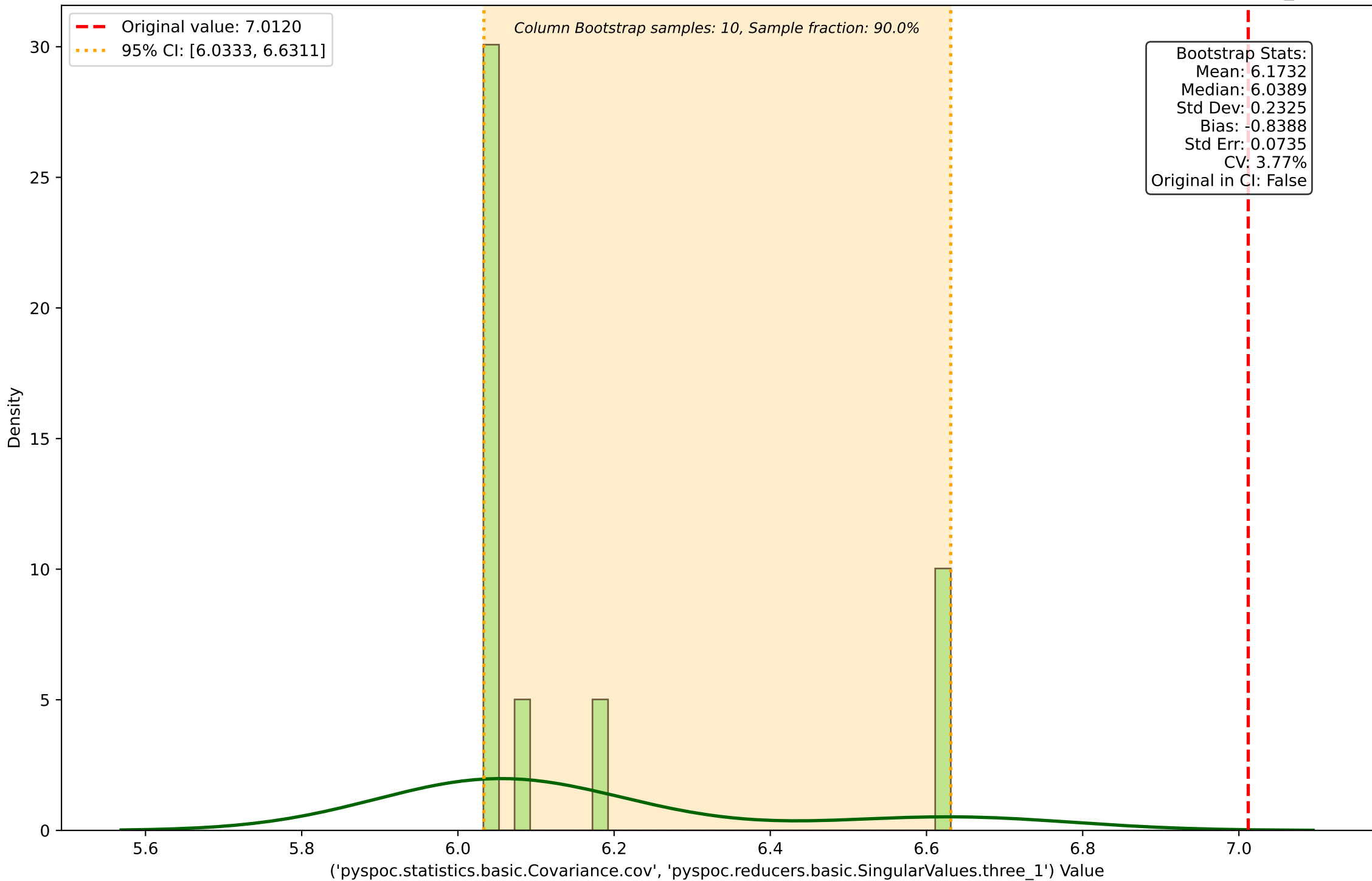
Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_2')



Row Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_3')

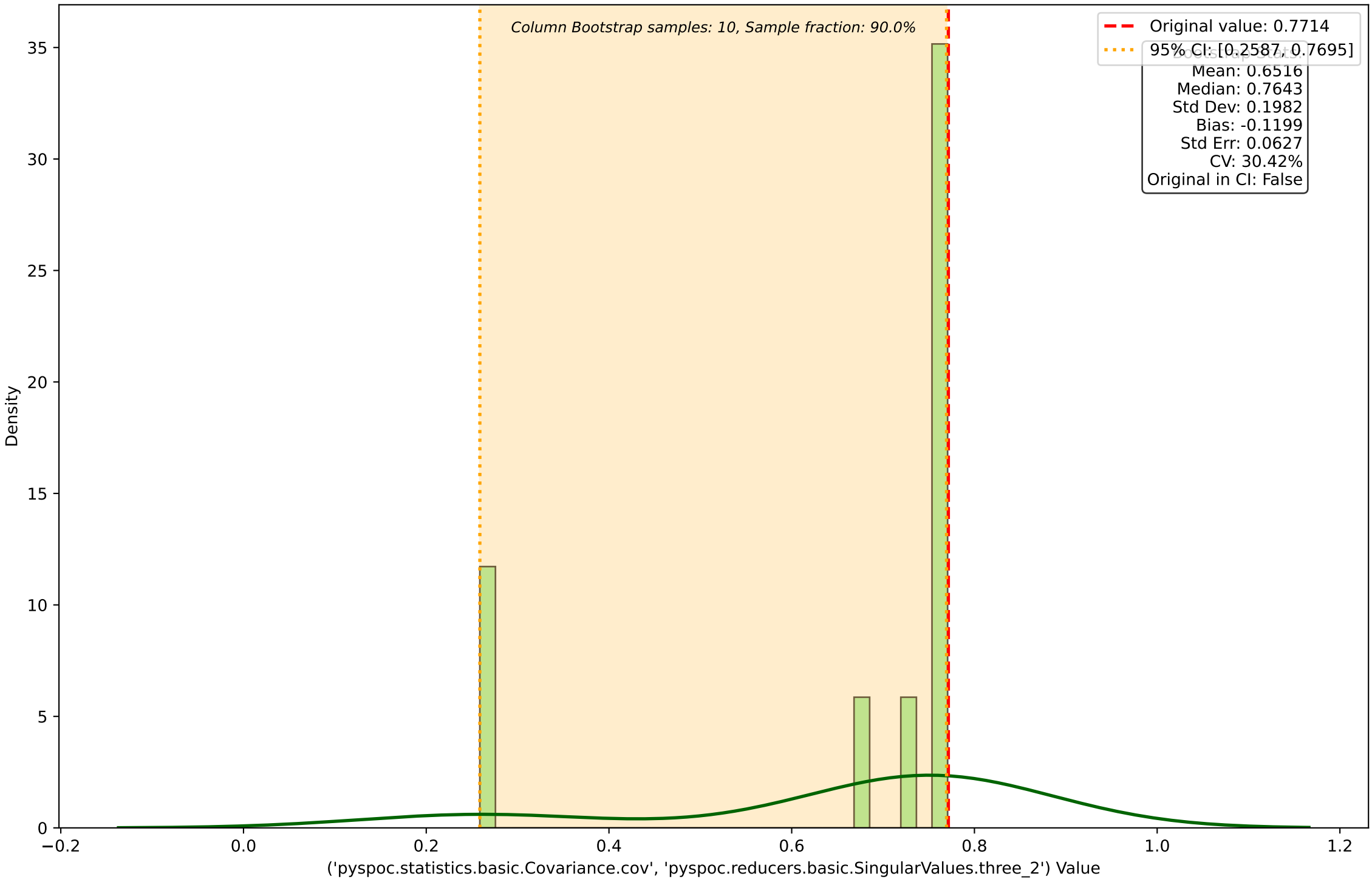


Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_1')

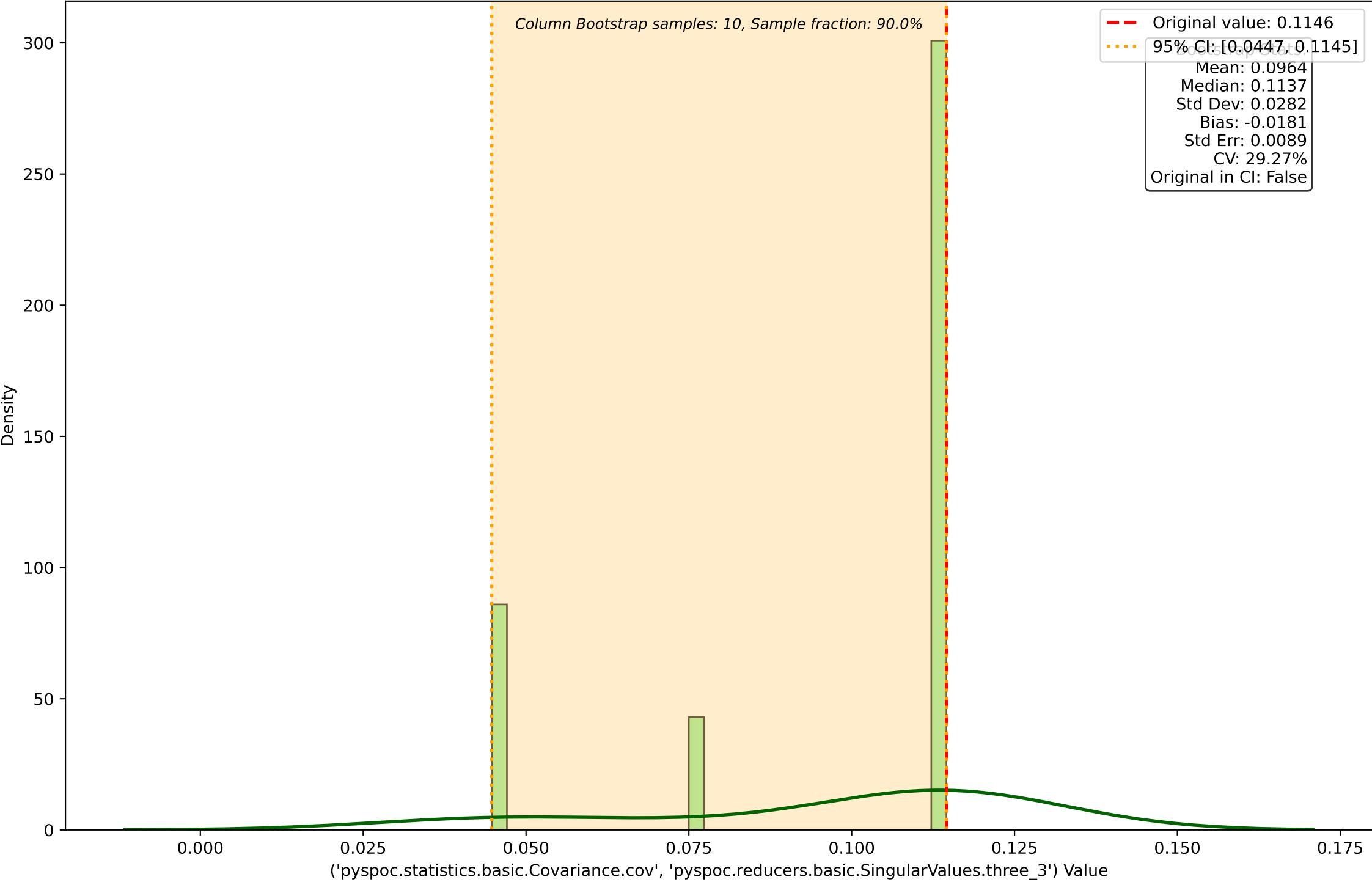


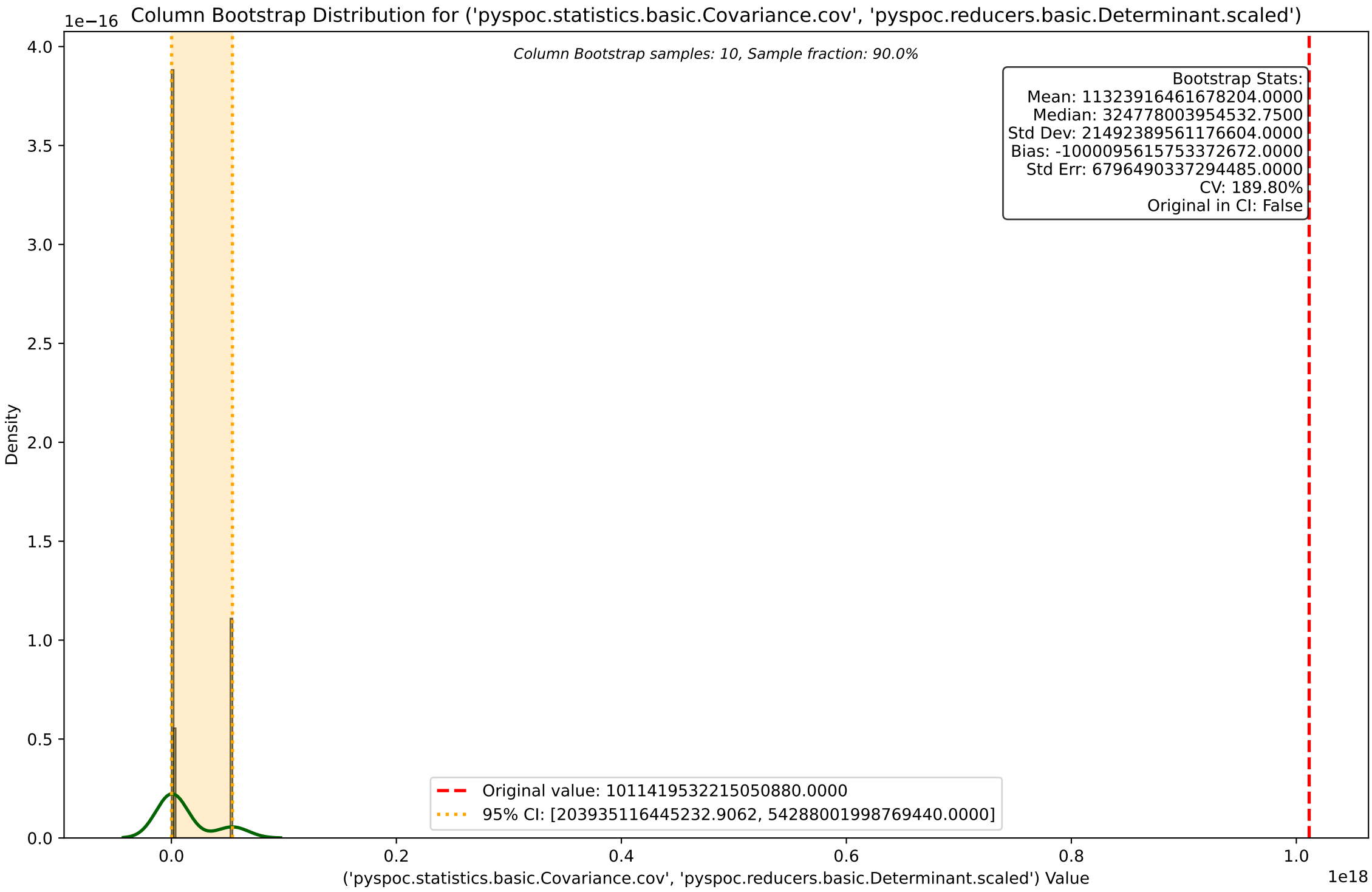


Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_2')

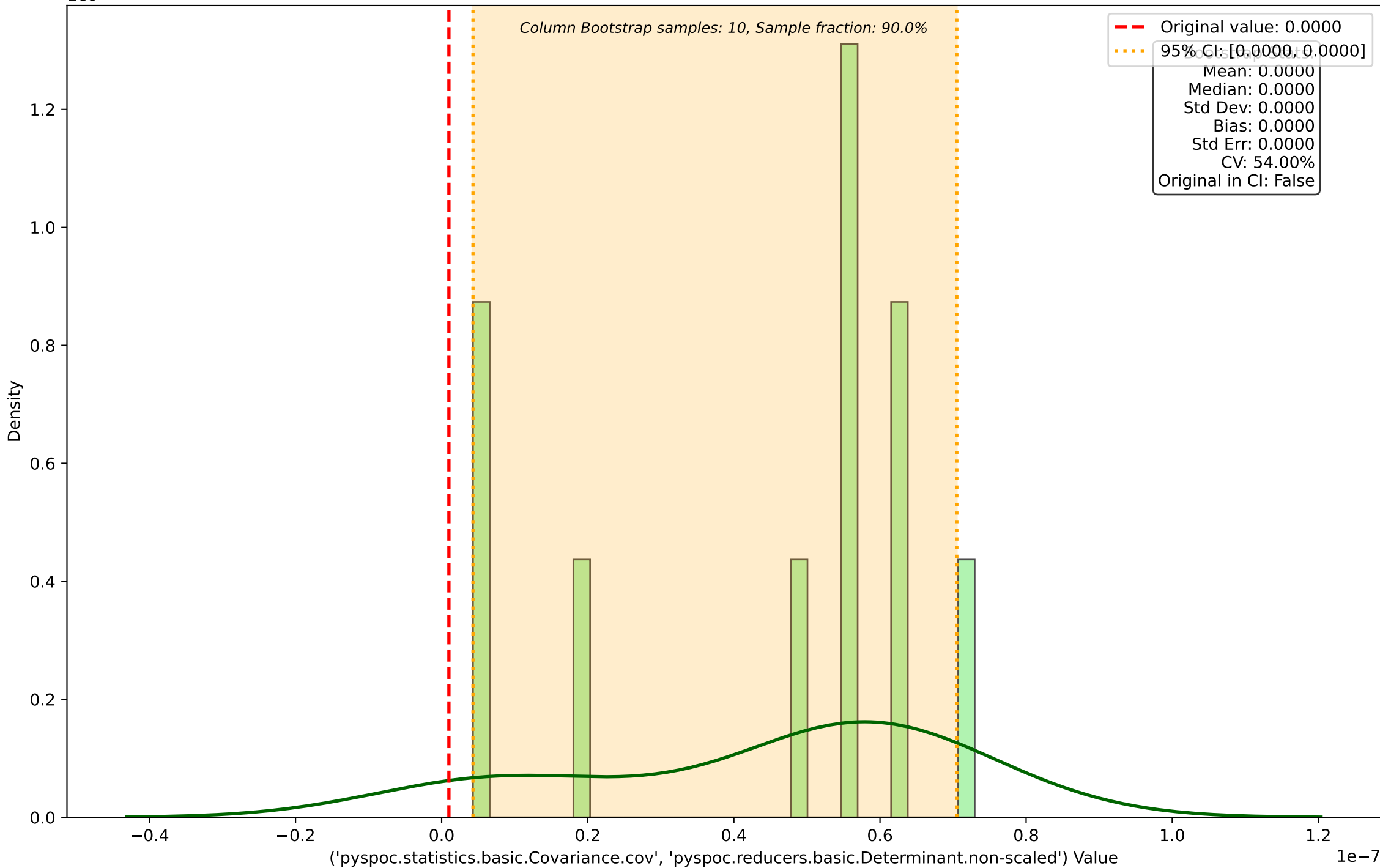


Column Bootstrap Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_3')

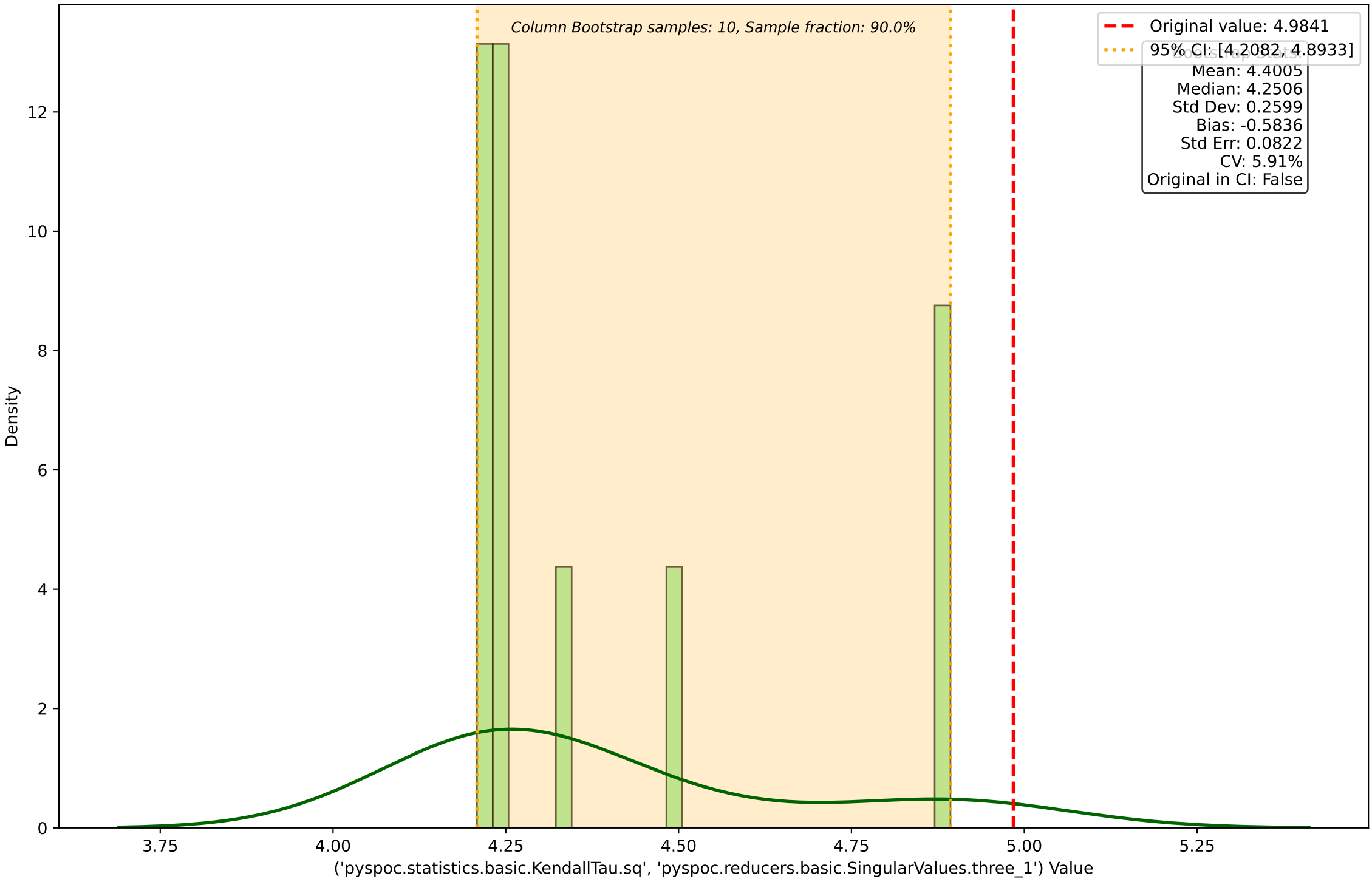




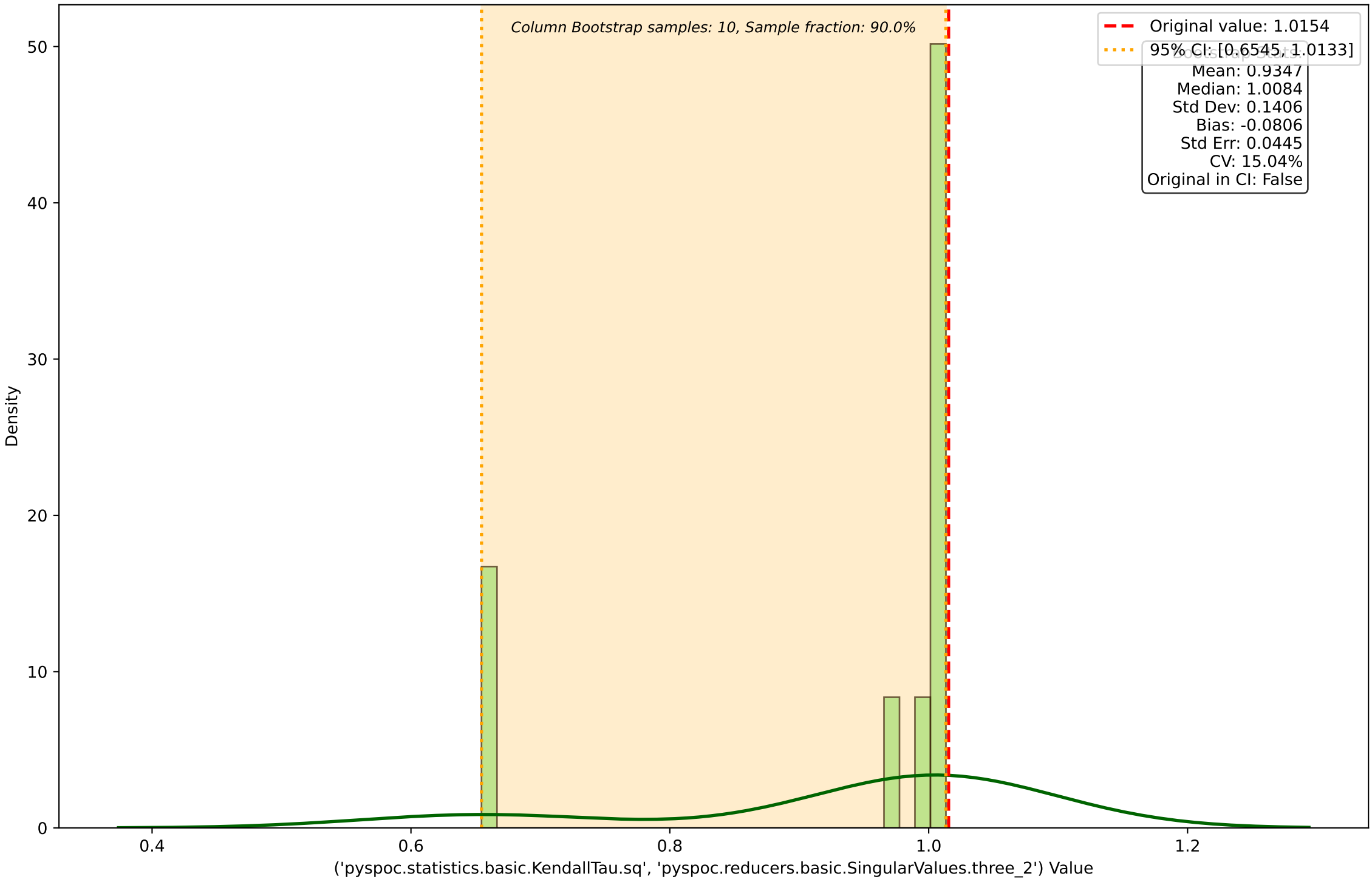
1e8 Column Bootstrap Distribution for ('pypoc.statistics.basic.Covariance.cov', 'pypoc.reducers.basic.Determinant.non-scaled')



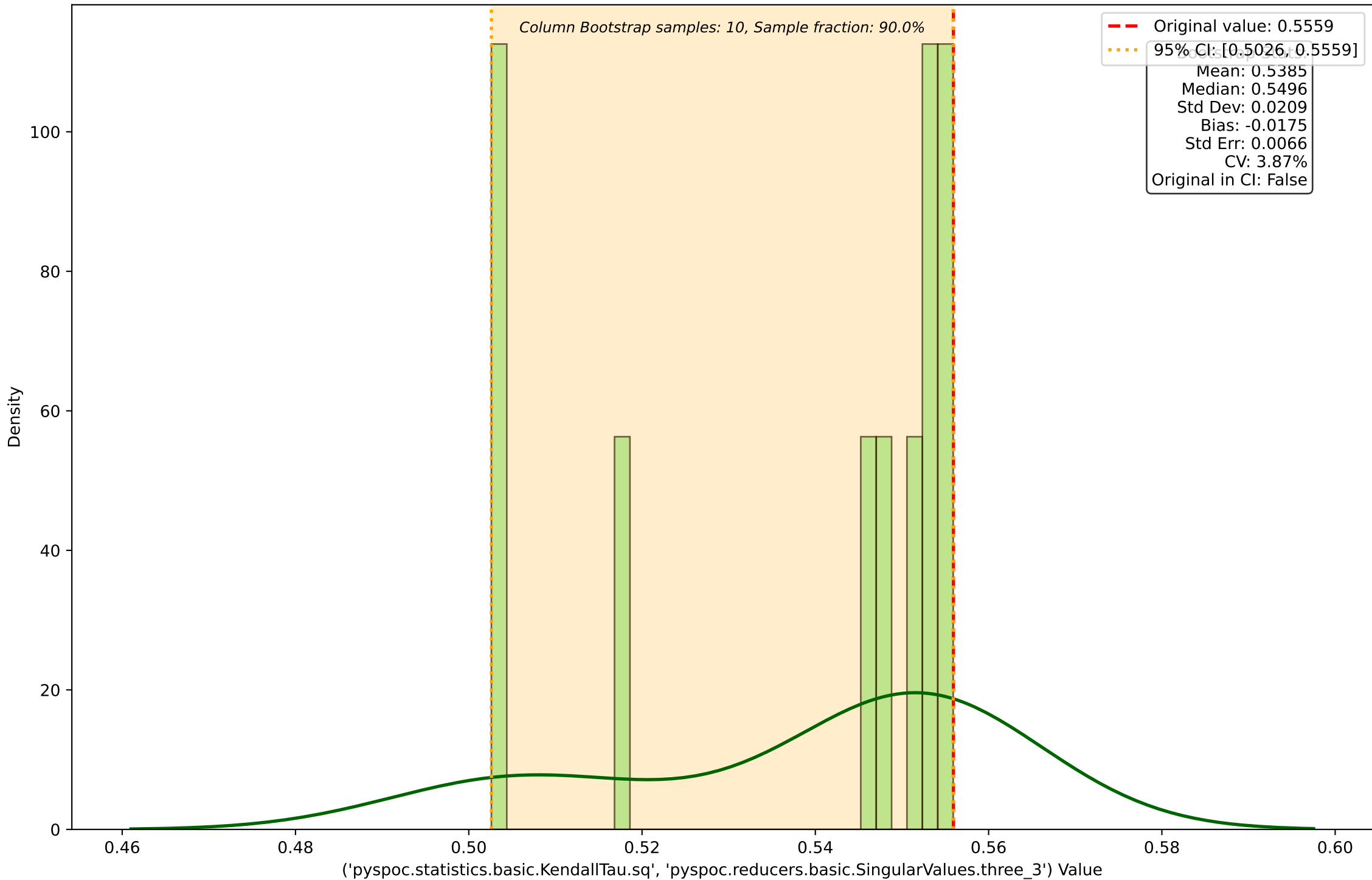
Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.sq', 'pyspoc.reducers.basic.SingularValues.three\_1')



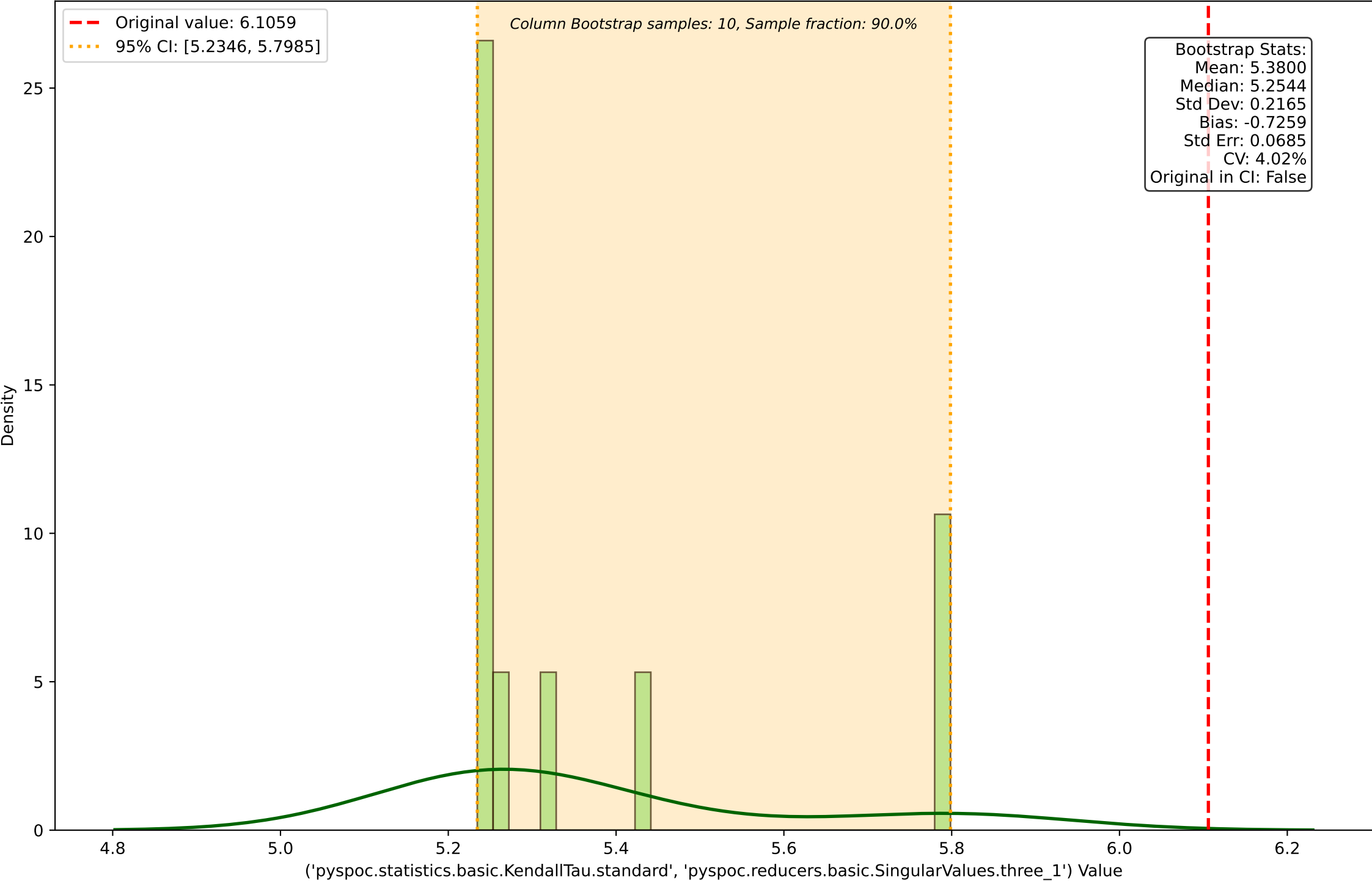
Column Bootstrap Distribution for ('pypoc.statistics.basic.KendallTau.sq', 'pypoc.reducers.basic.SingularValues.three\_2')



Column Bootstrap Distribution for ('pypoc.statistics.basic.KendallTau.sq', 'pypoc.reducers.basic.SingularValues.three\_3')

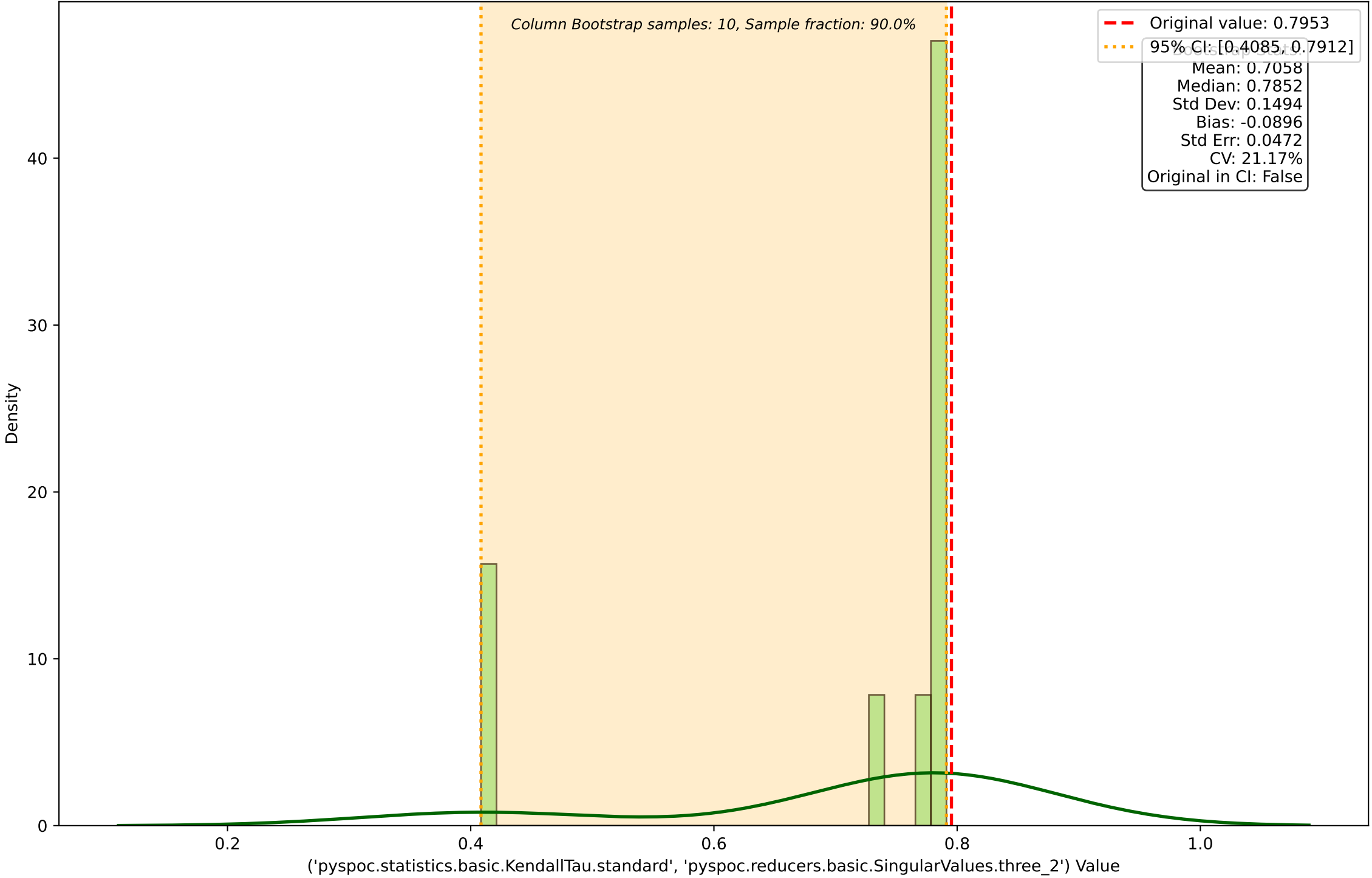


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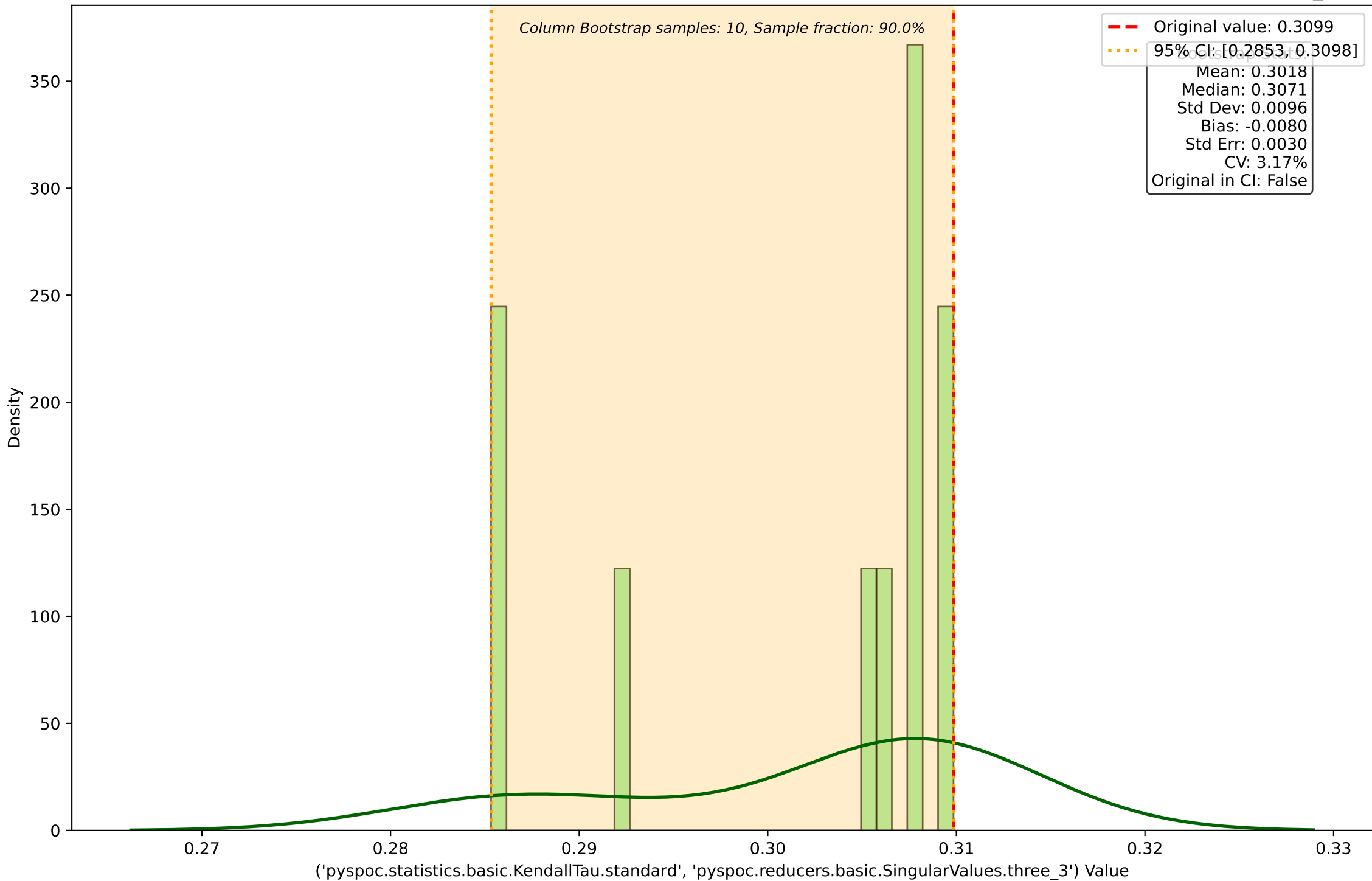




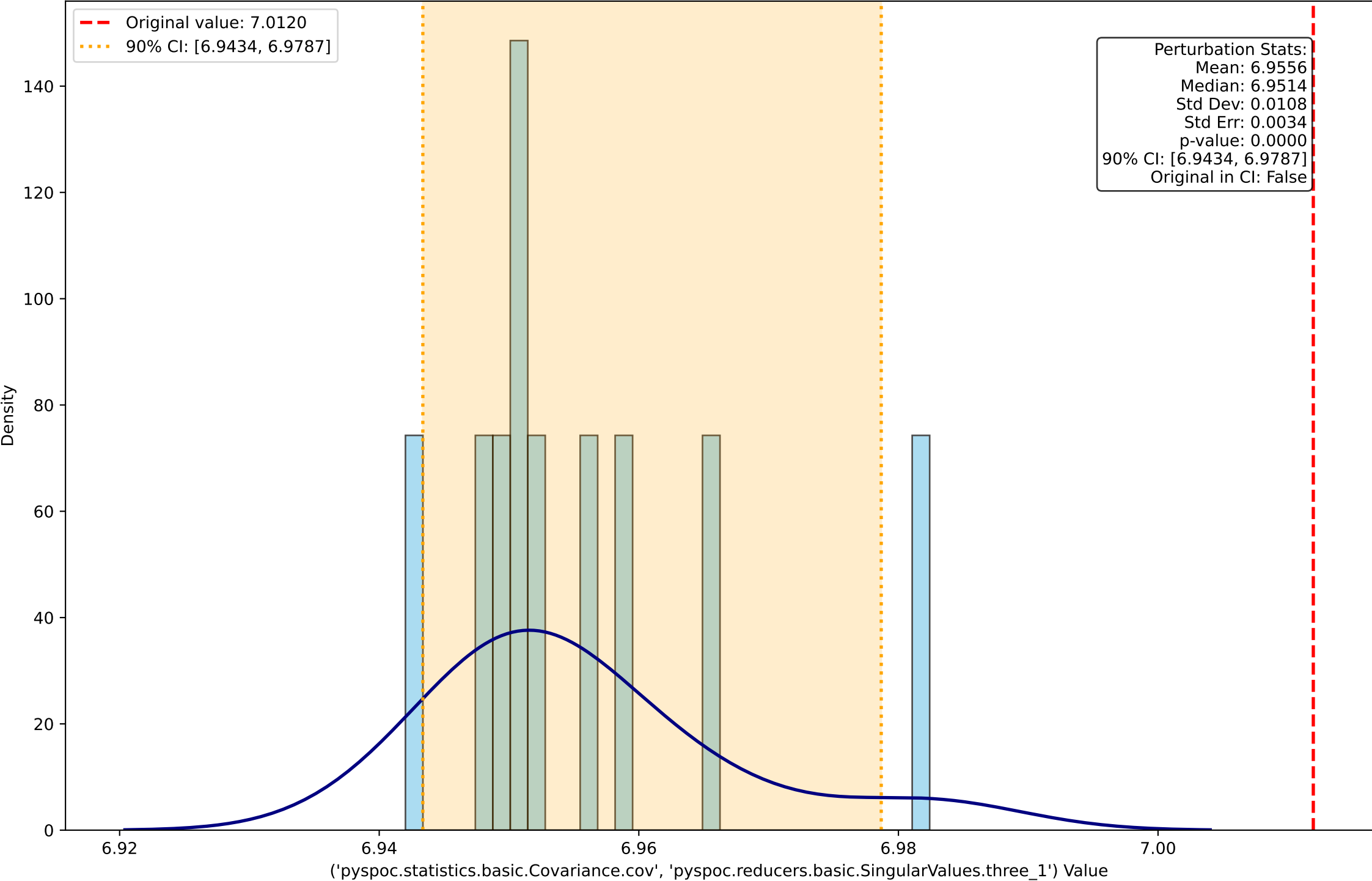
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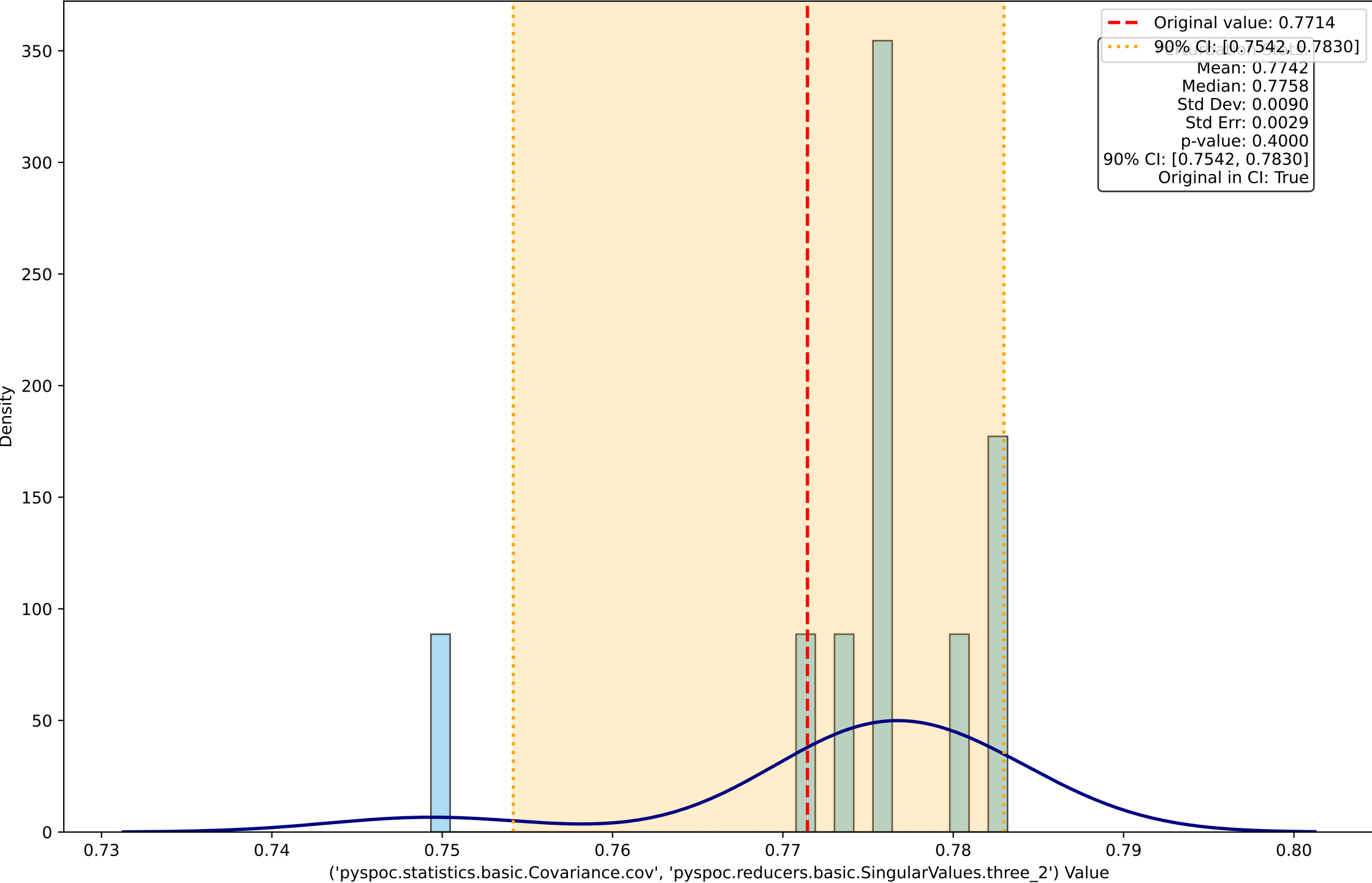
Column Bootstrap Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_3')



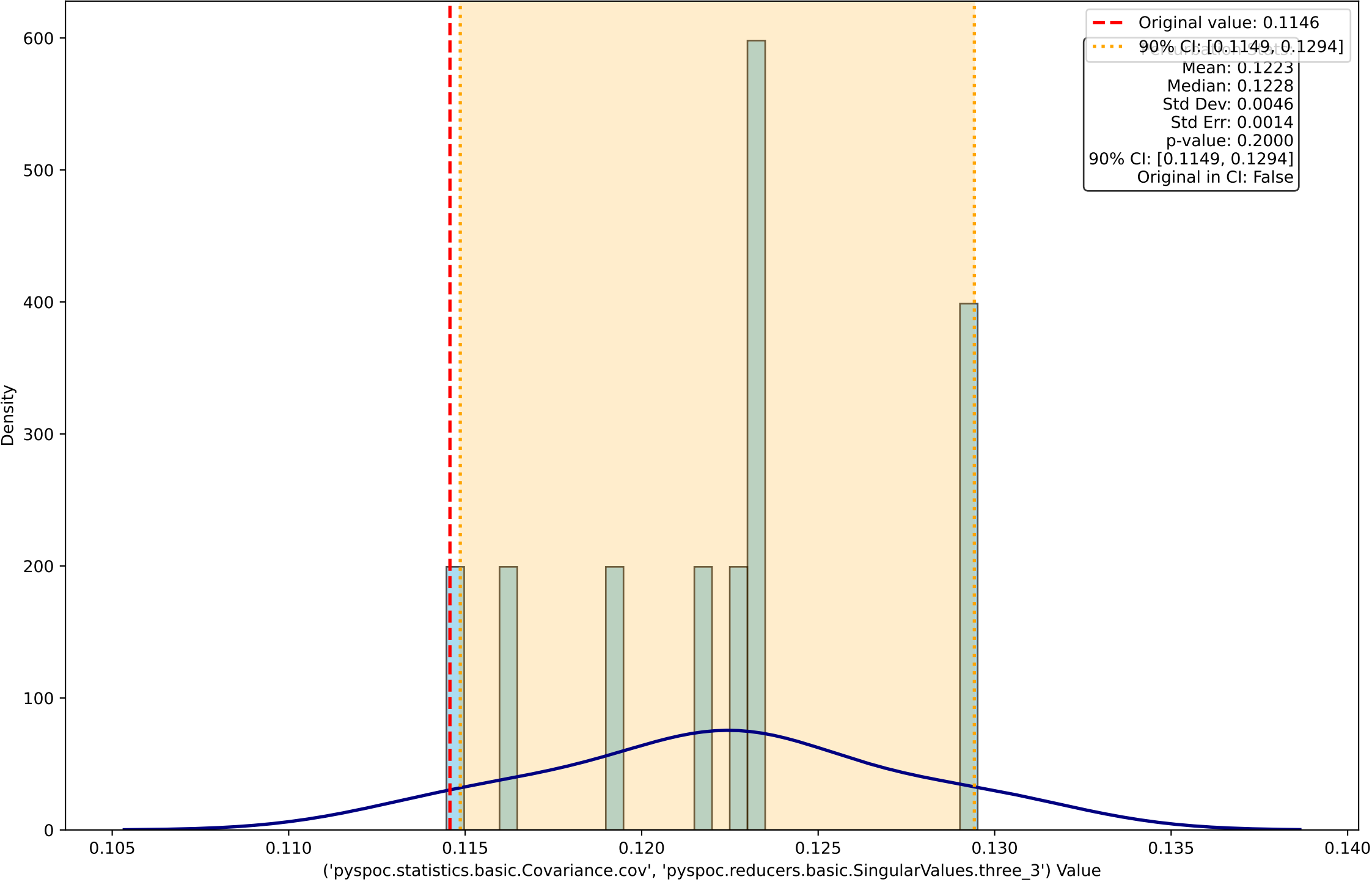
Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_1')

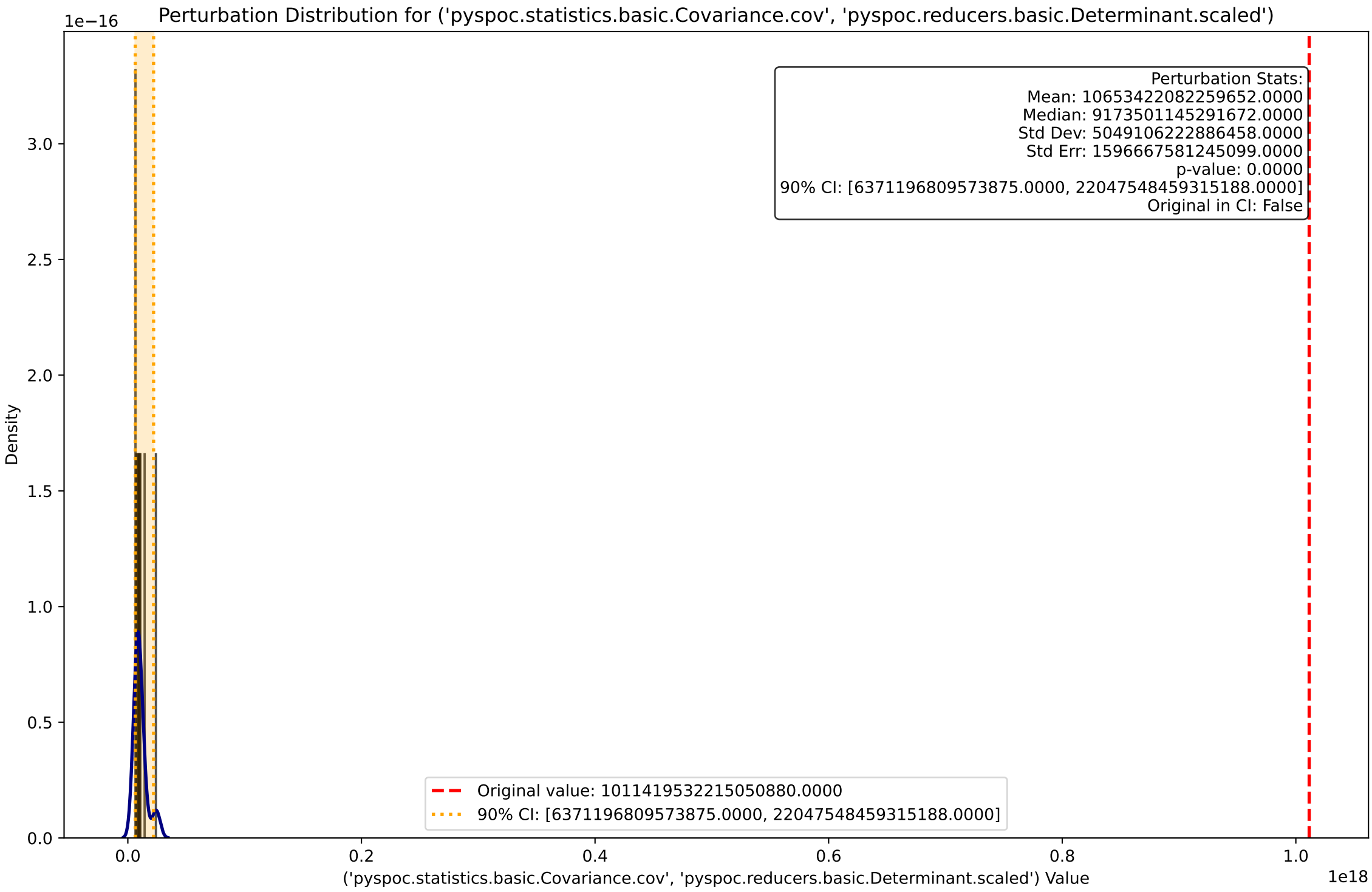


Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.SingularValues.three\_2')

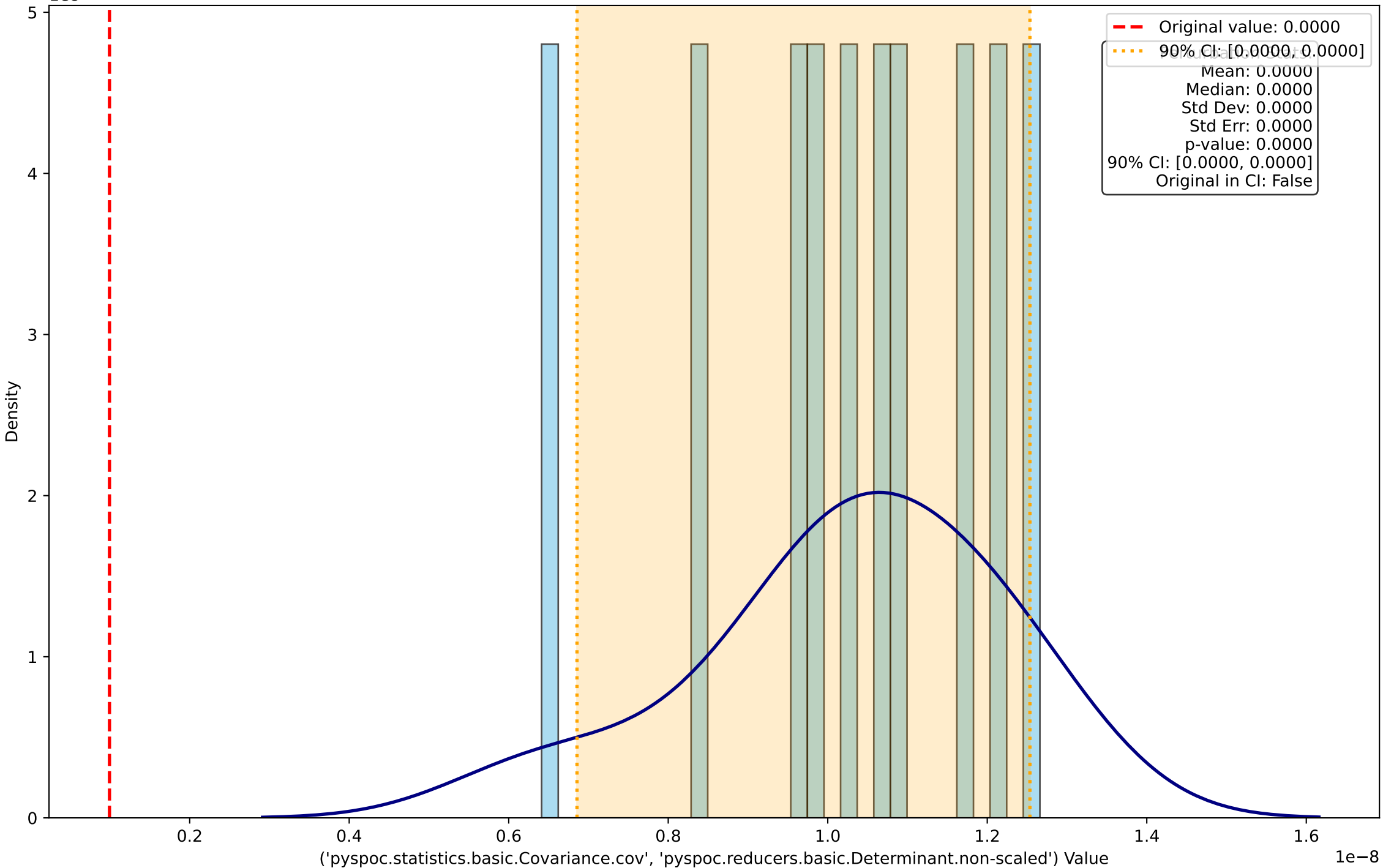


Perturbation Distribution for ('pypoc.statistics.basic.Covariance.cov', 'pypoc.reducers.basic.SingularValues.three\_3')

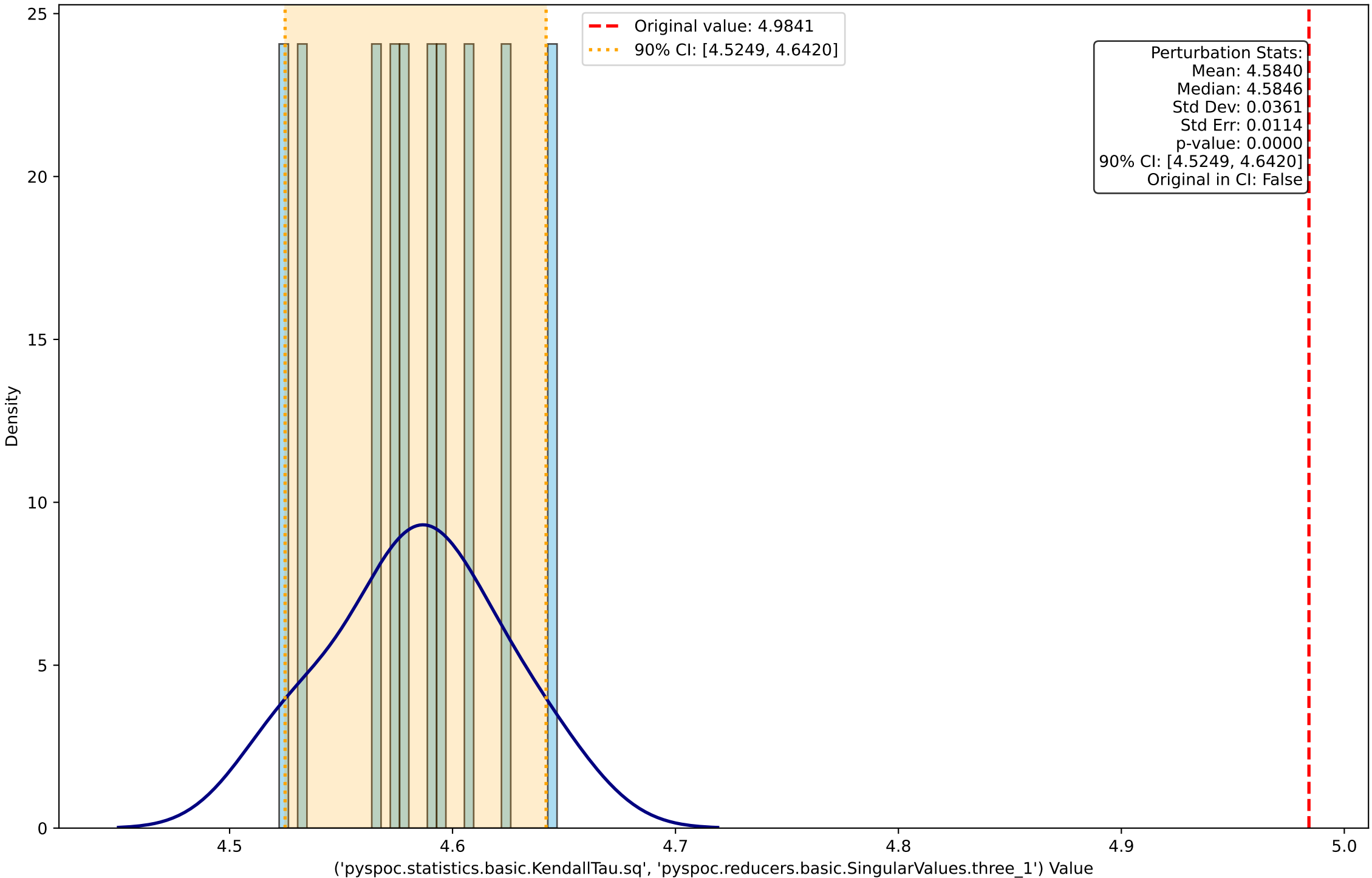




Perturbation Distribution for ('pyspoc.statistics.basic.Covariance.cov', 'pyspoc.reducers.basic.Determinant.non-scaled')

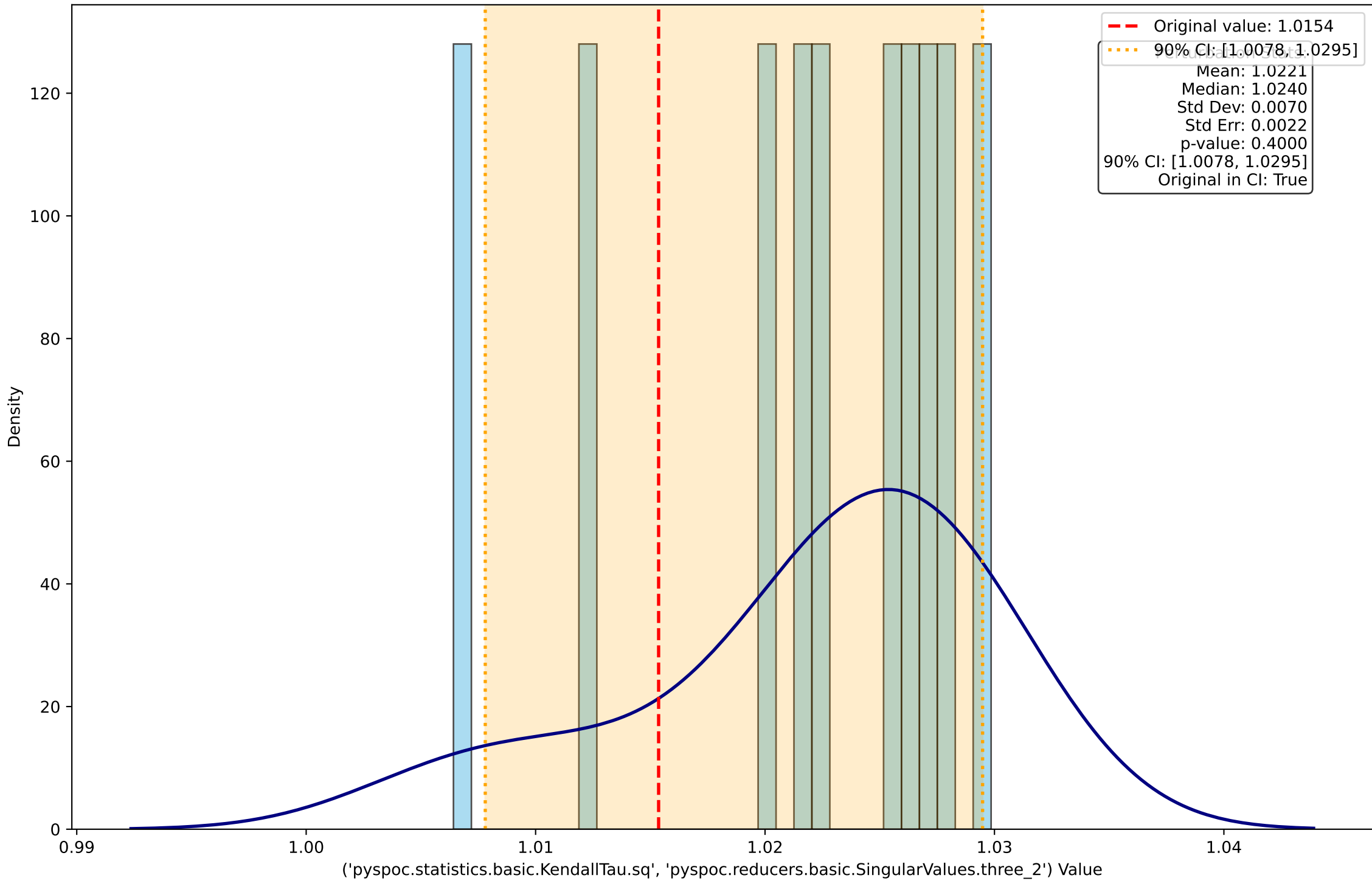


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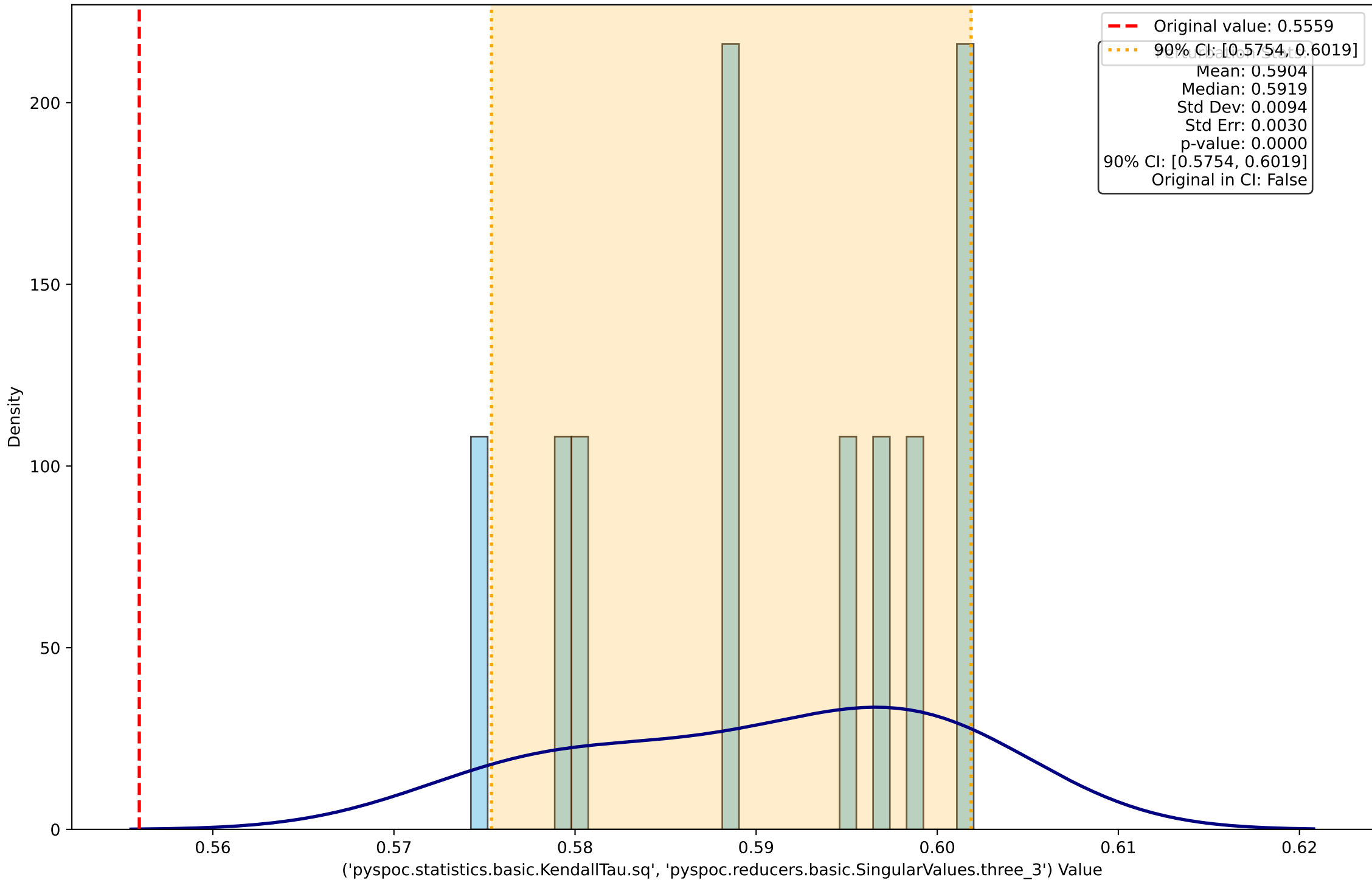




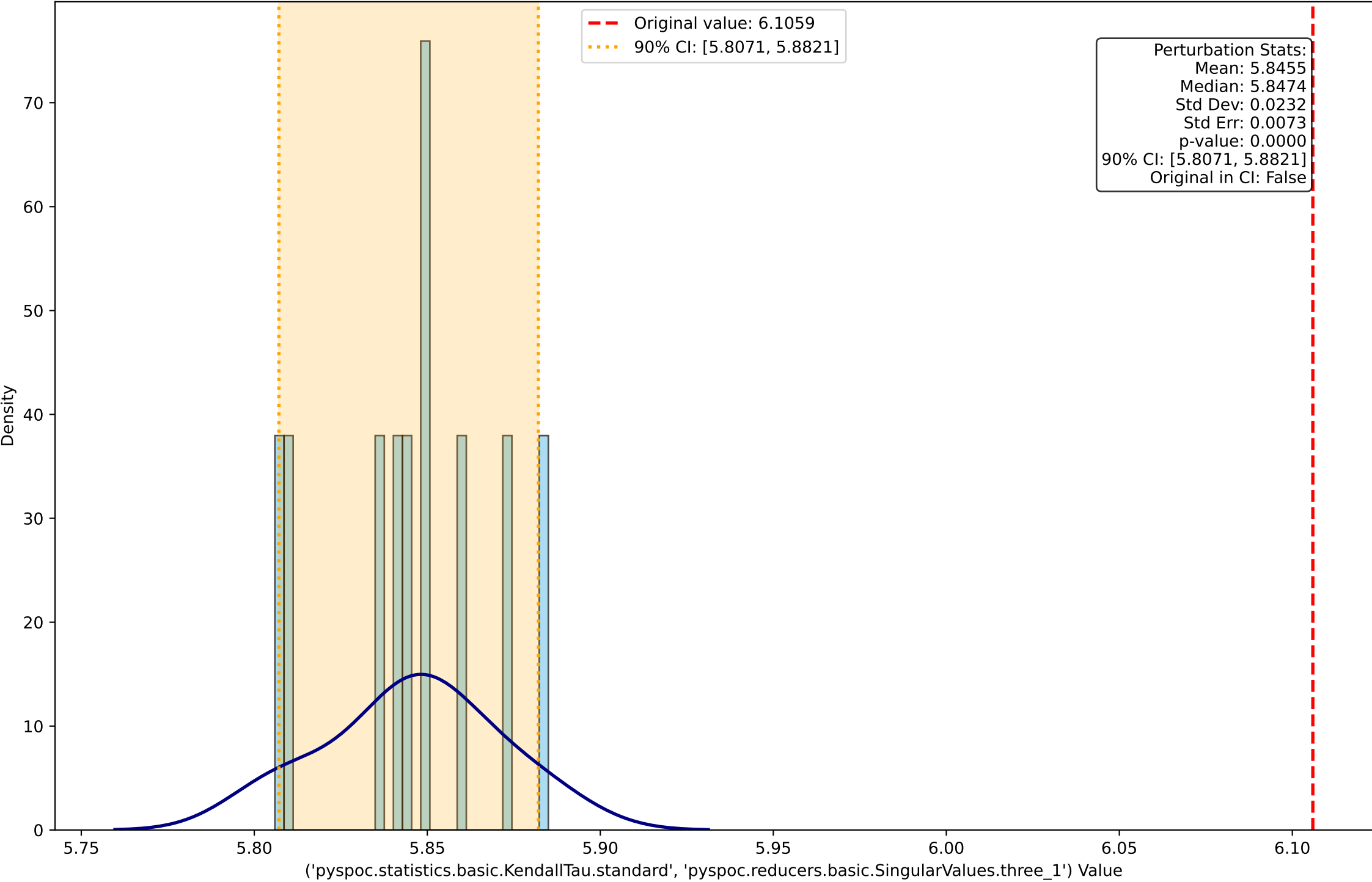
Perturbation Distribution for ('pypoc.statistics.basic.KendallTau.sq', 'pypoc.reducers.basic.SingularValues.three\_2')



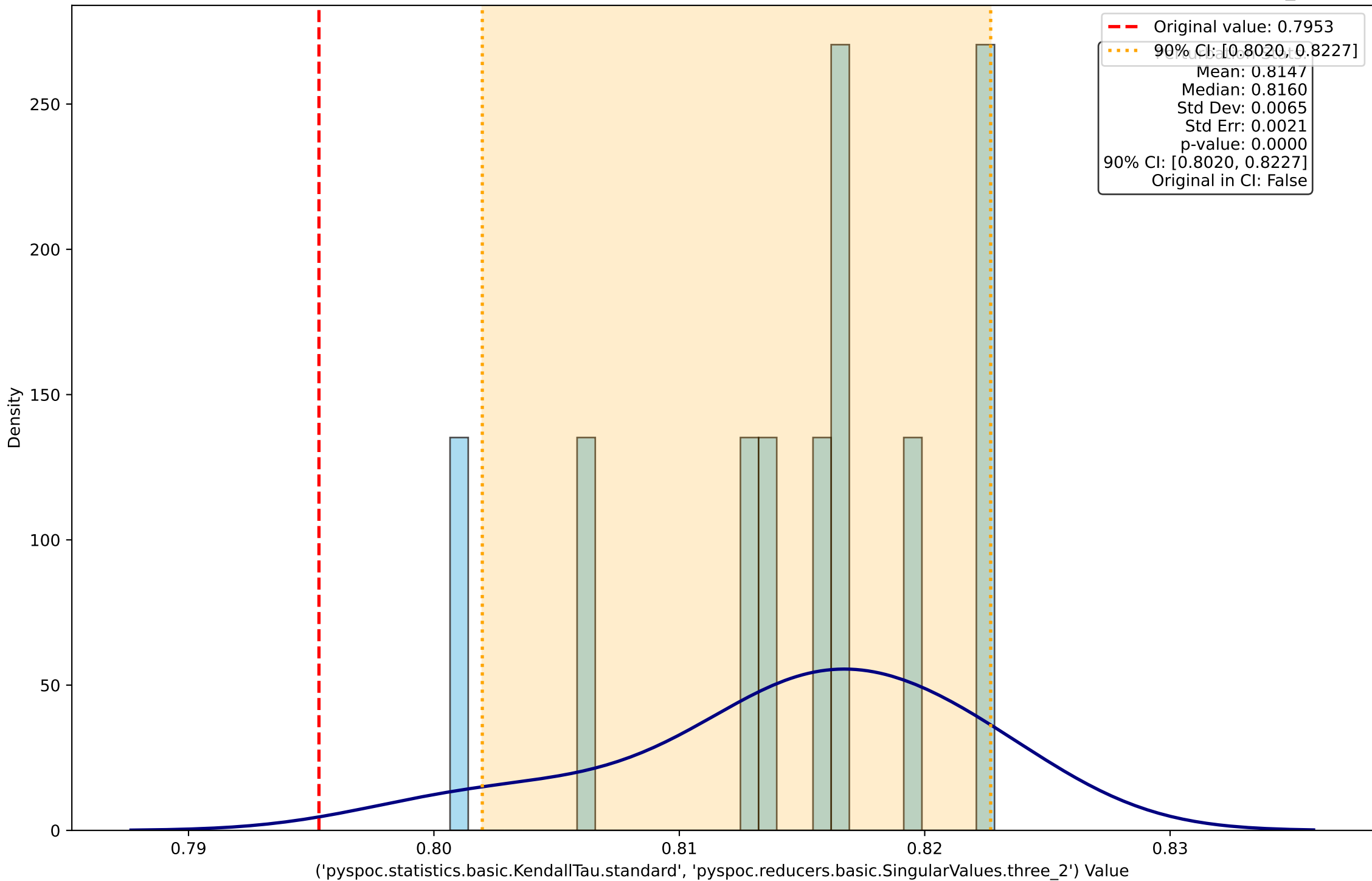
Perturbation Distribution for ('pypoc.statistics.basic.KendallTau.sq', 'pypoc.reducers.basic.SingularValues.three\_3')



Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_1')



Perturbation Distribution for ('pypoc.statistics.basic.KendallTau.standard', 'pypoc.reducers.basic.SingularValues.three\_2')



Perturbation Distribution for ('pyspoc.statistics.basic.KendallTau.standard', 'pyspoc.reducers.basic.SingularValues.three\_3')

