

betaSandwich: External Tests

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Tests

```
#> test-betaSandwich-beta-hc
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#>
#>          est          se          t          p          0.05%          0.5%
#> complaints  0.67072520 0.1082482  6.1961775 2.540602e-06  0.2628863  0.36683611
#> privileges -0.07342743 0.1079619 -0.6801233 5.032154e-01 -0.4801877 -0.37651281
#> learning    0.30887024 0.1259760  2.4518173 2.222714e-02 -0.1657605 -0.04478679
#> raises      0.06981172 0.1211810  0.5760945 5.701462e-01 -0.3867531 -0.27038404
#> critical    0.03119975 0.1228721  0.2539206 8.018131e-01 -0.4317363 -0.31374337
#> advance     -0.18346445 0.1278179 -1.4353577 1.646458e-01 -0.6650347 -0.54229228
#>
#>          2.5%          97.5%          99.5%          99.95%
#> complaints  0.44679669 0.89465371 0.9746143 1.0785641
#> privileges -0.29676370 0.14990884 0.2296580 0.3333328
#> learning    0.04826895 0.56947154 0.6625273 0.7835010
#> raises      -0.18087029 0.32049372 0.4100075 0.5263765
#> critical    -0.22298047 0.28537997 0.3761429 0.4941358
#> advance     -0.44787598 0.08094708 0.1753634 0.2981058
#>
#>          est          se          t          p          0.05%          0.5%
#> complaints  0.67072520 0.1236282  5.4253423 0.0000163422  0.2049404  0.32365940
#> privileges -0.07342743 0.1233012 -0.5955126 0.5573158368 -0.5379804 -0.41957533
#> learning    0.30887024 0.1438748  2.1467991 0.0425858908 -0.2331962 -0.09503455
#> raises      0.06981172 0.1383985  0.5044255 0.6187608687 -0.4516220 -0.31871922
#> critical    0.03119975 0.1403298  0.2223316 0.8260181761 -0.4975105 -0.36275305
#> advance     -0.18346445 0.1459784 -1.2567921 0.2214432791 -0.7334564 -0.59327471
#>
#>          2.5%          97.5%          99.5%          99.95%
#> complaints  0.41498082 0.9264696 1.0177910 1.1365101
#> privileges -0.32849542 0.1816406 0.2727205 0.3911255
#> learning    0.01124259 0.6064979 0.7127750 0.8509367
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#> raises      -0.21648731 0.3561107 0.4583427 0.5912455
#> critical    -0.25909452 0.3214940 0.4251525 0.5599100
#> advance     -0.48544370 0.1185148 0.2263458 0.3665275
#>              est      se      t      p      0.05%      0.5%
#> complaints  0.67072520 0.1289287 5.2022958 2.828169e-05 0.1849700 0.3087791
#> privileges  -0.07342743 0.1298924 -0.5652943 5.773469e-01 -0.5628135 -0.4380790
#> learning     0.30887024 0.1544300 2.0000670 5.743683e-02 -0.2729642 -0.1246665
#> raises       0.06981172 0.1469150 0.4751844 6.391371e-01 -0.4837092 -0.3426280
#> critical     0.03119975 0.1468358 0.2124805 8.336040e-01 -0.5220228 -0.3810176
#> advance     -0.18346445 0.1505436 -1.2186796 2.353187e-01 -0.7506567 -0.6060910
#>              2.5%      97.5%      99.5%      99.95%
#> complaints  0.40401588 0.9374345 1.0326713 1.1564804
#> privileges  -0.34213031 0.1952755 0.2912241 0.4159586
#> learning     -0.01059245 0.6283329 0.7424070 0.8907047
#> raises       -0.23410514 0.3737286 0.4822515 0.6233326
#> critical     -0.27255325 0.3349528 0.4434171 0.5844223
#> advance     -0.49488769 0.1279588 0.2391621 0.3837278
#>              est      se      t      p      0.05%      0.5%
#> complaints  0.67072520 0.1560447 4.2982892 0.0002677147 0.08280705 0.2326554
#> privileges  -0.07342743 0.1593643 -0.4607521 0.6493034784 -0.67385252 -0.5208164
#> learning     0.30887024 0.1954076 1.5806464 0.1276144566 -0.42735248 -0.2397043
#> raises       0.06981172 0.1843445 0.3787025 0.7083820908 -0.62472951 -0.4477051
#> critical     0.03119975 0.1771669 0.1761037 0.8617538415 -0.63629904 -0.4661672
#> advance     -0.18346445 0.1801712 -1.0182783 0.3191381252 -0.86228242 -0.6892656
#>              2.5%      97.5%      99.5%      99.95%
#> complaints  0.34792217 0.9935282 1.1087950 1.2586434
#> privileges  -0.40309753 0.2562427 0.3739616 0.5269977
#> learning     -0.09536107 0.7131016 0.8574448 1.0450930
#> raises       -0.31153391 0.4511573 0.5873286 0.7643529
#> critical     -0.33529792 0.3976974 0.5285667 0.6986985
#> advance     -0.55617704 0.1892481 0.3223367 0.4953535
#>              est      se      t      p      0.05%      0.5%
#> complaints  0.67072520 0.1453437 4.6147514 0.0001215881 0.1231243 0.2626966
#> privileges  -0.07342743 0.1518210 -0.4836449 0.6332106640 -0.6454321 -0.4996398
#> learning     0.30887024 0.1954437 1.5803544 0.1276813392 -0.4274885 -0.2398057
#> raises       0.06981172 0.1856771 0.3759846 0.7103740812 -0.6297501 -0.4514461
#> critical     0.03119975 0.1616663 0.1929885 0.8486619907 -0.5778987 -0.4226519
#> advance     -0.18346445 0.1670209 -1.0984518 0.2833735709 -0.8127370 -0.6523483
#>              2.5%      97.5%      99.5%      99.95%
#> complaints  0.37005878 0.9713916 1.0787539 1.2183262
#> privileges  -0.38749300 0.2406381 0.3527850 0.4985773
#> learning     -0.09543577 0.7131763 0.8575462 1.0452290
#> raises       -0.31429054 0.4539140 0.5910695 0.7693736
#> critical     -0.30323255 0.3656321 0.4850514 0.6402982
#> advance     -0.52897359 0.1620447 0.2854194 0.4458081
#>              est      se      t      p      0.05%      0.5%

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#> complaints 0.67072520 0.1667964 4.0212205 0.0005336592 0.04229852 0.2024716
#> privileges -0.07342743 0.1725885 -0.4254479 0.6744646600 -0.72367665 -0.5579414
#> learning 0.30887024 0.2172358 1.4218201 0.1684980061 -0.50959322 -0.3009836
#> raises 0.06981172 0.2025307 0.3446969 0.7334542920 -0.69324842 -0.4987600
#> critical 0.03119975 0.1893406 0.1647811 0.8705559500 -0.68216491 -0.5003428
#> advance -0.18346445 0.1905520 -0.9628053 0.3456594482 -0.90139321 -0.7184078
#>          2.5%    97.5%    99.5%    99.95%
#> complaints 0.3256805 1.0157699 1.1389788 1.2991519
#> privileges -0.4304540 0.2835992 0.4110866 0.5768218
#> learning -0.1405163 0.7582568 0.9187241 1.1273337
#> raises -0.3491550 0.4887784 0.6383834 0.8328719
#> critical -0.3604811 0.4228806 0.5627423 0.7445644
#> advance -0.5776513 0.2107224 0.3514789 0.5344643
#>          est      se      t      p      0.05%      0.5%
#> complaints 0.67072520 0.1234665 5.4324453 1.606024e-05 0.2055494 0.3241132
#> privileges -0.07342743 0.1251745 -0.5866004 5.631859e-01 -0.5450383 -0.4248344
#> learning 0.30887024 0.1520500 2.0313731 5.392855e-02 -0.2639973 -0.1179851
#> raises 0.06981172 0.1445709 0.4828892 6.337390e-01 -0.4748774 -0.3360472
#> critical 0.03119975 0.1395534 0.2235685 8.250669e-01 -0.4945854 -0.3605735
#> advance -0.18346445 0.1439233 -1.2747376 2.151303e-01 -0.7257138 -0.5875055
#>          2.5%    97.5%    99.5%    99.95%
#> complaints 0.415315214 0.9261352 1.0173372 1.1359010
#> privileges -0.332370670 0.1855158 0.2779795 0.3981835
#> learning -0.005669106 0.6234096 0.7357256 0.8817378
#> raises -0.229255912 0.3688793 0.4756707 0.6145008
#> critical -0.257488482 0.3198880 0.4229730 0.5569849
#> advance -0.481192497 0.1142636 0.2205766 0.3587849
#> test-external-betaSandwich-beta-mvn
#> Test passed
#> Test passed
#>          est      se      t      p      0.05%      0.5%
#> complaints 0.67072520 0.1432881 4.6809545 0.0001030949 0.1308690 0.26846733
#> privileges -0.07342743 0.1196668 -0.6135989 0.5455016623 -0.5242873 -0.40937234
#> learning 0.30887024 0.1431252 2.1580422 0.0416047589 -0.2303721 -0.09293027
#> raises 0.06981172 0.1656987 0.4213173 0.6774347660 -0.5544790 -0.39536008
#> critical 0.03119975 0.1046937 0.2980099 0.7683710623 -0.3632469 -0.26271051
#> advance -0.18346445 0.1337535 -1.3716605 0.1834027121 -0.6873979 -0.55895555
#>          2.5%    97.5%    99.5%    99.95%
#> complaints 0.37431113 0.96713928 1.0729831 1.2105814
#> privileges -0.32097709 0.17412223 0.2625175 0.3774325
#> learning 0.01279319 0.60494730 0.7106708 0.8481126
#> raises -0.27296210 0.41258553 0.5349835 0.6941025
#> critical -0.18537560 0.24777510 0.3251100 0.4256464
#> advance -0.46015474 0.09322584 0.1920266 0.3204690
#> [[1]]

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#> [[1]][[1]]
#> [[1]][[1]]$value
#> [[1]][[1]]$value[[1]]
#>               est           se           t           p           0.05%           0.5%
#> complaints  0.67072520 0.1234665  5.4324453 1.606024e-05 0.2055494 0.3241132
#> privileges -0.07342743 0.1251745 -0.5866004 5.631859e-01 -0.5450383 -0.4248344
#> learning    0.30887024 0.1520500  2.0313731 5.392855e-02 -0.2639973 -0.1179851
#> raises      0.06981172 0.1445709  0.4828892 6.337390e-01 -0.4748774 -0.3360472
#> critical    0.03119975 0.1395534  0.2235685 8.250669e-01 -0.4945854 -0.3605735
#> advance     -0.18346445 0.1439233 -1.2747376 2.151303e-01 -0.7257138 -0.5875055
#>               2.5%          97.5%          99.5%          99.95%
#> complaints  0.415315214 0.9261352 1.0173372 1.1359010
#> privileges -0.332370670 0.1855158 0.2779795 0.3981835
#> learning    -0.005669106 0.6234096 0.7357256 0.8817378
#> raises      -0.229255912 0.3688793 0.4756707 0.6145008
#> critical    -0.257488482 0.3198880 0.4229730 0.5569849
#> advance     -0.481192497 0.1142636 0.2205766 0.3587849
#>
#>
#> [[1]][[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[2]]
#> [[1]][[2]]$value
#> [[1]][[2]]$value[[1]]
#>               est           se           t           p           0.05%           0.5%
#> complaints  0.67072520 0.1432881  4.6809545 0.0001030949 0.1308690 0.26846733
#> privileges -0.07342743 0.1196668 -0.6135989 0.5455016623 -0.5242873 -0.40937234
#> learning    0.30887024 0.1431252  2.1580422 0.0416047589 -0.2303721 -0.09293027
#> raises      0.06981172 0.1656987  0.4213173 0.6774347660 -0.5544790 -0.39536008
#> critical    0.03119975 0.1046937  0.2980099 0.7683710623 -0.3632469 -0.26271051
#> advance     -0.18346445 0.1337535 -1.3716605 0.1834027121 -0.6873979 -0.55895555
#>               2.5%          97.5%          99.5%          99.95%
#> complaints  0.37431113 0.96713928 1.0729831 1.2105814
#> privileges -0.32097709 0.17412223 0.2625175 0.3774325
#> learning    0.01279319 0.60494730 0.7106708 0.8481126
#> raises      -0.27296210 0.41258553 0.5349835 0.6941025
#> critical    -0.18537560 0.24777510 0.3251100 0.4256464
#> advance     -0.46015474 0.09322584 0.1920266 0.3204690
#>
#>
#> [[1]][[2]]$visible
#> [1] TRUE

```

Environment

```
ls()  
#> [1] "i"      "root"   "tex_file"
```

Class

```
#> [[1]]  
#> [1] "character"  
#>  
#> [[2]]  
#> [1] "root_criterion"  
#>  
#> [[3]]  
#> [1] "character"
```

References

R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. <https://www.R-project.org/>