

semmcci: Internal Tests

Ivan Jacob Agaloos Pesigan

Tests

```
#> test-semmcci-mc-latent-med-defined-none
#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-defined

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-std-defined-none

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-latent-med-std-defined

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined-equality

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined-inequality
```

```

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined-none

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-defined

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none-random-x

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-simple-med-std-defined

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mc-methods

#> Monte Carlo Confidence Intervals
#>
#>      est      se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x2    0.5535 0.1038 100 0.2569 0.2718 0.3115 0.7273 0.7682 0.7801
#> visual=~x3    0.7294 0.1025 100 0.4512 0.4673 0.5210 0.9148 0.9359 0.9411
#> textual=~x5    1.1131 0.0665 100 0.9383 0.9554 0.9868 1.2475 1.2660 1.2732
#> textual=~x6    0.9261 0.0495 100 0.8288 0.8304 0.8391 1.0327 1.0555 1.0645
#> speed=~x8     1.1800 0.1683 100 0.7761 0.7961 0.8324 1.4817 1.5984 1.6622
#> speed=~x9     1.0815 0.1693 100 0.6298 0.6547 0.7586 1.3783 1.5034 1.5576

```

```

#> x1~~x1      0.5491 0.1125 100 0.2256 0.2381 0.3178 0.7079 0.7624 0.7706
#> x2~~x2      1.1338 0.0887 100 0.9037 0.9207 0.9527 1.3015 1.3129 1.3154
#> x3~~x3      0.8443 0.0856 100 0.6154 0.6521 0.7143 1.0313 1.0914 1.1016
#> x4~~x4      0.3712 0.0558 100 0.2231 0.2386 0.2643 0.4616 0.4961 0.5149
#> x5~~x5      0.4463 0.0609 100 0.2719 0.2881 0.3242 0.5560 0.6163 0.6292
#> x6~~x6      0.3562 0.0434 100 0.2436 0.2481 0.2747 0.4401 0.4621 0.4686
#> x7~~x7      0.7994 0.0800 100 0.6047 0.6076 0.6375 0.9513 0.9740 0.9777
#> x8~~x8      0.4877 0.0689 100 0.3444 0.3449 0.3632 0.6204 0.6399 0.6507
#> x9~~x9      0.5661 0.0680 100 0.3585 0.3805 0.4320 0.6575 0.7357 0.7707
#> visual~~visual 0.8093 0.1388 100 0.5387 0.5506 0.5662 1.1172 1.2236 1.2619
#> textual~~textual 0.9795 0.1101 100 0.7738 0.7744 0.8030 1.2205 1.3133 1.3830
#> speed~~speed   0.3837 0.0984 100 0.1975 0.2020 0.2098 0.6088 0.6392 0.6446
#> visual~~textual 0.4082 0.0711 100 0.2358 0.2375 0.2899 0.5572 0.5965 0.6084
#> visual~~speed   0.2622 0.0615 100 0.1148 0.1218 0.1395 0.3891 0.4218 0.4294
#> textual~~speed   0.1735 0.0530 100 0.0258 0.0413 0.0791 0.2618 0.2921 0.2937
#> Standardized Monte Carlo Confidence Intervals
#>           est      se    R 0.05%   0.5%   2.5% 97.5% 99.5% 99.95%
#> visual=~x2      0.4236 0.0613 100 0.2099 0.2152 0.2898 0.5204 0.5431 0.5538
#> visual=~x3      0.5811 0.0536 100 0.4535 0.4578 0.4646 0.6765 0.6924 0.6985
#> textual=~x5      0.8551 0.0246 100 0.7739 0.7794 0.8003 0.9019 0.9155 0.9223
#> textual=~x6      0.8380 0.0221 100 0.7917 0.7931 0.7954 0.8788 0.8922 0.8924
#> speed=~x8        0.7230 0.0489 100 0.5749 0.5855 0.6144 0.7929 0.8028 0.8051
#> speed=~x9        0.6650 0.0546 100 0.5226 0.5330 0.5534 0.7513 0.7680 0.7681
#> x1~~x1          0.4042 0.0817 100 0.1868 0.1961 0.2259 0.5316 0.5423 0.5448
#> x2~~x2          0.8206 0.0497 100 0.6932 0.7049 0.7292 0.9159 0.9537 0.9559
#> x3~~x3          0.6623 0.0613 100 0.5121 0.5205 0.5423 0.7841 0.7904 0.7943
#> x4~~x4          0.2748 0.0423 100 0.1537 0.1583 0.1802 0.3432 0.3490 0.3504
#> x5~~x5          0.2689 0.0419 100 0.1493 0.1619 0.1865 0.3595 0.3926 0.4011
#> x6~~x6          0.2977 0.0371 100 0.2037 0.2040 0.2277 0.3673 0.3710 0.3731
#> x7~~x7          0.6757 0.0669 100 0.4884 0.5067 0.5381 0.7974 0.8103 0.8151
#> x8~~x8          0.4772 0.0688 100 0.3519 0.3555 0.3714 0.6226 0.6571 0.6694
#> x9~~x9          0.5578 0.0713 100 0.4100 0.4102 0.4355 0.6938 0.7157 0.7269
#> visual~~visual   1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual~~textual 1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed~~speed     1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> visual~~textual   0.4585 0.0645 100 0.3101 0.3130 0.3524 0.5909 0.6207 0.6261
#> visual~~speed     0.4705 0.0728 100 0.3025 0.3134 0.3322 0.5929 0.6311 0.6469
#> textual~~speed     0.2830 0.0743 100 0.0505 0.0791 0.1338 0.4106 0.4621 0.4880
#> Monte Carlo Confidence Intervals
#> Standardized Monte Carlo Confidence Intervals
#> test-semmcci-mvn
#> Test passed
#> Test passed
#> Test passed
#> Test passed

```

```

#> Test passed

#> test-semmcci-mvn

#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mvn

#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-npd

#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> [[1]]
#> [[1]] [[1]]
#> [[1]] [[1]]$value
#> [[1]] [[1]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[2]]
#> [[1]] [[2]]$value
#> [[1]] [[2]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[2]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[3]]
#> [[1]] [[3]]$value
#> [[1]] [[3]]$value[[1]]

```

```
#> [1] TRUE
#>
#>
#> [[1]][[3]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[4]]
#> [[1]][[4]]$value
#> [[1]][[4]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[4]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[5]]
#> [[1]][[5]]$value
#> [[1]][[5]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[5]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[6]]
#> [[1]][[6]]$value
#> [[1]][[6]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[6]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[7]]
#> [[1]][[7]]$value
#> [[1]][[7]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[7]]$visible
#> [1] TRUE
```

```

#>
#>
#> [[1]] [[8]]
#> [[1]] [[8]]$value
#> [[1]] [[8]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[8]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[9]]
#> [[1]] [[9]]$value
#> [[1]] [[9]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[9]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[10]]
#> [[1]] [[10]]$value
#> [[1]] [[10]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[10]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[11]]
#> [[1]] [[11]]$value
#> [[1]] [[11]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]] [[11]]$visible
#> [1] TRUE
#>
#>
#> [[1]] [[12]]
#> [[1]] [[12]]$value
#> [[1]] [[12]]$value[[1]]
#>
#> 2.5% 97.5%

```

```

#> visual=~x2      0.2897874 0.5203873
#> visual=~x3      0.4646159 0.6765250
#> textual=~x5     0.8002979 0.9019032
#> textual=~x6     0.7954116 0.8787872
#> speed=~x8       0.6143520 0.7928503
#> speed=~x9       0.5533531 0.7513261
#> x1~~x1          0.2258972 0.5315962
#> x2~~x2          0.7291958 0.9158788
#> x3~~x3          0.5422806 0.7841317
#> x4~~x4          0.1801977 0.3432245
#> x5~~x5          0.1865401 0.3595047
#> x6~~x6          0.2277287 0.3673203
#> x7~~x7          0.5381230 0.7974247
#> x8~~x8          0.3713578 0.6225555
#> x9~~x9          0.4355037 0.6937509
#> visual~~visual  1.0000000 1.0000000
#> textual~~textual 1.0000000 1.0000000
#> speed~~speed    1.0000000 1.0000000
#> visual~~textual 0.3524238 0.5908821
#> visual~~speed   0.3321714 0.5928531
#> textual~~speed  0.1338109 0.4106239
#>
#>
#> [[1]][[12]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[13]]
#> [[1]][[13]]$value
#> [[1]][[13]]$value[[1]]
#> [1] TRUE
#>
#> [[1]][[13]]$value[[2]]
#> [1] TRUE
#>
#> [[1]][[13]]$value[[3]]
#> [1] TRUE
#>
#>
#> [[1]][[13]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[14]]
#> [[1]][[14]]$value
#> [[1]][[14]]$value[[1]]

```

```

#> [[1]][[14]]$value[[1]]$thetahatstar
#>
#>          y1          y2          y3
#> [1,] 1.7970756905 2.863941859 4.506806294
#> [2,] 1.8110674524 3.342076472 5.961401220
#> [3,] 1.6404839610 2.872316084 4.065886805
#> [4,] -1.1584024141 -1.558403238 -0.645703837
#> [5,] 1.0654343110 0.555884319 0.568526405
#> [6,] -1.8976944298 -1.430929395 -1.970417146
#> [7,] -0.5970157141 -0.108327205 0.638613604
#> [8,] 1.3674059735 2.287867811 2.406862865
#> [9,] 1.0422544947 0.589594076 1.236499425
#> [10,] -0.1312050501 -1.979032586 -3.340345641
#> [11,] 1.3384999182 1.441961482 1.754542220
#> [12,] -0.7871261152 -2.364689561 -2.595624630
#> [13,] -0.1937486521 0.295082123 1.434664404
#> [14,] 0.9684725285 0.514116723 -0.104805869
#> [15,] 1.3244928289 2.944296638 4.279806246
#> [16,] 0.0930376802 -0.116608789 0.627367032
#> [17,] 0.7033506903 1.974366524 2.247790718
#> [18,] -0.0102597182 -1.037425667 -2.400847890
#> [19,] 0.7871206840 1.748608512 1.340706331
#> [20,] 0.4810447345 0.480712301 0.297136938
#> [21,] 0.4287002891 -1.685372417 -1.517956579
#> [22,] 0.9305393395 1.854531351 1.088136227
#> [23,] 0.8945198312 1.861332584 3.255001002
#> [24,] 0.0224009198 -0.068675362 1.008259587
#> [25,] 0.1611362801 0.387797634 1.304428433
#> [26,] 1.7132911728 1.697877480 2.297207621
#> [27,] -1.2687181250 -2.055217971 -2.672374781
#> [28,] 0.3597009416 0.279420206 0.358737823
#> [29,] -0.8003044051 -2.617409965 -3.390366625
#> [30,] -0.4009045681 -0.473888660 -1.246917880
#> [31,] -0.0228437018 -1.164526975 -2.366883373
#> [32,] 0.5276068060 1.621507209 2.439200514
#> [33,] -0.1605805048 -0.851740688 -0.548675322
#> [34,] -0.5440131732 -0.572395043 0.284984102
#> [35,] 0.5775100206 0.093689748 -1.687672397
#> [36,] -0.1206618380 0.932956997 1.469027248
#> [37,] 3.2800836881 5.926811147 6.788453563
#> [38,] 0.0853579787 0.200745896 0.899359143
#> [39,] -0.3917050541 0.435340063 1.146817020
#> [40,] 0.6174115178 2.192497679 2.458897357
#> [41,] -0.9888090972 -0.563164677 -0.395498406
#> [42,] 0.0256573824 -0.056829503 -0.018806521
#> [43,] 0.4740193861 -0.242767041 -0.210049259

```



```

#> [44,] -0.0678271981  0.801435680  1.633659674
#> [45,]  1.1744944961  1.915610549  2.022045337
#> [46,]  1.4537455154  3.082426847  5.017368070
#> [47,]  1.0276334790  1.601038506  2.418975164
#> [48,] -1.4205320630 -3.530284474 -5.644186157
#> [49,] -1.3436111619 -2.669728365 -4.599090980
#> [50,] -0.3743928365 -1.588277767 -1.078519486
#> [51,] -3.0311257697 -4.743833330 -5.511472062
#> [52,]  2.6611282480  2.480458237  1.640591792
#> [53,]  1.1880034848  2.258617082  1.235084712
#> [54,] -1.2589544496 -1.057195780 -1.360421728
#> [55,] -0.6100599999 -1.295505490 -1.116811617
#> [56,] -0.7776999837 -2.143454352 -3.692915301
#> [57,] -1.1129697131 -0.571576160 -1.950050307
#> [58,] -0.4712967650 -0.511691029 -0.076507902
#> [59,]  1.6556004738  1.470539553  1.105633336
#> [60,] -1.5317621826 -2.642844946 -1.767523450
#> [61,] -0.5401308207 -1.666679786 -2.600115235
#> [62,]  1.1150673427  2.597067235  4.106722957
#> [63,] -0.9409377666 -1.116914355 -1.672099308
#> [64,]  0.4657358724  1.107576508  1.808758552
#> [65,]  0.1599484966  0.089543556  1.080110187
#> [66,] -1.0555235411 -0.567044320 -0.225014438
#> [67,] -2.1160435840 -5.042335227 -6.519063848
#> [68,]  3.1889156395  3.604075735  3.835641747
#> [69,]  1.0540938249  1.953930600  1.513879860
#> [70,] -3.0525837990 -5.701730692 -7.747219980
#> [71,]  1.2298496055  1.591617381  1.681007937
#> [72,]  3.0713241780  5.287868387  5.787697388
#> [73,] -1.2298484210 -1.906953232 -1.574497023
#> [74,]  1.1221376156  0.728184324  1.103831322
#> [75,] -0.4636280986 -1.304441314 -2.565684228
#> [76,] -3.2444980869 -5.954000796 -6.335791277
#> [77,] -0.5382464361 -0.908592395 -2.158505083
#> [78,] -2.0982597455 -3.443323126 -2.881228334
#> [79,]  1.8403553383  3.754687592  5.690374284
#> [80,]  1.0187007593 -0.093018710  0.396097464
#> [81,]  0.6361047335 -0.193279461 -1.617082211
#> [82,]  1.0299842546  1.493987463  2.047769110
#> [83,] -0.7704705862 -3.061970737 -3.222302479
#> [84,]  0.4489869464  1.167308764  0.904558849
#> [85,]  0.3593714799  0.466376323  1.736486083
#> [86,]  0.5936085563  2.407506710  3.685370521
#> [87,]  1.2980023524  2.437059594  3.303123252
#> [88,]  0.4647400150  1.980689904  4.299133891

```

```

#> [89,] -0.9109884857 -1.320121448 -2.045882905
#> [90,] 4.4536799350 6.468168299 6.694781333
#> [91,] 0.6797137750 2.972286405 2.242582248
#> [92,] 0.6962889071 0.885919696 0.164107472
#> [93,] 1.5283055469 0.936562653 1.146234830
#> [94,] 0.8627672881 1.827795193 1.177267836
#> [95,] 0.0119975352 -1.460929564 -2.055958713
#> [96,] 1.4260672359 2.734785778 3.587873631
#> [97,] -0.2918112100 0.258382411 -1.037048173
#> [98,] 0.9998473601 1.189122638 1.643912163
#> [99,] 0.7615916534 -0.113021996 0.295828594
#> [100,] -1.1500461383 -2.428786713 -2.236692784
#> [101,] -1.1123743309 -1.315415047 -1.318188941
#> [102,] 0.9671868724 1.660194596 2.414442967
#> [103,] -0.8174565267 -0.783978229 -2.020544861
#> [104,] -2.8372520048 -4.409486593 -3.488310955
#> [105,] -2.3992236167 -2.859318540 -1.999684715
#> [106,] 1.7438351201 0.280591880 1.716610940
#> [107,] -0.7831253669 -1.730642571 -1.784083991
#> [108,] -1.7778638122 -1.229263667 -1.193490324
#> [109,] -0.8295708879 -1.104226955 -0.704099726
#> [110,] -1.2864385860 -2.567297949 -2.806579077
#> [111,] -0.7131253077 -1.920988078 -2.504066008
#> [112,] 1.7436167305 0.992191173 1.535803967
#> [113,] -1.3696959084 -2.388490652 -1.448417267
#> [114,] 0.8244099706 1.377602744 2.339424801
#> [115,] 2.0502033319 3.844537939 3.390245332
#> [116,] -2.3701371594 -3.979483190 -4.767279320
#> [117,] -1.2128688775 -2.557158724 -3.507851224
#> [118,] 0.2559481784 -0.909715851 -1.764015687
#> [119,] 2.6210921214 4.298396038 4.182789556
#> [120,] 1.4453842158 1.839267197 2.932435644
#> [121,] -2.2277307097 -2.688310644 -3.346420866
#> [122,] -0.0880879919 -0.537096828 0.641793066
#> [123,] 0.6704916931 0.733873025 1.170846533
#> [124,] -0.7346312565 -0.775959272 0.002146935
#> [125,] -1.2283912946 -0.999827978 -1.275169070
#> [126,] -0.3242188784 -0.015302362 -0.556286647
#> [127,] 0.8541945826 1.411174080 3.153302007
#> [128,] 1.4649194221 1.848821494 1.928045859
#> [129,] 0.0597448028 0.113665402 -0.007397726
#> [130,] 3.5589682074 6.031888054 6.826086884
#> [131,] 0.6312467555 1.788168225 1.430877442
#> [132,] -1.9709327648 -4.520192730 -5.215371322
#> [133,] 1.3015484193 1.328603450 0.872819853

```

```

#> [134,] 1.6967795496 3.203082163 4.638223512
#> [135,] -1.0187746252 -3.197002332 -4.413680007
#> [136,] 1.8465171680 1.062561194 1.948903223
#> [137,] -1.0713816542 -2.905568033 -3.890094423
#> [138,] 1.8255286561 3.215114107 2.952856701
#> [139,] 1.7113034875 3.359744494 4.815698888
#> [140,] -0.1571641985 -1.830592882 -1.026414006
#> [141,] -2.4985441708 -2.610661566 -2.181606157
#> [142,] 0.6301465744 1.121431111 2.393115367
#> [143,] 0.6528921341 2.781412900 3.813048481
#> [144,] 0.3954644956 0.058683686 -0.449448901
#> [145,] -0.2001904600 -0.458943031 -0.915566981
#> [146,] -1.9338850548 -2.133393576 -2.444952753
#> [147,] 0.4402901238 1.619661588 1.211050675
#> [148,] -0.7273770537 -0.608092845 -2.175722649
#> [149,] -0.1282640957 -1.203210200 -1.195494393
#> [150,] -0.0898242971 -0.727606416 -1.932637550
#> [151,] 0.0099310052 -0.507765476 -2.067648875
#> [152,] -0.5213420754 -1.427201934 -2.861137076
#> [153,] -0.4683329081 -1.743253284 -1.455523606
#> [154,] -1.5012540668 -1.236179084 -0.321058338
#> [155,] -1.1505867321 -0.354854455 1.280016079
#> [156,] -0.9189566430 -2.802773058 -3.470225132
#> [157,] 2.1642236247 4.604373953 6.717810822
#> [158,] 0.0859373035 1.075365319 1.074970606
#> [159,] -2.3705880177 -3.259830182 -4.158863137
#> [160,] -0.6054918195 -0.942979836 -1.715932312
#> [161,] -0.0848867658 1.682813479 2.171351323
#> [162,] 0.0228274450 -0.328413249 -2.229460756
#> [163,] 0.3971742987 0.144189339 1.505799768
#> [164,] 0.1483689052 -0.470478042 -1.878837106
#> [165,] -1.4123681703 -2.151672728 -0.888994914
#> [166,] 1.6106047145 3.282586130 3.189285018
#> [167,] 0.1568138540 -0.979093912 -2.412799972
#> [168,] 1.1528694904 1.651173543 3.519744460
#> [169,] -0.5245351432 -1.610016510 -0.578291338
#> [170,] 2.0039688242 3.745279365 4.885876279
#> [171,] 0.4474317318 0.946480127 1.149516249
#> [172,] 1.4717359287 1.783801479 2.418173770
#> [173,] 0.6702699937 1.293224250 2.465017027
#> [174,] 0.9767832747 3.350980199 5.111329351
#> [175,] -1.3932590047 0.500177843 1.336909869
#> [176,] 0.7477328466 0.620578611 1.353046375
#> [177,] 0.2405524718 -0.528956102 -1.297714164
#> [178,] -1.3925397044 -1.463901204 -2.259992784

```

```

#> [179,] -1.0773946490  0.316771805  1.012970754
#> [180,] -0.2086142585 -0.793136448  0.001310780
#> [181,]  2.7513361547  4.286522641  5.247854361
#> [182,]  0.2064048380  0.489292266 -0.546359258
#> [183,] -0.9230464261 -1.532206725 -2.323294882
#> [184,] -1.1388214872 -2.414191726 -2.777414063
#> [185,] -0.5356728216 -0.458755790 -1.157574529
#> [186,]  1.2671677337  3.480381273  3.835316007
#> [187,] -1.2703185269 -2.962140300 -2.121231582
#> [188,]  1.0843935983  0.752481126 -0.375845521
#> [189,] -0.9897247944 -3.081815466 -6.334815429
#> [190,] -1.0772998981 -2.632308988 -2.710151035
#> [191,]  0.8369326388  1.766951443  1.580722709
#> [192,]  1.0429201361  3.082487147  4.144396783
#> [193,] -0.3641694927 -1.395594998 -1.207644896
#> [194,]  1.1005737147  0.812692852  0.201595540
#> [195,] -1.0548838732 -0.598256742 -0.793234853
#> [196,]  1.5159509183  3.203185127  4.699472856
#> [197,]  0.1555622504  0.991405480 -0.612654164
#> [198,] -0.1211833706 -1.886375343 -3.837552024
#> [199,] -1.6274148122 -2.738441447 -2.881888220
#> [200,]  0.3725167437  1.054014956 -0.032136710
#> [201,] -0.4662567667 -1.665619817 -2.223325888
#> [202,]  0.2858962266 -0.782712397 -0.101938279
#> [203,] -1.4903177001 -2.421204085 -4.607662880
#> [204,]  0.3293708176 -0.382780208 -0.828919033
#> [205,]  0.1322836446 -1.732326728 -3.609974062
#> [206,]  0.5871158540  2.694163433  2.760631763
#> [207,] -0.2487939463 -0.554269420 -0.710355045
#> [208,] -2.2711853083 -3.929546422 -6.277002086
#> [209,] -0.1781910229  0.405368712  0.171716295
#> [210,] -0.7883865664 -3.351989744 -3.841336011
#> [211,] -2.9492315203 -4.150579951 -4.551177057
#> [212,] -1.2305804505 -1.162756732 -0.996913935
#> [213,]  0.6082317033  0.876654821  0.631841383
#> [214,] -0.5563634729  0.270937507 -0.396950833
#> [215,]  3.3471335487  4.028008598  3.269749303
#> [216,]  1.3269500163  2.845098598  4.412872870
#> [217,]  0.4448633780  1.340931367  1.588245490
#> [218,]  0.6926417275  1.163019238  2.165233369
#> [219,]  1.4918429329  1.913110083  2.138146642
#> [220,]  0.2490212638 -0.360003252 -0.607160175
#> [221,]  3.3300337611  3.138361817  2.103392060
#> [222,]  1.3158724286  1.528141805  0.691399570
#> [223,] -0.2702348753  0.142319324  1.171464199

```

```

#> [224,] 0.9313793078 0.128529730 1.814454740
#> [225,] -0.2176558269 1.921504540 3.576433121
#> [226,] -3.4953375606 -5.639639355 -7.566418738
#> [227,] 0.4815803269 -1.656874599 -2.046471964
#> [228,] 1.6589998848 0.538918395 -1.489146214
#> [229,] -0.4709615343 -2.549962101 -3.558716713
#> [230,] -0.7946662532 -0.694553368 -0.302684919
#> [231,] -1.9230390536 -3.868501968 -4.488677419
#> [232,] -0.4927710059 -2.531169912 -3.614591643
#> [233,] -0.8426701644 -0.577817452 -1.784323296
#> [234,] -0.2098512454 0.929897399 -0.502675649
#> [235,] -0.5374043277 1.724908534 2.666880341
#> [236,] -0.4982835826 -2.126551057 -2.542307486
#> [237,] -1.2909108449 -0.455167107 -0.540873701
#> [238,] 0.2527782786 2.247015887 2.570542768
#> [239,] 2.7517947399 3.369454389 4.295224117
#> [240,] 0.8130514763 1.245655387 1.442686529
#> [241,] -0.7276872177 -1.884103646 -1.841117755
#> [242,] 1.8023102550 2.290500391 2.766322765
#> [243,] 2.6584633157 3.691562846 5.191533540
#> [244,] -0.2057358922 -0.227269287 -0.998483106
#> [245,] 0.9741043839 -0.147510217 0.457053789
#> [246,] 1.3071352237 3.991800704 3.729461443
#> [247,] 0.4339183404 0.078216390 -0.267224017
#> [248,] -0.8567224954 -1.349243081 -0.948064151
#> [249,] 0.4120701696 0.482653086 -0.665989782
#> [250,] 0.4480577394 0.199610766 -0.338623083
#> [251,] 1.2943032788 1.996294643 2.592941661
#> [252,] -1.2021675086 -2.251202357 -3.144468609
#> [253,] -1.5193079757 -0.785432588 -0.282350479
#> [254,] -0.0457557598 0.202674136 -0.820002739
#> [255,] 1.1118327300 2.158974088 2.154832238
#> [256,] 1.4686664890 2.538238240 2.948743510
#> [257,] 2.1114582476 3.220040974 4.290337970
#> [258,] 2.7201434437 4.122114634 4.715181526
#> [259,] -0.2613357037 -2.132198526 -1.751818036
#> [260,] -0.0140356656 -1.259196646 -1.872394499
#> [261,] -1.5264071159 -1.751240312 -1.923012503
#> [262,] 0.8848908815 1.719484494 1.090957758
#> [263,] 0.2957132312 2.122213786 1.747416510
#> [264,] 1.1076846648 3.640865199 4.900312501
#> [265,] 0.9983254854 1.704219130 1.707114299
#> [266,] 1.3106800009 1.084049904 1.011854695
#> [267,] -2.1118121250 -0.568298356 0.124968962
#> [268,] 0.7761913144 0.815837663 -1.154515134

```

```

#> [269,] 0.8697137804 0.993454447 1.092261576
#> [270,] -1.4948491913 -2.518981322 -2.388917154
#> [271,] 1.4970935894 0.321543072 0.652762273
#> [272,] -0.8620294747 -1.845297017 -2.584467920
#> [273,] -0.6275103963 -1.517733390 -2.895501563
#> [274,] 0.1853706253 0.149611505 -1.634665273
#> [275,] 0.1503243312 -0.367244206 -1.756113265
#> [276,] -2.0329116702 -2.756790215 -2.768378908
#> [277,] 0.4744762069 -1.289352151 -1.786279990
#> [278,] 0.1796112131 1.561538716 1.491246418
#> [279,] -0.6825811422 -1.678096100 -1.730863553
#> [280,] -0.2261085611 0.033186818 -0.045350167
#> [281,] 1.3718564922 1.720352341 1.068794208
#> [282,] -2.7647938549 -3.960426566 -4.977529717
#> [283,] -0.9718105416 -1.064250936 -1.444183480
#> [284,] 1.5056628890 1.633711242 0.546806964
#> [285,] -0.0017078478 -0.282946872 0.692848990
#> [286,] -1.1250657045 -2.556172867 -4.149117492
#> [287,] -1.6209174410 -0.856658253 -0.599797793
#> [288,] -0.9388237314 -0.442783861 -0.633773623
#> [289,] 0.5156952164 2.193502278 2.062341080
#> [290,] -3.1391293854 -5.035005383 -6.325728742
#> [291,] 0.6634000957 2.685959141 2.150623606
#> [292,] 0.4860636182 1.125590618 0.966710952
#> [293,] 1.9201709690 1.954169430 1.898933457
#> [294,] -0.4432870164 -0.011799422 -0.566571371
#> [295,] -2.3260735241 -6.145602906 -7.608734990
#> [296,] -1.8338884954 -1.435215185 -0.744860354
#> [297,] -1.3221329872 -2.239208400 -2.185671216
#> [298,] -1.7126119920 -4.349758865 -6.647890273
#> [299,] -2.5740683048 -3.727568725 -3.398459757
#> [300,] -0.0761405967 0.463989894 1.415543854
#> [301,] 0.5684302945 0.597961020 -0.423174216
#> [302,] -2.2097850756 -3.321739526 -4.449448303
#> [303,] 1.1146171332 2.587277162 3.356343102
#> [304,] 0.4394525969 1.358793141 1.474513375
#> [305,] -1.3986646264 -1.539545478 -2.662689959
#> [306,] -0.1094991143 0.970400296 0.009670781
#> [307,] 1.2113116640 2.202507508 1.126392105
#> [308,] 0.6153298646 1.543169721 1.305657083
#> [309,] 0.9805799854 1.413881692 2.119206655
#> [310,] 0.5940091215 1.883782608 2.647449967
#> [311,] 0.0445841073 -0.681102901 -1.826499301
#> [312,] 0.0883318118 -0.799647967 -0.954696854
#> [313,] -1.1870992978 -2.000448499 -3.671676557

```

```

#> [314,] 0.8515782551 -0.404696691 -0.660404025
#> [315,] -1.4948341864 -2.270783552 -2.873794187
#> [316,] -1.9867711269 -2.706466485 -3.059078347
#> [317,] 1.3545714542 0.026985542 0.015280325
#> [318,] -0.7343903492 -0.957116866 -0.580651303
#> [319,] 0.9693223174 1.838276480 0.665463582
#> [320,] -0.8219222633 -1.078073417 -1.953543078
#> [321,] 0.4041468685 -0.426867642 0.390759936
#> [322,] -3.2912054232 -3.237058655 -3.401726955
#> [323,] 0.8647448296 1.015329331 0.997564218
#> [324,] 2.1789482699 2.802721901 3.292941273
#> [325,] -0.1773743427 -0.859194989 -2.194343113
#> [326,] 1.0337134282 2.964906190 4.706165077
#> [327,] -1.3640461108 -0.679054462 -0.824073386
#> [328,] 0.3122928707 1.101037564 1.848118841
#> [329,] -0.2093299702 -3.069312886 -5.178521181
#> [330,] -0.3515903120 0.558941618 1.765161761
#> [331,] -0.9115033836 -0.893762266 -1.100918932
#> [332,] 2.1797343058 2.319992286 4.126734096
#> [333,] 1.0927368332 2.102553803 1.896748831
#> [334,] -1.2579360727 -2.502965347 -3.272243387
#> [335,] 1.1583167704 1.275922096 0.510286666
#> [336,] -1.2931362016 -2.172265927 -2.442267405
#> [337,] 0.1290043128 0.221934254 -0.090225399
#> [338,] 0.5292922155 0.712037580 0.552363809
#> [339,] -0.9799699221 -2.101416081 -2.440932454
#> [340,] 2.1799142172 5.005979113 7.310337500
#> [341,] -0.6817070683 -2.932068930 -3.512203163
#> [342,] 0.5382526658 0.899726982 0.040355443
#> [343,] -0.9013298605 0.122432853 0.923333226
#> [344,] -0.4701508360 -0.359927028 1.455695424
#> [345,] 0.1886275240 0.536198678 1.281526617
#> [346,] -0.0114663510 0.907849839 0.859091794
#> [347,] -0.5592101133 -2.281624912 -3.318568787
#> [348,] 0.1415867529 -0.146565814 -1.599037785
#> [349,] -0.1964311693 -1.323265645 -0.365003077
#> [350,] -0.5458672673 -0.210005417 1.751468062
#> [351,] 0.0965177079 0.641919766 0.995796067
#> [352,] 1.0439268850 1.422612372 0.630411623
#> [353,] -3.1619362814 -5.444531729 -6.626470721
#> [354,] -2.0835121675 -4.354665487 -5.235273088
#> [355,] 0.8826905017 0.770410814 0.929698869
#> [356,] 0.3507033534 -0.192129211 0.199163875
#> [357,] 1.2310595806 1.511614252 1.765123854
#> [358,] 0.9641328801 2.373647332 2.306681461

```

```

#> [359,] -1.0740207290 -2.120876136 -2.127691871
#> [360,] -1.9199059806 -3.718295848 -2.973420994
#> [361,] 0.1894894060 0.579991687 1.334346989
#> [362,] -0.4688522482 -1.943941748 -1.929361375
#> [363,] 0.9303238291 1.935289454 1.254112067
#> [364,] -1.5293101082 -1.814694807 -1.168772922
#> [365,] 0.2070582133 0.996277170 0.781338934
#> [366,] 0.8216394981 1.698395844 1.775266722
#> [367,] 0.4773935135 1.458685481 1.221475461
#> [368,] -0.5071019730 0.408633224 -0.696788363
#> [369,] -1.0855884768 -2.586048047 -2.669072990
#> [370,] 2.1305301971 2.011989478 0.861919472
#> [371,] 1.0839482956 0.682972950 1.285653358
#> [372,] -0.4242893632 0.382286441 1.719447874
#> [373,] 1.2684277798 1.506470130 1.866744634
#> [374,] 0.7961598175 -0.547743307 -1.651177215
#> [375,] -0.1655888278 -1.058321572 -1.032796981
#> [376,] -1.7843339730 -2.968394703 -3.775744278
#> [377,] -0.6596273358 0.251561508 0.316957381
#> [378,] -0.2257772050 -0.231684132 -1.565574885
#> [379,] 0.8947427573 0.761464265 0.611213799
#> [380,] -1.5146309094 -1.524490531 -0.053395855
#> [381,] -0.7102487187 -2.684509961 -2.160504762
#> [382,] -0.6829445251 -1.812267036 -2.400873213
#> [383,] 0.4447577865 1.835369763 2.705647258
#> [384,] 2.3346956314 4.449194090 6.035803935
#> [385,] 0.1395376205 -0.450857136 -0.295921533
#> [386,] -0.9874286432 -2.494289023 -1.682080842
#> [387,] -1.2287538472 -2.198347280 -2.398008283
#> [388,] 0.3299589908 -0.616116561 -1.398230636
#> [389,] 1.9684879434 2.465057671 2.433050870
#> [390,] -1.8933207537 -3.449602401 -4.456355181
#> [391,] -0.7863354120 -1.609100626 -1.594961205
#> [392,] -1.0683711553 -0.700221449 -0.885358905
#> [393,] 0.2543270202 0.267644603 0.375414743
#> [394,] -0.0225885472 0.987533882 0.051439394
#> [395,] 2.7313208195 3.071669994 2.895230590
#> [396,] -1.1902110732 -0.920924810 -0.537035978
#> [397,] -0.8559624005 -0.447432504 -0.729129578
#> [398,] -1.7126669604 -3.159732469 -2.676128865
#> [399,] -0.2670929438 -0.552020196 -0.566847944
#> [400,] -0.3479404499 0.197432235 -0.543533027
#> [401,] -0.1216237533 -2.329926474 -1.976696474
#> [402,] 0.8956076721 0.414048574 0.488608178
#> [403,] -0.1186430615 -0.749339144 -1.867234095

```



```

#> [404,] -0.7490944456 -1.298265683 -1.229067684
#> [405,] -0.3074878056 -2.094140901 -3.494917328
#> [406,] 0.1996019762 -0.610482823 -1.657346887
#> [407,] 1.2643408422 1.651336477 1.517637856
#> [408,] 1.3131857047 1.757757848 1.621694870
#> [409,] -0.7932656074 -0.673956011 -0.635640135
#> [410,] -1.1710004900 -1.851308981 -3.261626574
#> [411,] 0.3527042454 1.249029763 1.029058604
#> [412,] 0.8680952524 0.689023440 0.413283677
#> [413,] 2.0651163985 2.534420506 2.404198403
#> [414,] -1.1666020545 -3.806495296 -4.935908135
#> [415,] 0.6496168234 0.469635855 0.890980981
#> [416,] 0.0179183446 1.461504337 2.217776185
#> [417,] 0.2210301615 0.118924867 1.059456360
#> [418,] 1.1868847436 2.073337112 4.142242661
#> [419,] -0.2036719672 -0.849827897 0.300147341
#> [420,] -3.2775937119 -5.134680689 -5.575040653
#> [421,] -0.6550713509 0.114646166 -0.776351093
#> [422,] 0.0705560760 -0.087409031 -0.670201791
#> [423,] -0.0166984487 1.502007412 1.971267025
#> [424,] 0.6398615056 1.242303104 2.383519367
#> [425,] -0.6670025631 -1.612262623 -3.623894025
#> [426,] -1.5479875423 -3.003614848 -2.112769568
#> [427,] -0.9194124249 -0.835745236 -2.265781332
#> [428,] 1.3214793145 0.985746739 0.333584369
#> [429,] -0.2553962098 -0.349534201 -0.361109945
#> [430,] 1.1254494347 0.408371769 -0.170886322
#> [431,] 1.2692633789 1.431089935 2.035047082
#> [432,] -1.2923897133 -2.008195954 -1.610478146
#> [433,] -1.3355460662 -0.505326667 -1.493250602
#> [434,] 0.4985981380 -0.763668784 -2.051177369
#> [435,] 0.6479827285 0.484330625 -0.018383187
#> [436,] 1.5215439617 2.243242327 2.378444074
#> [437,] 1.6308364465 2.624383380 2.422865919
#> [438,] -0.1068481352 1.394367224 2.032648863
#> [439,] -0.3321367131 0.013721396 0.397784106
#> [440,] -1.6612588380 -0.921435762 0.739150187
#> [441,] 1.2424065126 1.189884485 1.585660056
#> [442,] 1.0302058178 1.835905918 2.484742593
#> [443,] -1.4307828154 -3.141833746 -3.577857153
#> [444,] 0.2324451629 2.105733555 3.802132652
#> [445,] -1.6850593634 -3.948431780 -3.907080216
#> [446,] 0.7173074105 1.145149859 0.150079694
#> [447,] -0.3387528290 -0.271060111 -0.874062078
#> [448,] 1.2754256080 2.884640618 4.466633549

```

```

#> [449,] 2.0650791128 3.467960521 3.571945602
#> [450,] -0.7101966076 -0.119476991 0.643649474
#> [451,] -0.2665709011 -0.333347477 0.787502467
#> [452,] 1.1965028203 1.204788916 1.413447861
#> [453,] -0.1410770023 0.329315956 -0.180104705
#> [454,] 0.1531517568 -2.602032211 -3.461956297
#> [455,] -1.3094878298 -2.721324556 -2.348445553
#> [456,] -1.6193504107 -1.462203990 -1.249915647
#> [457,] -1.0398611799 -0.169432902 0.909608930
#> [458,] -0.7014717653 0.490464092 1.773504682
#> [459,] 1.2498522949 1.207946919 0.090996279
#> [460,] 0.6395983333 1.895087954 2.822944346
#> [461,] -0.4049645667 -0.174072092 0.070205959
#> [462,] -2.7403618885 -3.424416072 -4.284394763
#> [463,] -2.0518130084 -3.291334807 -4.675462173
#> [464,] -0.1168986091 1.202673645 1.034554622
#> [465,] -0.5132421592 -2.251313704 -1.514816295
#> [466,] 1.6935329092 2.046244551 2.482796176
#> [467,] 1.9880067255 2.597701438 2.542440224
#> [468,] -1.4795784877 -1.906159690 -3.062547845
#> [469,] 1.3187218486 1.665111893 1.764745587
#> [470,] -0.9775323251 0.723466597 2.538084082
#> [471,] -1.5122384632 -0.997731076 0.694558299
#> [472,] 0.8814858346 1.002547186 -0.003723485
#> [473,] 1.0856942148 1.344705407 1.678278555
#> [474,] -1.3212146215 -0.499455114 -1.367852725
#> [475,] 1.2833533462 1.099249529 1.073044619
#> [476,] -2.2419774490 -3.611933651 -4.212518695
#> [477,] 2.7868526349 4.211111394 4.039197936
#> [478,] 1.0906496892 3.570445878 4.899886300
#> [479,] -1.2129983562 -1.567829410 -1.518621954
#> [480,] 0.7787080008 1.406505052 0.761289777
#> [481,] -0.0219679539 0.559609048 1.969288417
#> [482,] -0.6789145035 -0.125961434 0.701296791
#> [483,] 0.7978526838 1.684386382 2.678068604
#> [484,] -0.6947721784 -2.655416158 -2.389896334
#> [485,] 1.5454148151 0.950541057 3.057696989
#> [486,] 0.2453795253 0.762921006 0.222860953
#> [487,] -1.4132565454 -3.703761236 -4.075149152
#> [488,] 1.2708676520 0.545120795 0.806981662
#> [489,] 0.0349849011 -0.601439090 -2.046645247
#> [490,] -0.0999349691 -0.355257057 -0.619946476
#> [491,] 0.7318508419 -0.030557759 -0.644291491
#> [492,] 0.6282379123 1.375576903 1.675221510
#> [493,] -0.4170740468 -0.382131804 -0.962724009

```

```

#> [494,] 0.6456313200 1.484898578 1.440503392
#> [495,] 0.8574515540 0.908135213 0.644299834
#> [496,] -0.0956419050 -1.881976267 -2.278081474
#> [497,] 0.3352499616 2.052500558 2.913802969
#> [498,] 2.0321964455 4.081100992 3.597512902
#> [499,] -2.5360511783 -2.002051202 -1.037842737
#> [500,] 1.4951070591 2.035796649 2.972729333
#> [501,] 1.3092654100 0.817848274 1.426021083
#> [502,] 0.2623389085 -0.338076255 -1.543530335
#> [503,] 1.1247016163 0.860551725 0.387897221
#> [504,] -0.7479898202 -0.983291533 -1.261310051
#> [505,] -0.0636418100 1.389156032 1.069856617
#> [506,] 0.3095913226 1.374424889 1.969836603
#> [507,] 1.4095542549 0.801991882 1.551159376
#> [508,] 0.2403472310 1.749835073 2.465184183
#> [509,] 0.9833836222 2.057060430 3.187390785
#> [510,] 0.2653012835 2.031207421 1.926078346
#> [511,] 0.8773061903 1.846604999 1.395396404
#> [512,] -1.1569777743 -3.537105505 -3.273658627
#> [513,] -1.6480979342 -1.864042853 0.166777220
#> [514,] -1.7464207787 -3.387583515 -4.680550806
#> [515,] 0.2557378544 0.422345177 -0.472814943
#> [516,] 0.8476799091 1.946569034 3.424825423
#> [517,] -0.4820903176 -1.496337862 -0.609461351
#> [518,] -0.6408770204 -0.946090313 -1.738396603
#> [519,] -3.0486947194 -3.692714538 -4.811085379
#> [520,] 1.4709066080 1.930699189 1.125483147
#> [521,] 2.9979294716 3.020327037 3.671833488
#> [522,] -0.1838030492 0.301401253 -0.807783682
#> [523,] -0.1050265253 1.084785475 1.040245511
#> [524,] 0.3623136238 3.422622764 4.422935153
#> [525,] 0.8443411167 0.660509839 1.623164023
#> [526,] 0.6847662139 1.500455716 1.365467517
#> [527,] 1.4748500864 2.903600836 4.018096689
#> [528,] 0.0888738821 0.774836577 0.338616017
#> [529,] -0.4680747767 -2.463117981 -2.846334447
#> [530,] 0.5408045492 -0.672606303 -1.280522519
#> [531,] 0.7900584464 1.089155338 0.250489129
#> [532,] -1.0317847210 -2.662839108 -3.712258770
#> [533,] 1.3774438255 0.907182934 0.644624784
#> [534,] -0.8833193197 -3.062485793 -3.461542973
#> [535,] -1.1546724821 -2.897898467 -3.960541092
#> [536,] 4.3516485844 7.600691479 8.588097841
#> [537,] 1.0987143181 1.490932039 1.740393986
#> [538,] -1.5839871303 -2.404580533 -2.052887374

```

```

#> [539,] -1.1483022775 -0.974287115 -0.286329600
#> [540,] -2.7960301986 -4.780363336 -5.165476444
#> [541,] -0.5859821771 -1.587219785 -1.373704698
#> [542,] 0.1595191931 -0.296298887 -1.498167549
#> [543,] -2.3169571490 -3.820715823 -3.986159498
#> [544,] 1.5288771455 1.008751650 1.130533709
#> [545,] -0.6389923717 -0.075359828 0.244073385
#> [546,] 0.4478999813 1.786407653 3.289176412
#> [547,] 0.3603663846 -0.544041198 -1.733012885
#> [548,] -0.7356329589 0.180893265 0.119684094
#> [549,] -0.5061099632 -1.077711415 -0.645700595
#> [550,] 1.8557367565 4.122948917 4.843686369
#> [551,] 2.4650200235 3.311993511 4.110672573
#> [552,] 1.9043810406 1.413766815 1.882792571
#> [553,] 0.5751135337 1.493497379 0.738683567
#> [554,] 0.5411829923 1.531973548 1.590586207
#> [555,] -0.4943285333 -2.102553363 -3.060080139
#> [556,] -1.0453733964 -1.165183022 -2.688360406
#> [557,] 0.3557628373 0.749794107 0.579251593
#> [558,] 2.1371453146 4.180640649 4.735594494
#> [559,] -0.2010971202 -0.095565880 0.976892215
#> [560,] 0.0633127854 -0.699421078 -1.627003563
#> [561,] 0.6624194946 0.506015995 1.220562152
#> [562,] 1.5343512192 2.302218328 3.744107627
#> [563,] -0.8426179713 -0.734419699 -0.960233491
#> [564,] 1.1181173183 3.025288152 4.651690728
#> [565,] 0.8084984839 1.486817423 2.962675759
#> [566,] -1.1860181114 -2.156322642 -2.232106506
#> [567,] -2.1549217537 -2.279463207 -1.615945182
#> [568,] 3.5579327234 6.717963884 8.652821321
#> [569,] 0.2598789336 -0.630894373 -0.705403879
#> [570,] -2.5008778125 -3.356256480 -3.038742603
#> [571,] -2.0749891854 -3.158588220 -2.763912781
#> [572,] 1.2835015376 1.749891803 2.659288562
#> [573,] -0.7865571996 0.041833091 1.171700437
#> [574,] 0.9767433068 1.718681113 2.412112982
#> [575,] 0.1958041833 1.974967978 2.314176885
#> [576,] 2.1062245241 2.275784517 2.214018058
#> [577,] -0.4770370617 -2.153177207 -3.313893863
#> [578,] -0.0097303583 -1.402311325 -2.139318854
#> [579,] 0.7723269662 -1.118264193 -2.763955618
#> [580,] 1.4861977407 2.144619422 2.245955222
#> [581,] 1.2073627251 1.265715639 1.301243756
#> [582,] 1.3774566049 1.755908819 2.182713790
#> [583,] 1.2968252352 0.798294770 0.665668330

```

```

#> [584,] 1.7832117846 2.599454436 3.033124268
#> [585,] -0.3292682316 1.133462100 1.776752750
#> [586,] 0.5202565166 2.868748689 3.415545441
#> [587,] 0.7736571153 2.241692012 2.353765857
#> [588,] -2.5251729655 -3.625590699 -3.328675278
#> [589,] -1.2199118554 -2.878938535 -2.359707750
#> [590,] 1.4222393236 0.542225242 1.408940118
#> [591,] -2.8813204642 -5.635559406 -6.937215262
#> [592,] -1.3009279817 -3.179841491 -3.014043854
#> [593,] 1.2388108679 2.154931109 2.273667715
#> [594,] 1.2071449349 0.564869520 -0.605257739
#> [595,] -0.0214828028 0.554647778 0.355121762
#> [596,] 0.3173727813 -1.703442588 -1.751737302
#> [597,] -0.9822700848 -0.357159433 1.063979136
#> [598,] 0.9280553766 0.524504335 1.074223536
#> [599,] -0.7444132542 -1.852029633 -2.739734863
#> [600,] -0.4123438179 0.731956999 1.098044773
#> [601,] -2.0053275931 -3.125789666 -4.198580829
#> [602,] -1.6956048054 -3.146738127 -3.805100079
#> [603,] -2.6237014625 -2.930899289 -3.747615553
#> [604,] -0.4119865588 0.969281967 1.347325343
#> [605,] 0.0718240402 0.005199125 -0.607526509
#> [606,] 0.6085971846 1.054632952 2.806805264
#> [607,] -0.8311512629 -1.959006425 -4.085937917
#> [608,] 1.8165606898 3.510130293 3.614525533
#> [609,] 2.2937672203 1.924774091 0.386264194
#> [610,] -0.9655245715 -1.710063917 -2.468236162
#> [611,] 0.6021460871 -0.211298597 -0.533465962
#> [612,] -0.2559878100 0.647436181 -0.281956502
#> [613,] -1.0114203578 -1.286990801 -0.791791442
#> [614,] -1.1348586078 -2.083594314 -1.425131847
#> [615,] 0.4121839835 0.117772696 1.143550534
#> [616,] -0.0938888134 -1.016968190 -0.742780940
#> [617,] -0.7826403753 -0.349195831 -0.897249717
#> [618,] -3.9389732576 -7.466939965 -8.171166251
#> [619,] 0.2722232461 0.426757333 2.469080648
#> [620,] -0.1358598856 0.234408987 0.269031948
#> [621,] 0.2909620835 0.179362096 1.355181765
#> [622,] -1.3074000467 -0.904674835 0.007138226
#> [623,] -0.8161186215 -0.706107518 -2.869939343
#> [624,] 1.4328615154 3.701095858 4.090465265
#> [625,] 0.6163907724 0.669500572 0.038111605
#> [626,] -0.0046066067 -0.572281305 -0.565114214
#> [627,] 0.2840951741 0.327328986 0.987238288
#> [628,] 1.6353053861 3.386092886 3.296736667

```

```

#> [629,] -1.4397100546 -1.345870234 -0.851957118
#> [630,]  2.2209935393  3.690153833  5.219558174
#> [631,] -1.2939690071 -2.166439860 -1.290510379
#> [632,]  0.5073067718  0.134528932  0.373355293
#> [633,]  0.3932179180  1.536636590  1.569503956
#> [634,] -0.0435171108  0.661363584  0.902915375
#> [635,] -0.6173892725 -0.924107919 -0.680050744
#> [636,] -0.6203700407  0.337374975  1.050907784
#> [637,] -0.2643346887 -1.829908484 -3.372891238
#> [638,]  1.8275727579  2.247644270  4.312080961
#> [639,] -1.1916514558 -3.393683765 -4.917525414
#> [640,]  0.8323265620  2.049907680  3.490476938
#> [641,] -0.1389113933  0.522457159  0.921755519
#> [642,] -0.9738004351 -1.925791031 -2.011152674
#> [643,] -0.6903882450  1.338229600  2.050730422
#> [644,]  0.5994489452  0.998098782  0.831632490
#> [645,]  1.4582318004  0.580210542 -0.242608742
#> [646,] -1.7512588430 -2.918876359 -3.394234254
#> [647,] -1.5141929166 -2.395980985 -2.919842020
#> [648,]  1.0812978154 -0.180263409 -0.742545441
#> [649,]  0.1012957741  0.280525150 -0.002971328
#> [650,] -2.4807523167 -5.484302798 -8.048086413
#> [651,]  1.2805979368  0.878539833  1.927405582
#> [652,]  2.2370218502  4.407582874  4.849902841
#> [653,]  0.5353531161 -0.027497647 -0.160408940
#> [654,] -2.8913460652 -3.710713589 -5.806673981
#> [655,]  1.2478822958  1.617186743  1.615842420
#> [656,]  0.1057609021  0.948458471  0.609423570
#> [657,] -0.7112807742 -1.026169166 -2.228336039
#> [658,]  0.1719436200 -0.745357020 -1.159275643
#> [659,]  3.3042180938  5.111385518  6.397576212
#> [660,]  0.0606983300  0.812836963  1.991873919
#> [661,] -0.9844844639 -2.273111261 -2.651823788
#> [662,] -0.5429566916 -1.037460984  0.416944807
#> [663,]  1.5156887646  3.052218619  3.271788932
#> [664,]  0.4318858042  1.111825536  0.851244935
#> [665,] -0.1391141949  0.328297596  0.421047285
#> [666,]  0.3176055938 -1.780690147 -4.275057691
#> [667,]  0.3878035591  1.769936130  3.404567479
#> [668,] -2.8698252598 -4.462640104 -5.190877336
#> [669,] -2.9837651299 -2.514469506 -2.074410163
#> [670,] -0.2248728957 -1.104369621 -1.749773281
#> [671,] -0.1675653233 -0.829580996 -0.413148171
#> [672,]  1.1728980022  2.809784406  1.814446327
#> [673,] -1.3827081555 -2.323001473 -1.781990293

```

```

#> [674,] 0.2373838972 0.788822441 1.569650882
#> [675,] -0.2762577793 0.648627889 0.495860631
#> [676,] -1.3760937912 0.882867945 1.799059904
#> [677,] -0.7844412496 -0.519936227 -0.781113413
#> [678,] -0.7182275721 -2.380763170 -2.768480831
#> [679,] -0.0604290684 0.225442862 0.338648090
#> [680,] -0.7576713146 -1.081048223 -2.258643649
#> [681,] 0.4254888694 1.506637695 2.928226886
#> [682,] -1.4775903728 -1.652988316 -3.092220183
#> [683,] 0.3078471680 0.319337244 1.310062410
#> [684,] -0.3643233991 -0.899821702 -1.298656676
#> [685,] -0.1107275970 0.653812906 0.980445269
#> [686,] 2.1189513457 1.566738858 1.540125108
#> [687,] -0.4747726566 -1.117347259 -2.220085992
#> [688,] 0.1022655791 1.042325161 2.061899123
#> [689,] -0.2881541376 -1.273113495 -1.526567061
#> [690,] 1.4642548921 2.056163551 2.353999937
#> [691,] -0.3589798593 -0.852443048 -2.051473120
#> [692,] 0.7885358988 2.228888904 2.935056932
#> [693,] -0.6952475993 1.115054141 0.634207769
#> [694,] -0.6035489809 -1.043318146 0.105149947
#> [695,] -1.1009830112 -1.949784634 -2.408166997
#> [696,] 0.6392598433 0.074100702 -0.857667818
#> [697,] -0.7838774084 -1.888912626 -2.332023125
#> [698,] 0.3869208237 -0.434170212 -1.178591994
#> [699,] -0.6791628606 -1.629731661 -2.654776894
#> [700,] -1.2840353399 -1.941492689 -0.829627861
#> [701,] -0.2251023839 -0.135281052 0.297381101
#> [702,] 0.9363787196 1.749747735 1.369621430
#> [703,] 0.1020897733 1.891181193 1.848512936
#> [704,] 0.8771552327 2.683904601 3.368434444
#> [705,] -1.3981738469 -2.772677870 -3.619879358
#> [706,] -0.2469226853 -2.224444859 -3.829896876
#> [707,] -1.4234743387 -2.841111019 -3.899832722
#> [708,] 1.2621766371 2.831483626 4.090616025
#> [709,] 1.5314935206 2.040040716 2.890451902
#> [710,] -1.3556792292 -1.348265683 -1.361191653
#> [711,] -0.2764831082 0.835528137 1.716078152
#> [712,] 1.3514296822 0.347997841 0.549465625
#> [713,] -0.1342355739 -0.637138951 -1.066645388
#> [714,] 0.2864191659 0.832443456 0.401947513
#> [715,] -2.8572212415 -3.026603942 -2.957830029
#> [716,] -1.1654137153 -3.025859289 -4.314070891
#> [717,] 0.8646432920 -0.271672172 -1.019447531
#> [718,] 0.6969814595 -0.593150514 -2.090778581

```

```

#> [719,] 1.2414571158 2.424813431 3.075181608
#> [720,] -1.0180901523 -1.730558092 -1.576772918
#> [721,] 0.8045537576 0.930582075 0.666971065
#> [722,] 1.1203721727 -0.858581027 -0.267324483
#> [723,] 0.1938035667 0.045360380 0.711632611
#> [724,] 0.3483250494 0.494620746 0.362970731
#> [725,] 0.5735742282 0.816134744 1.495354356
#> [726,] 1.1156476615 2.985964058 3.598422531
#> [727,] -1.1046214237 -1.279504116 -1.036279070
#> [728,] 1.1476473856 0.644491350 -0.445107724
#> [729,] -0.5032244668 -1.463354029 -1.038199030
#> [730,] 0.8170276681 1.274379695 -0.146869007
#> [731,] 0.1322767069 -0.530653794 -0.545383281
#> [732,] 0.4454399737 0.061003191 -2.738854988
#> [733,] -0.7401205533 0.291901786 0.275674488
#> [734,] 0.9813082258 1.211392595 0.717132654
#> [735,] -0.0402224799 0.285541031 1.257041763
#> [736,] -0.3813698179 -0.266850745 -0.049337846
#> [737,] -1.0489990712 -1.450570393 -1.956527881
#> [738,] -0.7461709599 -0.467447597 -0.601983475
#> [739,] 1.2931520813 3.821605753 4.002181760
#> [740,] -1.4346627383 -2.371299752 -2.311435588
#> [741,] -0.3880306486 0.329789132 -0.511268873
#> [742,] -0.8158030167 -1.253304972 1.484740376
#> [743,] 0.5414608521 0.609476541 1.308337476
#> [744,] 0.1713265974 0.845634226 0.342553841
#> [745,] 0.7916910939 0.219349321 1.308426161
#> [746,] -3.0985253094 -4.923833888 -7.376878249
#> [747,] -0.3410005050 -0.691807157 -0.070557322
#> [748,] 1.2611790226 1.495826429 2.095039308
#> [749,] 1.6555064810 0.154763243 -0.322987906
#> [750,] -0.4480992735 -0.737206848 0.056606897
#> [751,] -1.4159817292 -1.269588625 -1.011502206
#> [752,] 1.2964761542 2.527760035 3.652452068
#> [753,] -2.3594549607 -3.156713018 -4.283313117
#> [754,] -1.9441789091 -1.283228095 0.115112904
#> [755,] 1.0909498705 1.953141934 2.121483504
#> [756,] -1.2927940976 -1.464681105 -3.320365903
#> [757,] 1.6180012576 -0.352518699 -0.093715700
#> [758,] -0.9171623969 -0.268486402 -0.392176486
#> [759,] 1.0535899314 1.520460553 2.321884737
#> [760,] -0.7879953752 -1.592105066 -1.835972358
#> [761,] 0.0248143881 -0.815592210 -1.522157631
#> [762,] -2.2002377832 -1.954968032 -2.235912926
#> [763,] -2.1256773614 -2.353469426 -2.896904917

```



```

#> [764,] 0.3136677486 0.338928409 -0.288161391
#> [765,] -1.8187924272 -3.590707862 -4.293981375
#> [766,] 0.8509004121 1.736208417 0.819994105
#> [767,] 0.1499615255 0.938991957 1.858601819
#> [768,] -1.0597298072 -1.059919011 -1.059390508
#> [769,] 1.8681496721 1.918241652 1.249958745
#> [770,] 0.5392800396 2.494576249 2.833154204
#> [771,] 0.1772101800 0.550163706 2.809680871
#> [772,] -0.7873740773 -0.353155182 0.693617763
#> [773,] -0.5795334874 0.380423466 0.390317376
#> [774,] -0.7665534302 -0.854134327 -0.575852171
#> [775,] -0.1607703569 0.104428733 0.489852549
#> [776,] 2.6573307183 2.515237694 2.942504121
#> [777,] 1.5569319225 2.171916689 2.046760135
#> [778,] 0.4771394744 1.792421786 2.078532865
#> [779,] 0.4023855648 1.936333069 3.434745648
#> [780,] -0.8217443329 -0.555400328 -0.492181936
#> [781,] 0.6253165898 0.680112641 1.989605849
#> [782,] -1.0755031022 -1.424204832 -1.546168802
#> [783,] 0.3389483883 0.215554658 -1.030390967
#> [784,] -0.8323396402 -2.942893734 -4.259352603
#> [785,] -0.1516809654 -0.685933365 -1.387852762
#> [786,] 3.7772717896 6.137006903 7.498848070
#> [787,] -0.4054974769 1.147320310 2.096348039
#> [788,] -1.3404225451 -1.535540546 -0.449276826
#> [789,] -0.7160774713 -1.270717482 -0.716347497
#> [790,] 1.2154583990 0.764573559 1.001810606
#> [791,] 0.9871749188 1.964731086 2.640493050
#> [792,] 1.8057591348 1.894917602 1.361358291
#> [793,] -0.0132715260 -0.590643699 -0.052854525
#> [794,] -2.3059298223 -2.542800439 -1.902663587
#> [795,] -0.0745654526 -0.366889911 -1.049049844
#> [796,] -0.5413618395 -1.425704118 -1.772838396
#> [797,] -0.5615352128 -1.573183131 -1.903386282
#> [798,] 0.4609467878 0.904895633 0.819308465
#> [799,] 1.5000190124 1.404587991 2.611801131
#> [800,] 2.0205955107 1.598001043 0.373309531
#> [801,] 1.7034972433 2.499630395 5.087977618
#> [802,] 1.3228115921 2.145839531 2.154463287
#> [803,] 0.9790239125 1.195464495 1.868885875
#> [804,] 1.6918661874 4.012946884 4.314154798
#> [805,] 0.1123776779 -0.248816080 0.580298765
#> [806,] 0.6426153791 0.944892858 1.612348204
#> [807,] -0.6092821039 -0.869460985 0.313327669
#> [808,] -1.0733585270 -0.737493900 -0.674536255

```

```

#> [809,] 2.3803311166 2.480240827 2.453583703
#> [810,] 0.5675089566 -0.093171574 -1.207315735
#> [811,] -0.2691778436 0.571668015 0.828424532
#> [812,] 2.4133171283 6.553132922 8.479674961
#> [813,] -0.1052018695 0.304690025 0.213912936
#> [814,] 0.1867296063 0.124990083 -0.478625709
#> [815,] 0.6171532304 0.991109382 -0.230655624
#> [816,] 1.1570141390 2.016505249 0.577540424
#> [817,] -0.2906536413 0.293071663 0.368466933
#> [818,] 0.6738149920 1.969822346 2.067143096
#> [819,] 0.0778644451 0.381671352 0.484839851
#> [820,] -0.0531097022 0.060799675 -0.734212944
#> [821,] -1.8178101884 -1.427868305 -2.597689387
#> [822,] 1.8792723293 2.603627617 4.107680263
#> [823,] 0.6383534578 2.026906020 2.611172213
#> [824,] -0.2392217030 -0.852097076 -0.192826671
#> [825,] 0.4828462643 1.970164078 1.682332925
#> [826,] -0.7171786015 -0.703975062 -0.626710273
#> [827,] 1.2349938141 1.408161860 3.116204314
#> [828,] 1.5397254548 2.916316798 2.181918521
#> [829,] 1.0397762603 2.275092051 1.396858208
#> [830,] 0.2506922739 -0.402778840 1.390576159
#> [831,] 0.2943666847 -0.895423013 -1.455643543
#> [832,] -0.5697427420 -0.804996890 -0.736753818
#> [833,] 3.3012518617 5.783673977 7.797207852
#> [834,] 0.1770199105 0.585219940 1.231152459
#> [835,] -1.0227229537 -1.153739017 -1.366847979
#> [836,] -0.2663572875 -2.406004477 -3.800279382
#> [837,] -0.5724508099 -1.443405252 -1.283810159
#> [838,] 2.0326428242 2.388770632 3.481964536
#> [839,] -1.1224390470 -1.399611931 -2.630725430
#> [840,] -1.1382445099 -0.048099547 1.658077967
#> [841,] -0.8661325742 0.191468047 0.693251649
#> [842,] 0.4467058202 -0.383749410 1.576871764
#> [843,] 1.9546030362 2.754197386 3.036477423
#> [844,] 1.4267614898 1.055365083 0.298638127
#> [845,] -0.1296231126 0.434194072 0.261526596
#> [846,] -0.0150098177 -0.224917856 1.615158335
#> [847,] 0.1336291343 0.114963605 1.587046163
#> [848,] -0.0739572271 0.542019835 1.273918309
#> [849,] 1.2438791007 1.353470123 1.106357565
#> [850,] -1.5255298536 -2.920528465 -3.865402176
#> [851,] 1.9905741836 1.199666394 0.961921238
#> [852,] -0.1058721663 0.049616438 -0.357596283
#> [853,] 0.9971019920 0.421037160 2.287744130

```

```

#> [854,] 0.3830872101 1.769500602 2.363804418
#> [855,] -1.1729898978 -2.705474513 -2.832483419
#> [856,] -1.2650028138 -1.918115084 -2.740666369
#> [857,] 0.0441762266 -0.188290729 0.802954757
#> [858,] -1.2130466663 -2.817313085 -4.092966045
#> [859,] -1.7373945474 -4.598345665 -3.938800764
#> [860,] 1.1404126781 0.222879578 -0.579021179
#> [861,] 2.3527719236 2.089161254 2.028216699
#> [862,] -0.5615517689 -0.896416786 -2.249656679
#> [863,] -0.4364072941 1.044078873 1.704587976
#> [864,] -0.5274853972 -1.054391267 -0.945160136
#> [865,] 0.6073104572 -0.045486185 0.493182636
#> [866,] -0.4750452292 -0.376818774 0.101622367
#> [867,] -0.7579274046 -0.242141103 0.965247139
#> [868,] 0.8148591322 1.222933271 0.265735835
#> [869,] 0.8719048155 2.247689491 4.098629010
#> [870,] 0.1006813492 1.209824431 1.885005920
#> [871,] -0.8759612961 -0.961341566 -0.652540493
#> [872,] 0.4686937152 0.048403085 -0.778070552
#> [873,] -1.0439186791 -0.967829251 -0.307225876
#> [874,] -2.0807578920 -1.652390732 -1.748283235
#> [875,] -1.0333162437 -2.763580517 -4.667574883
#> [876,] 0.0485217301 -0.339743742 -0.271313064
#> [877,] -0.2472603660 -0.289309943 0.512782478
#> [878,] -2.2231711525 -3.931134638 -5.000777059
#> [879,] 0.4693832467 -1.039275268 -1.955909734
#> [880,] 2.0121842322 3.085102685 4.270491445
#> [881,] -1.3545127574 -2.842873558 -4.646846786
#> [882,] 1.7625780792 3.472897350 3.789272156
#> [883,] -1.1340771500 -2.732994255 -3.357373819
#> [884,] -1.6815973155 -2.536638612 -2.169634627
#> [885,] 0.0874840706 -0.314911274 1.163727198
#> [886,] 1.2030292652 1.520710110 1.530315526
#> [887,] -0.2209807700 0.336003455 -0.466613831
#> [888,] 1.7225124129 4.060682699 5.275093836
#> [889,] -1.7535110475 -2.806715946 -3.854622548
#> [890,] 0.5337834592 0.755591263 -0.085238748
#> [891,] -0.3028906873 0.776592132 0.891132503
#> [892,] -1.9040682010 -4.083543482 -5.108849392
#> [893,] -1.2025865546 -1.807079095 -2.295180289
#> [894,] -0.5197530171 -1.353018146 -1.736212167
#> [895,] 2.5635736749 4.401766865 4.841502805
#> [896,] 0.8254822176 1.289749995 0.874380101
#> [897,] 1.4238262327 2.348824665 1.929728475
#> [898,] 2.1886566356 1.926523971 1.379372287

```

```

#> [899,] 2.0489481090 3.018901813 2.017506543
#> [900,] 2.1116427517 1.379516690 0.907064454
#> [901,] -0.0348278834 -0.960822941 -0.816675846
#> [902,] -1.6327386095 -0.622873374 -0.765831030
#> [903,] -0.0257037022 -0.668457418 0.726143291
#> [904,] 0.0051124322 0.648164913 -0.685455583
#> [905,] -0.6415968983 0.378082858 0.687614401
#> [906,] 2.0218133055 3.631595914 4.426190865
#> [907,] 0.0194625664 0.067140636 0.627580529
#> [908,] 0.6137110164 0.147285513 0.828993055
#> [909,] 3.5378381615 5.266218741 7.227002122
#> [910,] 1.7063524044 0.200238141 -0.887801559
#> [911,] -1.8497486023 -3.008885802 -2.215809639
#> [912,] -2.2117234582 -4.579121709 -5.245759327
#> [913,] 0.5754109940 0.414900526 0.143481225
#> [914,] 0.4327947564 0.282757913 -0.210037259
#> [915,] 0.9624545692 1.919543270 2.471319354
#> [916,] 1.4165943719 1.561251477 1.610717887
#> [917,] -0.7163389311 -0.565258810 0.192639594
#> [918,] -0.8143877596 -0.654214335 -0.257043791
#> [919,] -0.6624421186 -0.686249654 -0.296422678
#> [920,] -0.8084387687 -2.284182379 -3.565007990
#> [921,] 0.1880625381 0.899002962 1.355467970
#> [922,] -1.0691134868 0.305291287 -0.169616676
#> [923,] -3.4700754226 -5.846225433 -6.157908555
#> [924,] 1.3391277204 0.922622648 0.713194515
#> [925,] -2.2585007505 -2.903988883 -2.395104936
#> [926,] -0.2815334966 -0.591296655 -0.207737808
#> [927,] -0.7311219220 -0.352479231 -0.232461788
#> [928,] 0.5651745900 1.955352283 2.820991219
#> [929,] -0.7324389582 -0.662326723 -0.173521655
#> [930,] -1.0855594154 -1.808247271 -3.200252227
#> [931,] 2.6774253378 5.158444245 7.516604219
#> [932,] 1.1984916848 1.650868911 2.532018680
#> [933,] -0.2302901786 -0.488514451 0.373669457
#> [934,] -0.0040902382 1.183753032 3.712789182
#> [935,] -0.9431591668 -2.569231591 -3.284819585
#> [936,] -1.6920642466 -3.668526072 -4.738554004
#> [937,] -0.4333216072 -0.417060271 1.945150371
#> [938,] 1.6313545077 3.047747801 5.621533440
#> [939,] 0.9340572189 1.004638104 1.069564743
#> [940,] 0.0205029246 0.662115733 -0.125414473
#> [941,] 0.4297424268 0.450320626 0.191575215
#> [942,] 0.0986145202 0.198224203 -1.872986541
#> [943,] -0.5510404107 -1.681287244 -1.909943076

```

```

#> [944,] 0.5069497534 -0.283566831 -1.933450042
#> [945,] -0.2633749042 0.406648904 0.065650124
#> [946,] 2.4627679555 2.805124930 3.418879709
#> [947,] -0.2538212261 0.641218411 1.432925466
#> [948,] -0.5933752091 -1.319972926 -1.979861598
#> [949,] 2.4756285108 4.423889098 4.349715222
#> [950,] -0.4326066816 -0.436519445 -1.182882743
#> [951,] -0.3063616521 -1.409668230 -1.405475319
#> [952,] -0.0897558277 1.134929924 1.586632280
#> [953,] 0.2673503408 2.136868710 2.769383245
#> [954,] -1.5589591199 -2.158560367 -3.027139477
#> [955,] 0.6512717635 -1.285222277 -0.710795973
#> [956,] 1.9502734693 2.023741602 1.303031954
#> [957,] -1.9017111101 -4.136181796 -6.357271368
#> [958,] -0.2290968508 -0.076505762 0.234432593
#> [959,] -0.1182346060 -1.272936219 -2.389668754
#> [960,] 1.8615233127 3.008440892 3.360707214
#> [961,] -0.1459344099 -0.179450774 -1.030362691
#> [962,] -0.4210583517 -0.150250099 -1.290936679
#> [963,] -0.2923779956 0.365126951 -0.827745320
#> [964,] 2.1873635932 3.288102231 2.862189923
#> [965,] 0.4105521011 1.285223164 0.849802103
#> [966,] -0.3430100870 -0.380737037 -0.718577506
#> [967,] 0.0132463385 0.947269064 1.321228453
#> [968,] -1.1834463689 -2.633141068 -3.012253749
#> [969,] 0.8336597903 -0.675244592 -0.861441194
#> [970,] -1.9314985645 -2.162453618 -2.380784991
#> [971,] -1.0907308639 -1.373461613 -1.509402328
#> [972,] -1.7740954732 -2.394301796 -2.998696483
#> [973,] -2.5222147481 -6.050028449 -7.133616883
#> [974,] 2.2734258397 1.448854326 0.342558398
#> [975,] -1.3292721390 -2.007615016 -3.023922464
#> [976,] -1.6236572737 -2.953754634 -4.084053239
#> [977,] 1.3523900047 1.706031423 1.866038152
#> [978,] -1.7446834196 -2.982342414 -3.465815535
#> [979,] -0.5921139593 -2.386408001 -3.664661469
#> [980,] 0.0466253412 -1.286060488 -1.559325837
#> [981,] 0.2361101188 -0.351072450 -0.493485478
#> [982,] 0.0276543083 -0.126988466 -1.669278497
#> [983,] 0.5066759540 -0.273764605 1.097236926
#> [984,] -0.8104257961 -1.706468744 -2.089428356
#> [985,] -1.1710108323 -3.015346352 -3.126431655
#> [986,] -0.3302069143 -1.258536272 -1.690390526
#> [987,] -0.6451334818 -2.555803638 -3.101509927
#> [988,] -0.4168615518 0.087425591 0.797842755

```

```

#> [989,] -1.7268802962 -2.068853242 -1.742132032
#> [990,]  2.4658297692  4.454965828  5.369356160
#> [991,] -0.3428280826  0.783687526  0.730958929
#> [992,] -2.2102352727 -2.757748422 -3.022564584
#> [993,]  2.0946287284  1.246798083  1.902719172
#> [994,]  1.0378050800  1.518311981  3.408594108
#> [995,] -0.9137424960 -0.250087352  0.942185636
#> [996,]  0.2993749693  0.714249884  0.717990343
#> [997,] -0.2956877935 -0.476208506 -0.207778302
#> [998,] -1.8060277773 -2.698739174 -3.385927211
#> [999,]  1.3604090615  4.172187863  5.024278819
#> [1000,] -0.8665732002 -0.656411203  1.074827487
#> [1001,] -0.5164692149 -0.128273234 -1.221316390
#> [1002,] -0.3131368064 -2.128097968 -3.464221692
#> [1003,]  1.7877883166  3.118688606  2.941364573
#> [1004,]  0.9464938712  2.418936898  3.168891674
#> [1005,]  0.8600025393  1.027047967  2.185552691
#> [1006,]  0.8889846461  0.963829748  1.562258991
#> [1007,]  1.0511134813  0.944335897  1.482344854
#> [1008,] -1.8054465051 -3.661937940 -5.493250749
#> [1009,] -0.5664089395 -0.957483154  0.032674001
#> [1010,]  0.6884303288  1.088408544  0.120495438
#> [1011,] -0.1598026517  0.778685085  0.130402069
#> [1012,] -0.2755028897 -0.210977576 -0.194928523
#> [1013,] -0.0833794490  0.554766998 -0.087560412
#> [1014,]  3.0758660508  4.089320104  4.198650588
#> [1015,]  0.2889883844  0.047627287 -0.298982058
#> [1016,] -1.1024726855 -2.105917084 -2.561796189
#> [1017,] -0.5360129522 -1.233051197 -2.293535421
#> [1018,]  0.5905282042  2.167358801  1.796901167
#> [1019,]  0.6728872582  0.514422031  0.772827751
#> [1020,] -0.9558518278 -1.902253203 -1.690731273
#> [1021,] -1.6180177842 -2.109483103 -2.127955209
#> [1022,]  0.7304941668  1.342224900  2.336787098
#> [1023,] -1.2226911216 -0.575290144  0.431685472
#> [1024,] -1.2643612112 -3.659803112 -4.347212122
#> [1025,] -1.3580311144 -0.224054214  0.004644978
#> [1026,]  0.2971450388  1.318337540  2.995277197
#> [1027,]  0.4220239252 -0.443836184  0.857033879
#> [1028,]  0.8421237905  1.814708719  2.258435443
#> [1029,] -2.9525373948 -6.720905782 -6.749684085
#> [1030,] -1.1969425329 -0.971434505 -0.378815583
#> [1031,]  0.0825736511 -1.010293005 -1.229395874
#> [1032,]  0.0875234350 -0.245932588  0.508518330
#> [1033,]  1.7757098374  1.458698951  2.969423858

```

```

#> [1034,] 1.4573067502 2.331709818 2.530832113
#> [1035,] -1.8168886983 -1.393245361 -2.893293338
#> [1036,] -1.5014819743 -1.123329354 -1.245066307
#> [1037,] 0.9302156101 2.064085192 2.426700848
#> [1038,] 0.9325460541 1.721255894 3.014108291
#> [1039,] -0.0163242077 0.746618807 -0.532019368
#> [1040,] -1.5479792451 -2.478718613 -3.784073569
#> [1041,] -0.5530374789 -2.024365973 -2.920656649
#> [1042,] 1.6320228492 3.622985420 5.017110845
#> [1043,] -3.1782711166 -4.036493797 -4.589637608
#> [1044,] -0.9679266060 -0.788537597 -0.865093657
#> [1045,] 0.1223952684 2.076159167 2.562317897
#> [1046,] -0.0845749081 -0.195094872 -0.699563374
#> [1047,] 0.7877456305 0.306559920 0.645644179
#> [1048,] 1.4305470886 2.654698392 2.755992023
#> [1049,] 0.6580065833 0.220975412 -1.515818270
#> [1050,] -1.6440487677 -2.113580108 -1.070912246
#> [1051,] 0.8437230853 1.804303686 1.743195418
#> [1052,] -0.9223510398 -0.935808484 -0.686252009
#> [1053,] 0.1503230177 -0.242348291 -2.622459050
#> [1054,] -0.7237232371 -0.472677165 1.808954922
#> [1055,] -1.9823939484 -3.237026051 -4.175146173
#> [1056,] 1.2786362760 2.408587410 2.724984716
#> [1057,] 0.3900673465 0.494017420 0.070229761
#> [1058,] 0.9026904309 1.818928333 2.052002883
#> [1059,] -0.2743105427 -0.035901652 -0.200677465
#> [1060,] 0.1407158857 0.874205840 0.653820700
#> [1061,] -0.7262818713 -0.553760720 -0.148436467
#> [1062,] -1.9003179167 -3.672112875 -5.212810257
#> [1063,] 0.0165562883 0.870281092 -0.322218822
#> [1064,] -0.2943037050 0.609486357 -0.193058403
#> [1065,] -0.0624152826 -0.236674439 -1.989709415
#> [1066,] -1.2630240986 -1.196324891 -1.686741031
#> [1067,] -0.5483859282 -0.323092347 -0.759819369
#> [1068,] 0.3791157030 2.145894591 2.705812374
#> [1069,] 0.5796911575 0.237313619 -0.735223917
#> [1070,] -1.2457116518 -1.009212652 -0.466925306
#> [1071,] -0.1061117736 -1.471243033 -3.564151141
#> [1072,] 1.0871467575 1.662994856 3.873927261
#> [1073,] 0.3959263554 1.166692299 2.575061544
#> [1074,] -2.4360715779 -2.955756743 -3.344501042
#> [1075,] 1.3883771932 2.648956231 3.053561737
#> [1076,] 0.7330981159 -0.276955078 -0.660029660
#> [1077,] -0.0709094147 0.884843766 0.484716641
#> [1078,] 2.3652442242 1.514400310 0.702457302

```

```

#> [1079,] -0.3697380834 -0.459433264 -0.250541119
#> [1080,]  0.0546862719  0.878472436 -0.428415421
#> [1081,]  0.1293368123  0.646556633 -0.672229254
#> [1082,]  1.4747832314  1.783487645  1.877005226
#> [1083,]  1.8408788342  1.590384294  2.837615485
#> [1084,]  0.1136118207  0.546563948 -0.524440685
#> [1085,] -0.1430022839 -0.313151367  0.289840753
#> [1086,]  0.0882412050  0.033899835  0.272899718
#> [1087,]  0.6856735620  0.380791520  0.175587679
#> [1088,]  0.8390418473  0.196201206  1.739703135
#> [1089,] -2.1507041665 -0.797155229  1.689035712
#> [1090,]  0.2788242176  0.439942400  0.528457702
#> [1091,] -0.6438284251 -0.051751531  0.482408615
#> [1092,] -1.2920542492 -1.306857226 -1.685650251
#> [1093,]  1.1399471567  1.524960174  1.229306474
#> [1094,] -2.6557819829 -3.868234063 -3.778986781
#> [1095,] -1.2081674156 -1.008275889  0.464622995
#> [1096,] -2.1385458745 -2.068538174 -2.751016559
#> [1097,] -0.0915377775  1.365779839  1.767969786
#> [1098,] -1.2667425827 -0.923506258 -0.979750815
#> [1099,]  1.3702251129  2.150819264  3.957885679
#> [1100,] -0.6328776282 -0.817382778 -0.880573343
#> [1101,]  0.6520362045  0.775440150 -0.493524568
#> [1102,] -0.8391273829  0.050230010 -0.448098720
#> [1103,] -0.7684643115 -1.115423871 -1.160772082
#> [1104,]  0.3882499828 -0.704322192 -0.803357382
#> [1105,] -1.7031547692 -1.028778427 -0.417959594
#> [1106,]  0.3429636290  1.408246210  3.110656596
#> [1107,]  0.0278811202  1.414581352  1.997363127
#> [1108,]  1.0082163502  0.983487991  1.467770288
#> [1109,] -0.7033436290  0.025144694 -0.228585056
#> [1110,]  0.9736847563  1.076859440  1.568589345
#> [1111,]  0.7253070695  1.030310173  0.913770083
#> [1112,] -0.6958981478 -1.428508629 -2.058116268
#> [1113,] -0.8920764485 -2.175496494 -2.101711582
#> [1114,]  1.0115774510  1.115229579  1.186161793
#> [1115,]  0.6158946450 -0.139103104  0.794240333
#> [1116,]  0.4887139066  1.623212515  1.889919816
#> [1117,] -2.0764238124 -4.686820020 -5.821710043
#> [1118,]  1.2038892731 -0.450623709 -2.172376684
#> [1119,]  1.5055411949  2.871822972  3.807702177
#> [1120,]  0.5123456667  1.529488078  2.099392753
#> [1121,] -1.7048871712 -2.638800725 -1.523507043
#> [1122,]  1.1415456797  0.441977425  1.243638767
#> [1123,]  0.6034477827 -0.494999777 -1.283476421

```



```

#> [1124,] -0.8816639077  0.075536192  0.976117077
#> [1125,]  0.6736985061  0.257888389  1.489003643
#> [1126,]  0.3356179314 -0.270698129 -1.462086379
#> [1127,]  2.0742075195  3.711468239  4.996979626
#> [1128,]  3.0377767368  3.366646224  2.684743218
#> [1129,] -1.7571739175 -3.126933926 -3.762172515
#> [1130,] -0.9374560940  0.280790025  0.849913567
#> [1131,]  0.5524314494  0.125942586  0.229865268
#> [1132,] -0.9140404430 -1.816130169 -2.072509254
#> [1133,]  2.1362141849  2.871221153  2.514605753
#> [1134,] -0.2982035024 -0.395659240  0.067004947
#> [1135,] -0.3815882650 -1.682931807 -1.783400723
#> [1136,] -0.0972908628 -0.463844323 -0.889149337
#> [1137,]  0.2524685289  0.859543606  1.177258455
#> [1138,] -1.5631505562 -2.837602689 -2.816854966
#> [1139,]  1.6064069082  3.750320894  4.089721623
#> [1140,]  0.7075887902  2.280631041  2.495747663
#> [1141,] -1.3280828128 -2.965980637 -3.668890555
#> [1142,] -0.9613212237 -1.043430200 -0.046681266
#> [1143,] -0.2295939225 -0.882973821  0.117889774
#> [1144,]  2.6501099803  1.845854196  2.104968974
#> [1145,]  1.3932231502  3.064179305  2.278362866
#> [1146,] -0.2290090371  1.036904893  2.297751320
#> [1147,]  2.3915353458  3.138446944  3.839449181
#> [1148,] -0.5154641655 -2.436167812 -1.894811157
#> [1149,]  2.2782665110  3.578548373  4.419888850
#> [1150,] -0.4928757772 -0.727401110  0.170276442
#> [1151,]  0.1538725289  0.638864051  0.723186165
#> [1152,] -1.4749127066 -3.585345879 -4.487813818
#> [1153,]  1.7523313829  1.419541404  1.682533816
#> [1154,]  0.1088493225  0.594368996  0.583760046
#> [1155,] -1.5104137764 -3.119198201 -4.143894472
#> [1156,]  1.1595069030  1.455579797  1.761650700
#> [1157,] -1.2630043611 -2.327335891 -1.545350609
#> [1158,]  0.5995609952  0.624156894  2.034274233
#> [1159,]  0.2507394395  0.646920031  2.936935948
#> [1160,]  1.0266063034  1.149185852  0.304688719
#> [1161,] -0.9505563231 -1.542914481 -3.446779840
#> [1162,] -0.9489093446 -1.890496882 -2.035174032
#> [1163,] -1.5581332746 -2.170593550 -3.127177476
#> [1164,]  2.9825299806  4.771135091  5.934239293
#> [1165,]  0.1896095610  0.969673808  1.609381087
#> [1166,] -1.3133607545 -1.729899816 -4.240841258
#> [1167,] -0.0435990366 -0.096174936  1.278972151
#> [1168,] -0.2617403991  0.996869546  2.366995240

```

```

#> [1169,] -2.0793643862 -2.107986321 -0.299056231
#> [1170,] -0.8100967853 -1.098005619 -0.241002622
#> [1171,] 0.3169128263 -0.081759919 -0.323198925
#> [1172,] 0.4350967583 1.185237960 0.394328594
#> [1173,] -0.0386200296 -1.076541847 -1.106531295
#> [1174,] 0.8693575796 0.389755231 0.425006377
#> [1175,] 4.3433045048 4.485741736 5.311448869
#> [1176,] 2.3790861375 3.995223589 5.157888515
#> [1177,] 1.4865975645 2.326723952 3.880205936
#> [1178,] 0.9836206077 1.538871088 1.903927064
#> [1179,] -0.4841823280 -1.974050367 -2.847618967
#> [1180,] 0.1286244414 -0.026654460 0.660442749
#> [1181,] 0.8516558929 2.057845279 2.503447116
#> [1182,] -1.0567556842 0.386087720 2.412744568
#> [1183,] 1.7225961342 1.195309464 -0.167664848
#> [1184,] 1.2567022763 0.918163456 -0.122457375
#> [1185,] -1.6029731015 -1.847589870 -3.152953102
#> [1186,] -1.5041659068 -3.738364024 -3.852834336
#> [1187,] 0.5042480165 0.276583148 0.401999239
#> [1188,] -0.7349166778 0.342137485 1.223622586
#> [1189,] -0.1820422532 1.000339352 2.192837829
#> [1190,] -0.8322343222 -1.123651363 -1.335695907
#> [1191,] 0.1978490395 -0.753413766 -1.420997487
#> [1192,] -0.2353809976 -0.035195970 -0.405744506
#> [1193,] -0.2174572602 0.317041696 -0.791747285
#> [1194,] -0.2606613575 -1.516958132 -1.287253583
#> [1195,] 1.5250390785 0.243874439 -0.053531787
#> [1196,] 0.4919738709 2.391314562 2.347882436
#> [1197,] 1.1971736052 1.486696460 1.040081466
#> [1198,] -0.8524876527 -0.923624675 -0.745206259
#> [1199,] -1.0577149031 -3.177827899 -4.395823034
#> [1200,] -1.7877361137 -3.402359248 -1.413236495
#> [1201,] 0.5161587404 1.204299320 2.102424682
#> [1202,] -0.0116577272 0.053373212 -0.531250839
#> [1203,] -1.3148022806 -2.167487759 -1.454324021
#> [1204,] -1.9197390922 -2.880916643 -2.578781114
#> [1205,] -2.8447733218 -4.254098722 -4.639357865
#> [1206,] 3.6461996036 7.063544731 8.028928203
#> [1207,] -2.8036207928 -4.878397853 -7.021651484
#> [1208,] 0.6290996953 0.214770797 1.260798466
#> [1209,] -1.5628138796 -3.212532116 -4.443801993
#> [1210,] 0.2368715312 2.431860119 3.160932918
#> [1211,] 0.3800787955 0.879352982 -1.108016041
#> [1212,] 2.4500212624 3.257787846 3.949619036
#> [1213,] -0.1731537709 0.851644546 0.951907804

```

```

#> [1214,] -0.0542559835 -0.731602699 -0.327375208
#> [1215,] -1.2506814187 -0.462257519 -0.921620553
#> [1216,] 0.8403396740 -0.097930499 -2.017085306
#> [1217,] -1.0593863373 -2.502643788 -2.087402201
#> [1218,] -1.1047183099 -3.162826232 -4.966329933
#> [1219,] 0.6842702326 -0.796386199 -1.907053189
#> [1220,] 2.4689232546 3.575805394 4.879672319
#> [1221,] -1.4086696323 -1.331981101 -1.160114904
#> [1222,] -0.0390672189 -0.483819212 0.037701781
#> [1223,] -0.3309459645 -0.395231435 -0.448626037
#> [1224,] 2.6984692991 1.904403642 1.093558931
#> [1225,] -0.6374800420 -0.496071609 0.738277435
#> [1226,] 0.3392973703 -0.785324475 -0.995116299
#> [1227,] 2.3747632864 3.590428790 5.048014570
#> [1228,] -0.6126598830 -1.619307983 -4.449726949
#> [1229,] 3.4531551291 3.751088888 3.147090016
#> [1230,] -1.1803528371 -1.638382916 -2.244788487
#> [1231,] -0.7388221213 -2.162670773 -3.384894155
#> [1232,] -2.0858805886 -3.146383506 -3.158769805
#> [1233,] -0.7599246317 -0.351446042 -0.009243095
#> [1234,] 0.4198549629 1.317280151 1.779692595
#> [1235,] -1.0528875639 -1.961070469 -1.624679796
#> [1236,] -1.1499398121 -1.667440507 -1.805636985
#> [1237,] 1.6564631675 2.339862387 2.507031532
#> [1238,] -0.1588684424 -0.500588664 -1.164579103
#> [1239,] -0.0369256267 1.635092355 3.001633711
#> [1240,] -1.7229692350 -1.646932443 -2.937311049
#> [1241,] -0.1425503617 -0.626810741 -0.246449867
#> [1242,] -0.9162877083 -1.746128108 -2.915666361
#> [1243,] 0.5006115065 0.652129769 0.041967229
#> [1244,] 1.8623932534 1.437220212 0.577431058
#> [1245,] -1.0734370704 -1.509268550 -0.997736955
#> [1246,] 0.7542995797 0.223665598 -1.019911524
#> [1247,] -0.9485369782 -0.899196521 1.171024938
#> [1248,] 0.6705551420 2.874367792 3.308049801
#> [1249,] -2.0829990764 -3.265608059 -3.619630955
#> [1250,] -0.6731349136 1.255610355 1.643723221
#> [1251,] 0.4689174682 1.488950931 1.599425427
#> [1252,] 0.4459741283 -0.276220249 -0.878727486
#> [1253,] 1.4488346296 1.604567618 3.123287881
#> [1254,] 1.9571262765 3.119900754 4.042795598
#> [1255,] 1.7115935437 3.091022741 3.439394181
#> [1256,] -0.2976730195 0.342082103 0.199107149
#> [1257,] -0.0718403256 0.851738477 0.434379649
#> [1258,] 2.1982251412 3.514921604 5.235544128

```

```

#> [1259,] -2.0516420070 -2.321592242 -2.540939027
#> [1260,] -0.7737186476 -0.692998721 -0.516395912
#> [1261,] 0.3069808515 0.465643503 -0.425148850
#> [1262,] 1.5650952046 1.406428583 1.974951420
#> [1263,] -0.2419311421 -0.836998737 -1.149923699
#> [1264,] -0.8860885037 -3.455532335 -4.536436922
#> [1265,] -0.3795955242 1.069310213 0.251666722
#> [1266,] 0.9434100374 1.445723383 1.443803812
#> [1267,] 0.5079351437 -0.723990189 -2.045707210
#> [1268,] -1.4084503860 -3.110992320 -3.714521882
#> [1269,] -1.5276793594 -0.130169562 -0.512078479
#> [1270,] 3.0339085147 2.229974443 3.065628203
#> [1271,] -1.0493481557 -0.356332201 -1.386944848
#> [1272,] -1.2921539607 -2.342936303 -2.272900414
#> [1273,] 0.2966884750 0.779863497 1.329520885
#> [1274,] 0.9034961356 1.797715041 1.667013582
#> [1275,] -0.1842924559 -1.528674081 -2.377925592
#> [1276,] -1.1382580219 0.263091909 -1.214495058
#> [1277,] 0.2424804378 1.110348745 1.683328527
#> [1278,] -0.3194100382 0.035370148 -0.398903096
#> [1279,] 2.0293186644 3.961974298 4.458274569
#> [1280,] 1.7198105262 2.387142524 3.799831588
#> [1281,] -0.4764713798 0.019465123 1.756560438
#> [1282,] -0.7464913319 -1.106550026 0.279629455
#> [1283,] 2.6540408115 3.877558228 4.936634576
#> [1284,] 0.4214356052 -0.105320941 -1.685648332
#> [1285,] 1.4023998713 2.342457150 2.809178433
#> [1286,] -1.1439957479 -2.637724820 -3.500974975
#> [1287,] -0.6036162594 0.246490638 0.322366893
#> [1288,] -0.5932726640 0.363032636 -0.666928279
#> [1289,] 0.9088626381 1.145236151 -0.074409359
#> [1290,] 0.7158974258 1.394696768 0.483561853
#> [1291,] -2.2213063802 -1.903208642 -1.720702232
#> [1292,] 0.3757069993 0.934475455 1.541665491
#> [1293,] -1.1709927818 -1.817514634 -3.388105254
#> [1294,] -0.6493185646 -0.557257220 0.212608192
#> [1295,] 0.1957017116 -0.951991659 -1.467179909
#> [1296,] -0.3524737307 -1.951821766 -1.657220632
#> [1297,] -0.2227684359 -0.094532847 0.072734767
#> [1298,] -2.1488487563 -1.414884435 -1.484274719
#> [1299,] -1.7410849030 -1.605433892 -1.576945785
#> [1300,] 0.7674921679 1.118394255 2.493635514
#> [1301,] 1.0051261292 0.523473964 -0.071157041
#> [1302,] 1.6433384341 1.967181255 2.669259911
#> [1303,] 1.9594691310 1.934582288 3.159473969

```

```

#> [1304,] 0.5726984106 1.860896723 3.094837564
#> [1305,] -0.0504073874 0.377688931 -0.181377345
#> [1306,] 0.5332331958 -0.476468444 -1.250641476
#> [1307,] 1.6244246373 2.805602010 3.908741291
#> [1308,] 0.9858113700 1.180785579 2.428251027
#> [1309,] 0.5374820343 0.532948727 -0.119179860
#> [1310,] 1.6153036650 2.594028809 3.710167310
#> [1311,] 0.3759017181 -0.094010048 -0.133743081
#> [1312,] -0.1444099732 -0.786209017 -1.740191935
#> [1313,] 0.8577720471 1.922145885 3.377912358
#> [1314,] -1.4229343177 -1.754601143 -1.858275758
#> [1315,] -0.3503356126 -1.367744630 -2.237212449
#> [1316,] -0.2878738745 -0.881116120 -1.829782806
#> [1317,] 1.1800555706 1.761712349 1.078420744
#> [1318,] -0.7251399053 -0.720104021 -1.557660782
#> [1319,] 0.3489931676 1.873654376 1.151435705
#> [1320,] -0.8089271039 -0.656888711 -1.644629889
#> [1321,] -1.5573352939 -1.031821595 -0.385148681
#> [1322,] 0.6694885280 0.344905737 0.281919496
#> [1323,] -0.6855112390 -1.450928466 -1.464432424
#> [1324,] -0.5796890647 -0.064841955 0.291570359
#> [1325,] -0.0868506401 0.285550368 0.208868239
#> [1326,] 1.4038639937 -0.091081554 -1.139666642
#> [1327,] 1.1153913285 2.152014471 2.670283865
#> [1328,] 0.6561005602 0.871490697 0.802895074
#> [1329,] 0.2960372638 -2.104909031 -3.091030930
#> [1330,] -2.7195910917 -4.544801124 -4.704371253
#> [1331,] -0.5685521489 0.360220245 2.084644250
#> [1332,] 0.5712793946 2.023588169 1.802525363
#> [1333,] 0.0761370597 1.893273343 4.168614339
#> [1334,] -2.4538003018 -4.750728508 -6.610142309
#> [1335,] -0.4424291367 0.312573220 -0.463702686
#> [1336,] -1.2897937443 -1.689466320 -2.301695449
#> [1337,] 2.0111436045 2.702506221 3.307724940
#> [1338,] 2.4562600628 4.036159424 3.378764561
#> [1339,] 1.3305291627 1.545909306 0.805203093
#> [1340,] -0.1383283628 -1.260454773 0.179276913
#> [1341,] -1.4760128224 -3.312195510 -3.246290780
#> [1342,] -0.1253009314 0.101180199 0.591720369
#> [1343,] -0.3762772323 -1.461503163 -2.807190859
#> [1344,] -0.0848445516 0.062825849 -0.405302299
#> [1345,] -0.5527168168 -0.726807093 0.412449796
#> [1346,] 1.2440597303 2.421093311 3.625371676
#> [1347,] 0.6828134294 3.827241061 5.364674441
#> [1348,] 0.2553081265 0.569858530 0.925679651

```

```

#> [1349,] -0.0215735644 -0.413276217 0.254094395
#> [1350,] -1.6511834733 -0.986704010 -0.026144725
#> [1351,] -0.1357183568 0.445624994 0.680768878
#> [1352,] -0.6410254642 -0.560629943 -0.598821817
#> [1353,] 0.1105086039 0.354172448 0.779107441
#> [1354,] -0.6964478357 -0.903752892 -0.594677255
#> [1355,] 0.1236009601 0.079413152 2.358529990
#> [1356,] -2.0735157049 -0.788145630 -0.905901442
#> [1357,] 1.9290934101 5.518466819 8.386534077
#> [1358,] -0.2203671634 -2.504872357 -3.301831337
#> [1359,] -1.7692744372 -1.501180601 -0.128981286
#> [1360,] -0.5271523936 -0.666379873 -1.350581452
#> [1361,] -0.5573304167 -1.050534908 -2.785512851
#> [1362,] -0.3275000130 -0.728432414 -0.118227885
#> [1363,] -0.4714537065 0.960166336 2.261526952
#> [1364,] 1.4855379812 2.725052623 3.137521815
#> [1365,] -2.4178380416 -4.602806818 -4.450190254
#> [1366,] -0.0300972532 0.199027751 -0.375524002
#> [1367,] -0.2397696681 1.067693644 1.863447920
#> [1368,] -0.5450777371 -0.675911581 -1.148472861
#> [1369,] 0.1814680788 1.113331978 1.269164495
#> [1370,] -1.1349970218 -3.639233036 -5.562229126
#> [1371,] -0.0368594921 1.593961187 0.883909055
#> [1372,] -1.0929526172 -1.100506210 -1.460972068
#> [1373,] 1.5611618995 1.051931309 3.770836329
#> [1374,] 2.3064797767 4.493754550 5.343096001
#> [1375,] 1.0279647656 1.560905007 1.269854614
#> [1376,] -1.2933424262 -3.470152430 -4.395305152
#> [1377,] 0.9248222898 2.247048192 2.851667287
#> [1378,] 0.9530357829 2.654897999 2.880460132
#> [1379,] 1.4491626161 1.002862075 0.192269454
#> [1380,] -0.3301803130 -1.124023388 -1.435227178
#> [1381,] 1.3171020266 1.856484431 2.108605633
#> [1382,] 1.3788126810 2.470487078 1.447988799
#> [1383,] -0.5268598845 -0.356434501 -0.472632108
#> [1384,] 1.9316881826 2.795926056 3.524584876
#> [1385,] -0.7795659113 -0.766630109 -1.083972141
#> [1386,] -1.3022227718 -1.690508050 -1.544398103
#> [1387,] 0.3956805343 -0.284209514 0.312266759
#> [1388,] -0.5097110172 -1.184534096 -2.090886418
#> [1389,] -0.3091270769 -0.088640559 -0.874779353
#> [1390,] 0.0500168161 -0.324755811 0.584504672
#> [1391,] 0.8669761814 0.663022869 0.516296075
#> [1392,] 0.0669529665 0.492237758 -0.160742562
#> [1393,] -0.8762688991 -0.301750949 -0.870788047

```

```

#> [1394,] -0.0577020622 -1.565728797 -1.102147806
#> [1395,]  0.3440292378 -0.018306042  1.117009375
#> [1396,]  0.4961352766  0.531424081 -0.745694297
#> [1397,] -1.0335877204 -1.253521755 -1.383239922
#> [1398,] -0.3668048577 -0.127717429 -1.133009435
#> [1399,]  0.9085454274 -0.111925514  0.306113682
#> [1400,] -0.7527844604 -0.102457046 -2.095316729
#> [1401,] -0.7822916725 -1.280525356 -0.834324386
#> [1402,] -0.0777148503 -1.518852136 -1.419577006
#> [1403,]  2.0439789368  1.269131920  0.698469759
#> [1404,]  0.1950792712 -0.196505738 -0.472353144
#> [1405,]  0.7020086955  1.045315404  0.411456915
#> [1406,] -0.4747182236  0.394799217  1.358681963
#> [1407,]  0.4173036980 -0.838393479 -1.180184077
#> [1408,]  0.7428250582  1.834250919  1.789425469
#> [1409,] -2.0750371229 -3.819024796 -3.961170852
#> [1410,] -0.2441104428  0.296159737  0.978912881
#> [1411,] -0.0107150802 -0.709423553 -1.725346009
#> [1412,]  0.9210774454  1.938187565  1.634361266
#> [1413,] -1.2627679586 -1.358444474 -1.078167713
#> [1414,]  0.4218412839  1.471586368  2.132250017
#> [1415,] -0.0265309134  0.684177393 -0.395654059
#> [1416,]  2.7334932352  4.995873026  5.400111210
#> [1417,]  0.0699525391 -0.354063030 -1.509105160
#> [1418,]  0.2671436187  0.597891559  1.550609608
#> [1419,] -0.1453383568 -0.027442580  0.649368764
#> [1420,] -1.9811078770 -2.500109705 -3.076692219
#> [1421,]  0.1475179792  1.385112231  3.594086785
#> [1422,]  0.3853072515 -0.353553382 -0.944200589
#> [1423,]  0.7629173530  0.790159696  1.497851941
#> [1424,]  0.4147246563  0.642312108  0.336369165
#> [1425,] -1.5698216654 -2.777895982 -3.224168733
#> [1426,]  0.6067734340 -0.743481910 -0.243304038
#> [1427,] -2.6905698813 -3.805164258 -4.170184156
#> [1428,] -0.6663448838 -1.468012963 -1.888792773
#> [1429,]  0.0545069530  2.032668505  1.282518506
#> [1430,]  0.2297194917  0.512549520  2.462028059
#> [1431,] -0.1028894337 -0.038542919 -0.739370158
#> [1432,]  1.2695890331 -0.370051562 -1.097974720
#> [1433,] -0.1349531282 -0.779094320 -2.023561844
#> [1434,]  0.0337703510  0.567522358  0.867056696
#> [1435,]  2.6510987443  3.583966865  4.767483118
#> [1436,] -1.0850497277 -1.572445083 -1.602716248
#> [1437,]  0.4270027456  3.875048496  6.240900834
#> [1438,] -0.7071502224  0.086998835  1.338088978

```

```

#> [1439,] -0.5048688422 -1.213539178 -2.255567126
#> [1440,] -1.2871293241 -1.948954729 -3.347771087
#> [1441,] 1.1002878698 2.244959866 2.569852348
#> [1442,] 0.4399699050 1.037809181 0.854243028
#> [1443,] 0.6148223003 0.028083502 -0.243188203
#> [1444,] 0.4107970183 0.010780024 -1.042049801
#> [1445,] 0.4791462119 2.198460869 3.041646584
#> [1446,] -0.0021017941 -1.400518223 -1.759358281
#> [1447,] 0.7620480990 -0.691835114 -2.024620452
#> [1448,] -0.1707898447 0.156339175 -0.475265833
#> [1449,] -0.4656052280 -2.121530734 -1.968172480
#> [1450,] 0.4359139379 -0.335531998 -2.559715089
#> [1451,] -0.3903053148 -0.209959284 -1.177658259
#> [1452,] -1.5344058049 -1.872739940 -2.800755423
#> [1453,] -0.5063634659 -0.897049405 -1.469489040
#> [1454,] -1.1222179818 -0.947790158 -0.066821632
#> [1455,] -0.4277215236 -0.367123740 -1.925695990
#> [1456,] -0.7760468310 -2.344758060 -2.442494627
#> [1457,] 0.4928543429 0.031971193 0.001199221
#> [1458,] -0.4637346286 -1.008289647 -1.774571933
#> [1459,] 0.3355264775 0.339328861 0.936739549
#> [1460,] -0.1862773421 0.261685836 0.324671103
#> [1461,] -0.3161887023 -0.764782201 0.001317752
#> [1462,] 1.1532477816 1.429551725 2.450626080
#> [1463,] -2.1321326195 -2.514948488 -3.529779601
#> [1464,] -0.8885424624 -2.688295290 -2.766745033
#> [1465,] -1.2695410529 -1.629383921 -1.699240991
#> [1466,] 0.7157057514 2.478032392 3.298214242
#> [1467,] 1.3412768279 0.372012995 -0.938321231
#> [1468,] 1.5094371680 1.612167582 1.369756049
#> [1469,] 0.3850935822 -0.310244016 -1.570919372
#> [1470,] 1.6184236547 2.741403191 3.475741424
#> [1471,] 0.3081946659 1.767972305 2.586602524
#> [1472,] 0.3290598187 -0.084788878 0.685908542
#> [1473,] 1.6852557460 3.591897878 3.128628766
#> [1474,] -2.8393145806 -5.032137861 -3.692350594
#> [1475,] -0.4552380836 -0.801386829 0.176757144
#> [1476,] -0.1114372590 -0.463355667 -2.335391424
#> [1477,] 0.3231646354 -0.401304268 0.718793267
#> [1478,] 0.1858186896 0.668906674 -0.849979528
#> [1479,] 0.8918114059 1.246564765 0.500656170
#> [1480,] 0.5996181750 1.889055351 3.074879458
#> [1481,] -0.4717370813 -1.790907279 -1.148906764
#> [1482,] -0.9724700373 -2.216707066 -3.332887523
#> [1483,] -1.1100607744 -1.086278014 -0.298673903

```



```

#> [1484,] 1.9806073734 2.238288563 1.483875849
#> [1485,] 0.6807699753 1.316171592 1.229558361
#> [1486,] 0.0795050362 -0.462692156 -1.658657028
#> [1487,] 0.5585182676 0.006586312 1.264624787
#> [1488,] -0.7240292856 -0.173603570 -0.066077266
#> [1489,] -0.3071086804 1.231712996 2.617479963
#> [1490,] -3.2059381039 -3.639638677 -4.151773878
#> [1491,] 1.8491117436 2.340789775 3.500328959
#> [1492,] 0.6211898964 1.234578962 0.266752847
#> [1493,] -2.3200936305 -2.180747176 -2.618795595
#> [1494,] -0.6249104156 -1.475742541 -2.037925736
#> [1495,] -0.4209609390 0.353711231 1.022272237
#> [1496,] 2.2096422081 2.938215142 2.442906366
#> [1497,] 1.2502791871 1.241656884 -0.090123380
#> [1498,] 1.4183995094 0.896824861 0.590475923
#> [1499,] 1.9819835288 2.916916316 3.146698101
#> [1500,] 1.7151857178 1.811360671 0.724084131
#> [1501,] -0.4353197415 0.005223954 -0.267234514
#> [1502,] 0.3426646961 1.487753489 3.137990373
#> [1503,] -0.5298191052 -0.261889382 1.618075859
#> [1504,] 0.6959632690 3.429661221 5.246483348
#> [1505,] -0.4179625135 -1.215027390 0.036116765
#> [1506,] 0.8790935908 0.832027939 0.204241518
#> [1507,] 0.4013855073 -1.776980761 -1.878284786
#> [1508,] 0.2225021404 0.905937003 1.731852241
#> [1509,] -0.8736885768 0.035315312 -0.531556906
#> [1510,] 0.0513113124 -0.650857578 0.547259231
#> [1511,] 1.7050197743 2.242133933 2.162811626
#> [1512,] -0.2600276063 -0.187433320 -1.232494718
#> [1513,] 1.2143204727 2.107673113 3.444417167
#> [1514,] -0.7255572866 -0.930066581 -2.266804004
#> [1515,] 1.0313887213 2.228857079 3.687776962
#> [1516,] 0.0987462114 -1.052110294 -0.713936303
#> [1517,] 0.3078444427 0.223123734 1.524116423
#> [1518,] 0.6511076541 -0.517603571 -0.186932270
#> [1519,] 0.2705954936 -0.668686949 -1.258791316
#> [1520,] -0.0093371510 -1.082907126 -0.755974744
#> [1521,] 0.4179211760 0.085855818 1.102017457
#> [1522,] 0.7220523692 0.921583937 2.320266032
#> [1523,] -1.0157444768 -1.166166253 -0.758926366
#> [1524,] -0.0050017972 0.024152921 -1.543491362
#> [1525,] 2.1709397059 1.795596897 1.607678420
#> [1526,] 1.3333776661 1.664119002 1.632645343
#> [1527,] 1.4285818557 2.022108151 2.310522099
#> [1528,] -2.0309495960 -1.269558220 -0.632810051

```

```

#> [1529,] -0.1115597507  1.407214746  1.705220734
#> [1530,]  0.1115058719  0.255046340 -0.818655246
#> [1531,] -0.4829642831 -1.163655553 -0.585762348
#> [1532,] -1.0727409807 -1.042167748 -0.453331097
#> [1533,]  0.3617616469  0.110462693  1.220235772
#> [1534,] -0.0663444648 -2.239770215 -1.100322064
#> [1535,] -0.2653934878 -0.833378545 -0.874759076
#> [1536,]  0.3778446418  1.532360025  1.176052404
#> [1537,] -0.8255648469 -1.543363110 -1.488604692
#> [1538,]  1.2382381487  2.462803977  4.064928928
#> [1539,] -0.2634407394 -0.296488872  0.101679968
#> [1540,] -0.5762507095  0.332535501  1.486446178
#> [1541,]  0.5071448644  1.110404915  1.813575618
#> [1542,] -1.0307741127 -0.255152172 -0.059088785
#> [1543,]  0.4230508487 -0.933033983 -0.696833129
#> [1544,]  0.6316933636  0.043729132 -0.643755137
#> [1545,]  2.2651259111  4.836584064  5.709763364
#> [1546,] -1.4462211400 -1.889683383 -0.973195469
#> [1547,] -0.6166600988 -1.282186937 -2.253689935
#> [1548,] -1.6372268630 -2.323679524 -3.483921727
#> [1549,] -0.3260343191 -1.115687657 -1.019655401
#> [1550,]  0.5750134274  1.910229362  3.422380308
#> [1551,] -0.2724854074 -1.885699219 -2.110351758
#> [1552,] -2.1152276481 -3.872855410 -3.999018881
#> [1553,] -1.4613472015 -2.057027043 -2.108227727
#> [1554,]  1.4670217221  2.788784229  3.858154736
#> [1555,]  1.6735218572  1.733600228  1.626994081
#> [1556,]  0.2097619358  1.804335180  2.890193973
#> [1557,]  1.0806706742  1.700887840  2.783426468
#> [1558,] -0.7420026155  0.121653312  0.892139634
#> [1559,]  2.6222840684  5.228737291  5.088681987
#> [1560,] -0.5361418167  1.134091196  0.243615349
#> [1561,] -0.6178717573 -2.764380414 -3.280765102
#> [1562,]  0.6177045191  0.394260861 -1.156321481
#> [1563,] -1.4178588289 -3.297759038 -4.173444237
#> [1564,] -2.0023481362 -3.278783643 -4.248858199
#> [1565,] -0.5924824650 -1.296279226 -0.081737581
#> [1566,]  0.5031426922  0.507217948  0.522527530
#> [1567,] -1.0687602349 -0.649572422  0.797516964
#> [1568,] -0.0457092603 -1.116881365 -0.684916865
#> [1569,]  0.1857502126  0.024945342  0.178423465
#> [1570,] -1.5244076331 -3.426582296 -3.297287295
#> [1571,] -1.1008621217 -0.754106615 -1.588730729
#> [1572,]  1.1784509043  0.394306899  0.200490897
#> [1573,]  0.0047254259  0.982759747  0.148976859

```

```

#> [1574,] -1.5132213200 -1.373840220 -2.295062195
#> [1575,]  0.6293171093  0.082216746  0.349362843
#> [1576,]  0.8694105153  1.644768750  1.960094097
#> [1577,] -0.5071051817 -0.667501418 -1.970236661
#> [1578,]  0.3777205836  2.185657612  3.129286519
#> [1579,]  0.0740540383 -1.187805534 -2.192047806
#> [1580,] -0.0312655008 -0.565518514 -0.194469638
#> [1581,]  0.2804982958 -0.382295079  0.657154428
#> [1582,]  0.9355323978  2.106658552  3.790945545
#> [1583,] -1.2527735579 -2.974228213 -3.023611092
#> [1584,]  0.5783445406  0.682445891  1.492392567
#> [1585,] -1.1624684655 -0.327205573  1.574168765
#> [1586,]  0.6980399586  0.528132576 -1.125621930
#> [1587,]  2.7994389230  3.454172910  4.387921838
#> [1588,]  1.9394646605  3.175532922  4.357515942
#> [1589,]  0.1902488960  0.376664893 -1.611594381
#> [1590,]  0.8267247628 -0.205231096 -1.288294071
#> [1591,] -1.1368299692 -2.273425321 -1.624528152
#> [1592,]  0.2121689065  0.403101267  1.789866569
#> [1593,]  1.1442780019  0.779092003  0.995357838
#> [1594,]  0.7469423889  0.749801838  1.597366409
#> [1595,]  0.0634924831  0.068988766 -0.223230685
#> [1596,]  0.2808339669  0.923732679  0.229998343
#> [1597,]  0.8962747149  1.409322974  1.654840062
#> [1598,] -0.1355643924 -1.205717997 -2.318534862
#> [1599,]  1.4885250357  2.684417130  2.524245535
#> [1600,]  0.5626930983  0.658878760 -1.247054849
#> [1601,]  2.7223526998  4.326219052  5.325205997
#> [1602,]  2.2670158543  4.080153021  5.073021046
#> [1603,] -0.4648436910  0.368864780 -0.208558329
#> [1604,]  1.6962181927  4.164327466  3.454031797
#> [1605,] -0.0627711027  0.961558588 -0.148070419
#> [1606,]  1.1636977143  2.229818825  2.427784386
#> [1607,] -0.1646390959  1.225744538  2.534441067
#> [1608,]  2.4137955203  2.755544440  3.809318836
#> [1609,]  0.0361281245 -0.339255322  0.673078158
#> [1610,] -1.2237146181 -3.597733020 -4.934245269
#> [1611,]  2.9572554201  5.031348434  4.737308210
#> [1612,]  2.2951147214  4.250165885  4.745836788
#> [1613,] -0.6024116834 -0.058161093  0.988457096
#> [1614,] -0.6165535921 -0.917542114 -0.019832165
#> [1615,]  0.9494200420 -0.509517831 -0.382587844
#> [1616,] -2.4576252948 -1.911559163 -0.592870733
#> [1617,] -0.6096052724  0.999840613  1.341907531
#> [1618,]  0.2261318400  0.012885108 -0.801846009

```

```

#> [1619,] -1.7355346651 -4.080091998 -5.411641876
#> [1620,] -0.6516890090 -0.861531474 -1.559609000
#> [1621,] -0.6799390054 -1.045926823 0.034322846
#> [1622,] 1.2422207512 3.208642448 3.323170998
#> [1623,] -2.1215180849 -4.188677322 -4.673917468
#> [1624,] -1.5838478967 -2.711715569 -2.608737451
#> [1625,] -1.9184526462 -0.930368113 -1.343950581
#> [1626,] -0.2639580718 -0.143622542 -0.857183358
#> [1627,] -0.0353131735 0.342017825 -1.031456184
#> [1628,] 0.0212499230 0.137750103 1.313717869
#> [1629,] -1.8482259213 -2.902353722 -4.259182227
#> [1630,] -0.2465955906 0.048185253 0.323145261
#> [1631,] 0.0439946813 -0.388710262 -0.658339413
#> [1632,] -1.7865517997 -3.521076319 -3.715334938
#> [1633,] -1.0169442660 -2.009846572 -2.482365702
#> [1634,] 2.2122585012 2.785726324 3.216263480
#> [1635,] 0.4952802176 1.484509757 2.482544144
#> [1636,] 0.0626345170 0.401519076 0.662919437
#> [1637,] 0.6439019360 0.184354815 -0.378300946
#> [1638,] -0.5351887816 -1.935014130 -2.190634963
#> [1639,] -0.3956307862 -0.440589883 0.368816135
#> [1640,] 0.7479205267 1.548671062 2.329143680
#> [1641,] 1.0547503347 0.400505149 -0.910490043
#> [1642,] -0.8780619106 0.892833180 0.889904141
#> [1643,] -0.0738644046 -1.172540499 -1.038460004
#> [1644,] -0.0470450685 -0.857280878 -0.580117377
#> [1645,] -1.9679874519 -3.430666332 -4.754944966
#> [1646,] 0.1305115492 1.810263244 1.841708359
#> [1647,] 0.5691729180 0.885602535 1.539933244
#> [1648,] -0.7643905994 -1.521901773 -0.420220145
#> [1649,] 0.8997991180 1.865581374 3.599294797
#> [1650,] -1.3794227237 -2.577411136 -3.588424443
#> [1651,] -1.4800226843 -2.821321904 -2.707577529
#> [1652,] 1.0683395489 0.998165286 2.681391889
#> [1653,] -0.2260974961 -0.248269966 0.665804295
#> [1654,] -1.7947293450 -1.609714053 -1.717678858
#> [1655,] -0.2679904214 -0.842557936 -1.472448666
#> [1656,] -0.3532197406 -1.146155286 -1.777773182
#> [1657,] 1.1281832664 3.110576632 2.497060897
#> [1658,] 0.8184113810 0.990797398 2.311308244
#> [1659,] 1.9152478510 3.450509780 3.493788193
#> [1660,] -0.5264127896 -0.482905193 -0.318601734
#> [1661,] -0.1234327612 -2.031549900 -2.055389952
#> [1662,] -0.3449152846 -0.326592295 0.772816128
#> [1663,] 1.0894651620 1.442884117 0.255637944

```

```

#> [1664,] -0.5328297184 -0.953512239 -1.295594497
#> [1665,] -1.4833454425 -2.190362959 -1.605842268
#> [1666,] 0.3989611474 -0.322241216 -0.561321879
#> [1667,] 1.7145716026 2.104030082 2.566859178
#> [1668,] 2.1767457566 4.745921254 4.917744374
#> [1669,] -0.6227806310 -0.208161525 -0.642762410
#> [1670,] 1.3884703789 2.681730877 3.234800637
#> [1671,] 0.9263476920 2.820653574 5.538692334
#> [1672,] 0.6863342000 0.471894837 0.543023072
#> [1673,] 3.0937135575 4.711224275 6.006580309
#> [1674,] 0.4071710083 1.206567718 1.979484676
#> [1675,] -1.5927781577 -2.064099319 -3.384197015
#> [1676,] -1.1331849862 1.254205217 4.118524406
#> [1677,] 2.1413512180 1.903586500 1.737397247
#> [1678,] -0.7569513308 -2.633920734 -2.728492412
#> [1679,] -2.7815936869 -3.285048254 -4.184083228
#> [1680,] -0.1989154547 1.613448688 1.553755049
#> [1681,] 2.7743311872 3.402295530 2.731717125
#> [1682,] 1.6693206987 3.730410864 3.078562241
#> [1683,] 0.0282983607 -2.203664168 -2.939575156
#> [1684,] -0.1382577443 -0.029085838 0.483079865
#> [1685,] 0.5572519097 2.326138479 3.224964012
#> [1686,] -0.6162223254 -2.546570767 -3.580527118
#> [1687,] -1.3196711228 -1.045148328 -1.121174714
#> [1688,] 0.0172169366 -0.101458317 1.351294296
#> [1689,] -0.6430432872 -0.757849540 -0.483834553
#> [1690,] 2.8146919023 4.887283009 6.347394765
#> [1691,] 0.8222967595 3.077614713 4.127842516
#> [1692,] 0.6868336452 1.629725178 1.907727349
#> [1693,] -1.3039012965 -1.178065083 -0.141616655
#> [1694,] -1.4382618882 -2.183644659 -3.211660345
#> [1695,] 0.6678091873 0.671919013 -0.992054849
#> [1696,] 0.2768146415 1.548462054 1.969082035
#> [1697,] -0.7812107052 -1.846230895 -2.312291204
#> [1698,] -1.1567526792 -1.351998406 -2.280138615
#> [1699,] -1.4565944274 -2.877173799 -2.575682246
#> [1700,] 1.9945758705 3.498114505 2.978849471
#> [1701,] -2.9249074566 -5.569569870 -7.604399685
#> [1702,] -2.2183861523 -3.939841210 -5.741300436
#> [1703,] 0.1203999145 0.744576070 2.169702488
#> [1704,] -0.1065425739 -0.089329075 0.164453273
#> [1705,] 1.0055362619 2.238791888 3.082010676
#> [1706,] 1.3793011431 1.054685873 0.846373223
#> [1707,] -0.3517108174 -1.390074705 -1.870919699
#> [1708,] 0.0130804893 -1.751056697 -1.398120025

```

```

#> [1709,] 0.0472645855 0.606800201 1.816973234
#> [1710,] -0.9055639417 -1.537884010 -2.915240456
#> [1711,] -1.0767494681 -1.153777128 -0.614294678
#> [1712,] -1.4773321824 -3.007654624 -4.100595496
#> [1713,] 1.5967007564 3.053769154 2.784424014
#> [1714,] 1.1598178736 2.959378183 2.929713763
#> [1715,] -1.2649996474 -3.061314926 -5.094764942
#> [1716,] -0.6337639337 -0.492587970 0.749081582
#> [1717,] -1.1859571191 -2.401705155 -2.175886261
#> [1718,] -2.2998560597 -3.417524981 -2.314134688
#> [1719,] -0.9939832276 -2.836335946 -4.068935007
#> [1720,] 1.4685547696 1.454322711 1.081028325
#> [1721,] -2.7249712126 -2.330165815 -1.361190691
#> [1722,] 0.5112308068 -0.204843632 -0.902837921
#> [1723,] 1.7681120081 3.007962397 3.331921080
#> [1724,] -0.2230733385 -0.649648688 -0.736581869
#> [1725,] -0.3651801101 -0.995665926 -0.704655723
#> [1726,] 2.0563189755 2.521882182 3.225403502
#> [1727,] -2.2170848901 -2.198434996 -2.664485339
#> [1728,] 0.4348770716 1.086538168 -0.042556399
#> [1729,] 1.0607246945 2.760207771 3.511455519
#> [1730,] 0.3057938270 -0.823860694 -1.618744529
#> [1731,] 0.0999475512 -0.525280500 -2.036663746
#> [1732,] 0.2309922520 1.152946532 0.722869802
#> [1733,] 1.3648793446 3.008720810 3.367492977
#> [1734,] -0.8808141356 0.864140142 1.293481157
#> [1735,] -1.0769293658 -2.644701597 -3.174332744
#> [1736,] -0.2210609101 -0.257583106 -0.926502036
#> [1737,] -0.0917442927 -1.657835402 -1.320219711
#> [1738,] 0.2244021759 -0.874366962 -2.591689211
#> [1739,] 1.7860071437 1.977263892 2.609740083
#> [1740,] 1.4702489253 1.691418188 1.995697324
#> [1741,] -2.0786581788 -4.247019236 -5.944507548
#> [1742,] 0.5998119789 -0.742066729 -1.112229789
#> [1743,] 0.6252853823 2.102179058 4.216387933
#> [1744,] -0.5899778216 -0.493961741 -0.433005407
#> [1745,] -0.2054368319 0.114090866 0.329572293
#> [1746,] -0.2162071851 -0.765699185 -0.095474006
#> [1747,] 0.1671855726 -0.058773965 0.686098528
#> [1748,] 0.2201527432 0.827563795 1.751802361
#> [1749,] -0.6482634194 -1.533989805 -0.473057214
#> [1750,] -2.6266164658 -2.258967717 -1.654629997
#> [1751,] -0.2706177672 -1.809744611 -3.531559831
#> [1752,] 0.5735999629 2.030589018 2.144435186
#> [1753,] -1.4474973958 -2.484660103 -2.546436278

```

```

#> [1754,] -1.4274423634 -1.419923363 -2.694520038
#> [1755,] -1.9943207833 -2.337456984 -1.842838754
#> [1756,] -1.7115309058 -3.167027603 -3.255827671
#> [1757,] -0.0607381902 0.002047798 1.532407054
#> [1758,] 1.4946034006 3.890261657 4.089848641
#> [1759,] 0.5698951909 1.315989614 1.304545772
#> [1760,] 0.5643885656 1.632592871 0.592796166
#> [1761,] 1.2410026029 0.935500408 0.969805818
#> [1762,] 0.1928104724 1.127542065 1.999072497
#> [1763,] -2.9961556602 -4.899552784 -5.138597721
#> [1764,] 1.8729383208 3.905184930 2.062635918
#> [1765,] -2.8424482894 -5.071891537 -5.253622198
#> [1766,] -3.5568278001 -5.570602051 -6.656550938
#> [1767,] 1.2093612771 0.095981273 -1.244875304
#> [1768,] 1.2817815090 2.108216276 2.093310558
#> [1769,] -1.0233320395 -1.944622362 -2.516740943
#> [1770,] 1.4231309976 3.327127394 5.372975260
#> [1771,] -1.3196880985 -1.242397942 -0.163791809
#> [1772,] 1.3331290649 2.776637621 2.923815083
#> [1773,] 0.4006448215 1.489165098 3.068847850
#> [1774,] 0.4190206775 0.910683050 -0.237079031
#> [1775,] 1.7141233516 2.504587052 3.816034924
#> [1776,] -0.6813141791 -0.858751954 -1.032260740
#> [1777,] -1.2013846184 -2.517332516 -2.159246130
#> [1778,] -1.7044448318 -2.570098221 -2.078998265
#> [1779,] -0.6963487386 -1.064415137 -1.032096068
#> [1780,] -0.6975755808 -0.430528853 0.476406597
#> [1781,] -2.0517318841 -2.113225384 -1.661332710
#> [1782,] -0.6985440253 -1.088577548 -3.233178829
#> [1783,] -0.5076516047 -0.565895765 -1.204320163
#> [1784,] -0.5754984778 -0.955076766 0.702864071
#> [1785,] -1.0562026150 -1.891129216 -2.527698901
#> [1786,] -0.4700875027 -2.223652148 -1.650739952
#> [1787,] 2.3221876159 2.865243763 3.497049921
#> [1788,] -0.7980322071 -0.202304910 -2.212543230
#> [1789,] -1.0878834314 -1.169273711 -2.382361917
#> [1790,] 0.9534177801 1.196734352 1.478062658
#> [1791,] 0.4145834279 -0.767742898 0.017726969
#> [1792,] -0.5481033573 -0.120086079 -0.834421743
#> [1793,] -1.3555833007 -1.476923444 -3.272337104
#> [1794,] 0.2835300258 2.780276462 3.279368778
#> [1795,] 0.5233790185 1.953773209 1.771383436
#> [1796,] 1.3460244466 3.175809244 5.714339751
#> [1797,] -0.0386014868 -0.131946494 0.649736737
#> [1798,] 2.8312777166 4.561360839 4.509964007

```

```

#> [1799,] 0.5974566480 0.646451539 0.346363897
#> [1800,] -0.7490856131 0.789618578 1.605282784
#> [1801,] 0.3626767821 -1.084486393 -1.661130988
#> [1802,] -0.4767955224 -0.194612714 -0.646981652
#> [1803,] 1.5326664884 -0.191098638 -0.880341282
#> [1804,] 0.6375001796 0.441419550 1.149462675
#> [1805,] 2.5322870474 5.668764937 6.409830853
#> [1806,] -1.9319705407 -2.362093831 -1.958797325
#> [1807,] 0.4713871240 0.456879138 2.099153771
#> [1808,] -0.8871597105 1.329121842 2.248929763
#> [1809,] 0.0300772185 0.233814340 -0.693440241
#> [1810,] -0.7159686004 -0.987815103 -2.206015521
#> [1811,] -0.3940999601 -0.197595112 -0.080550025
#> [1812,] 1.6482430602 1.761473885 1.175470745
#> [1813,] 0.2107266459 1.584591523 1.651546541
#> [1814,] -4.0803324126 -5.783208023 -6.078034126
#> [1815,] -0.4533824538 0.288713075 0.220734704
#> [1816,] -0.0086072265 2.143043299 3.169586281
#> [1817,] -1.6063446215 -3.322466105 -2.464370951
#> [1818,] -0.7937364866 -1.023005149 -0.570856522
#> [1819,] -2.5850353556 -4.392220767 -5.428024986
#> [1820,] 0.0253260769 1.625075168 1.822520012
#> [1821,] 1.2629823238 0.684120863 0.983547904
#> [1822,] -0.4544756032 -0.702401078 -1.624280870
#> [1823,] -1.1963664410 -0.402041625 -0.162457088
#> [1824,] 0.6874614199 1.141634750 0.542663782
#> [1825,] -1.0810806484 -0.127399959 0.927820337
#> [1826,] 0.9100248051 1.725205636 2.123080509
#> [1827,] -0.9383725602 -0.035349161 0.233992739
#> [1828,] -2.7423788539 -5.355914112 -6.606989064
#> [1829,] 2.0890170177 2.981979645 3.447206393
#> [1830,] 1.4433483472 3.137047148 4.451424475
#> [1831,] -1.2430735817 -1.679145663 -2.588061862
#> [1832,] 1.5281679496 1.808632961 1.305144784
#> [1833,] -0.3544852004 -1.098537820 -2.120528919
#> [1834,] -0.2638063952 -0.535481408 -1.342304862
#> [1835,] 1.0907898292 1.942196447 2.176508119
#> [1836,] 0.8612811530 0.473010999 -0.503382929
#> [1837,] -0.3191629614 -0.382809691 -1.334103194
#> [1838,] 1.3699539516 3.261977066 4.117706836
#> [1839,] -0.9993542468 0.116562081 -0.106223796
#> [1840,] 0.6309451759 1.021839716 0.836545756
#> [1841,] -0.0219817125 -0.760938221 -1.148360788
#> [1842,] 0.7322073889 -1.107641190 -2.011010964
#> [1843,] -1.3441755441 -2.252965089 -3.129218921

```



```

#> [1844,] 0.5837955407 1.814612772 3.366874145
#> [1845,] 0.3104137817 0.231120984 1.882139025
#> [1846,] -0.6106294104 -0.548350931 -0.551538022
#> [1847,] 1.0825508373 0.359367753 -1.100064256
#> [1848,] 2.2517437945 3.880698990 4.870306829
#> [1849,] -0.8073427419 -0.503454220 -0.255810974
#> [1850,] -3.3214861252 -5.708693818 -7.358676817
#> [1851,] -0.6182309131 -0.778011867 -0.926177785
#> [1852,] 2.2843200880 4.041503557 4.790979940
#> [1853,] 0.3226385178 0.179763955 -0.146763559
#> [1854,] -0.0958119430 -1.379768376 -0.745781903
#> [1855,] 0.3027264483 0.317579415 0.826103505
#> [1856,] -0.6813048873 -1.197922252 -0.865392960
#> [1857,] -1.5552316580 -0.108726077 0.580162490
#> [1858,] 1.8434252805 2.495557208 3.011391890
#> [1859,] 1.1415133310 1.884875008 2.017973948
#> [1860,] 1.4678497044 2.984039892 4.117730238
#> [1861,] -1.1385037592 -1.910647206 -2.385610291
#> [1862,] -0.9407788618 0.779195411 0.864213084
#> [1863,] 0.7845731225 0.593961410 0.732943176
#> [1864,] 2.0380340670 3.202267163 3.851403319
#> [1865,] -1.1869352720 -3.534541318 -6.042650193
#> [1866,] 1.3957294537 1.207000566 1.866232997
#> [1867,] 1.0477363703 2.657643193 3.387841135
#> [1868,] 1.9436271479 3.082771024 2.943011739
#> [1869,] -1.8673049283 -3.364208248 -3.256516247
#> [1870,] 1.5305429296 3.144499635 3.516865035
#> [1871,] 0.8390949034 0.573110308 1.064396389
#> [1872,] 0.3191028259 -0.395783886 -1.125317066
#> [1873,] -1.8979206368 -2.042340800 -2.862979534
#> [1874,] -0.0976798723 0.440542027 2.397946271
#> [1875,] 1.8457148089 1.701146410 0.755884695
#> [1876,] 0.0670161332 0.323684528 -0.323927063
#> [1877,] 2.7006715761 3.724918810 2.875885363
#> [1878,] 0.6356926954 0.624842971 0.691034580
#> [1879,] -1.9017728628 -2.467963281 -2.683898387
#> [1880,] 2.1754509493 1.941927211 3.703181805
#> [1881,] 2.2129951642 4.095444029 6.207393439
#> [1882,] -0.6796673040 -0.551404123 1.373123996
#> [1883,] 0.5896516014 -0.203263356 -0.083138426
#> [1884,] 1.1688584773 1.936779232 3.434425539
#> [1885,] -1.7756888279 -1.899654010 -1.291669711
#> [1886,] 0.0045460329 0.086605240 -0.570267092
#> [1887,] -0.0907720502 0.361373867 1.002006838
#> [1888,] 1.2639862037 1.209719168 0.782417781

```

```

#> [1889,] 1.3962544268 2.545938732 3.278832971
#> [1890,] -0.0866314264 1.232782612 1.330324359
#> [1891,] -0.3324690623 -1.223588048 -0.731287997
#> [1892,] 1.2786218630 1.602687532 2.041194587
#> [1893,] 0.4113219116 2.224217951 1.871828977
#> [1894,] -1.6080070685 -1.866575256 -1.184006826
#> [1895,] -1.0398951644 -1.415351122 -2.617451580
#> [1896,] -0.1619996849 -0.465548292 -1.404868011
#> [1897,] -0.0015996774 -0.991945922 -3.987823758
#> [1898,] -0.3845441699 -1.071356875 -2.345743301
#> [1899,] -0.1268220091 0.276698317 2.949087380
#> [1900,] -1.9425346438 -2.111040961 -2.594366213
#> [1901,] -0.3940778932 0.483433545 0.799324919
#> [1902,] -0.2563840300 0.236422419 1.884909701
#> [1903,] -1.2667841495 -2.521859847 -3.082432688
#> [1904,] -0.4038350523 -2.211721780 -2.942850782
#> [1905,] -1.0562452782 0.516112475 1.761941068
#> [1906,] 0.4167555779 -0.067883220 1.410224235
#> [1907,] 0.8893109373 0.196546367 -0.808884642
#> [1908,] 2.1167317887 1.933031610 1.596508183
#> [1909,] -0.4293192201 -0.522043972 -3.353038895
#> [1910,] 1.4592866875 2.524227170 1.866567680
#> [1911,] -0.7704144309 -1.341222878 -2.037027731
#> [1912,] -0.7077634121 -0.169288137 -0.809654681
#> [1913,] 0.3708442224 0.460836648 0.574472312
#> [1914,] -1.1971859483 -0.514915915 0.084362509
#> [1915,] -0.1881103838 1.517997473 2.093172339
#> [1916,] -0.2517465987 -0.462151843 -0.300781950
#> [1917,] -1.1271019779 -1.756956508 -1.840751870
#> [1918,] 1.9509859704 2.422924586 2.172126866
#> [1919,] -0.6253036771 -0.817081085 -1.923125208
#> [1920,] 1.6946841177 2.454879692 3.033769365
#> [1921,] 0.0005261961 -0.729553640 -0.058718380
#> [1922,] 2.0095187997 2.609928788 3.105744217
#> [1923,] -1.1371677961 -0.446315108 -0.220054989
#> [1924,] -1.5865115348 -1.355346713 -1.782744511
#> [1925,] 0.9912700446 1.844096981 1.948029504
#> [1926,] 0.6828155724 -0.108597284 -0.661892455
#> [1927,] 1.0141436957 0.361477320 0.276868448
#> [1928,] -2.1868076817 -3.200969386 -3.879960530
#> [1929,] 1.1855824561 1.371380948 2.174104141
#> [1930,] -1.4681541395 -2.273886595 -1.227362852
#> [1931,] -1.3776940224 -1.726924491 -1.702140346
#> [1932,] 0.1580465423 0.623075915 -1.806975340
#> [1933,] -1.1421408293 -1.867961549 -3.026039644

```

```

#> [1934,] -1.8277417425 -1.216943676 -1.213389036
#> [1935,] -1.8428254214 -2.732139534 -4.123046525
#> [1936,]  0.5511750572  1.342770369  1.952112930
#> [1937,] -2.0622887162 -2.635141060 -3.105210570
#> [1938,] -2.1500459099 -5.124060348 -4.841877856
#> [1939,] -1.7754341384 -2.858212470 -3.097657714
#> [1940,]  0.6393953829 -0.824756064 -1.186833208
#> [1941,] -0.8799810973 -1.881505854 -0.919308271
#> [1942,] -0.7817909486 -0.090623736 -0.386402117
#> [1943,]  0.3279460759  0.263358093  1.724529418
#> [1944,] -0.4273120068  1.058851626  1.403624730
#> [1945,] -1.7700312075 -1.981668562 -2.566460864
#> [1946,] -0.3485774706  0.207231881  0.704103680
#> [1947,]  1.0517768787  2.034641390  4.083213967
#> [1948,] -2.1988512007 -0.963917017  1.138479038
#> [1949,]  0.5387487752  1.057814480  2.956226204
#> [1950,] -0.1816142926 -0.643872939 -1.710593984
#> [1951,] -1.6532696513 -4.079300815 -5.374692558
#> [1952,]  0.1573372848  0.897705911  0.503519632
#> [1953,]  0.0669740093  0.511792593  0.609507350
#> [1954,] -0.8338241955  0.374115421  0.383901107
#> [1955,] -0.8544431627  0.327226436  0.090373614
#> [1956,] -1.3052190209 -3.479317790 -4.236889723
#> [1957,]  0.3908294900 -0.764382153 -1.842926885
#> [1958,] -2.4735450302 -3.378823003 -3.917717190
#> [1959,]  2.0012113499  2.599272923  2.792684100
#> [1960,] -1.4713105606 -1.604501291 -2.281149020
#> [1961,]  0.5959266364  0.106950747  0.711511573
#> [1962,] -2.3551765208 -3.369395241 -3.083997579
#> [1963,]  0.4835983454  1.864377471  2.103130025
#> [1964,] -0.5804446670 -0.594878792 -1.520692611
#> [1965,]  2.0731216034  1.172163539  0.615938996
#> [1966,] -0.0748730917 -0.198699829 -0.092937311
#> [1967,]  0.0030181892  1.690494600  2.291511033
#> [1968,]  0.3941931382  0.391623677 -0.237581897
#> [1969,] -0.3786953361 -0.827884626  0.640306665
#> [1970,]  0.0363047436  0.295481468 -1.243342864
#> [1971,] -2.5658824817 -3.195870961 -3.563978327
#> [1972,]  1.5124280265  0.456545466  0.692701975
#> [1973,]  0.5875640121  0.913219950  1.011374665
#> [1974,] -1.9227474579 -3.101965346 -4.025448430
#> [1975,]  0.3906448755  0.020140479 -0.346645936
#> [1976,] -0.7267618249 -0.918146585 -0.765408931
#> [1977,] -1.1267728347 -0.773882366 -1.003888122
#> [1978,]  1.3108190044  1.672563844  3.958969876

```

```

#> [1979,] 0.1293144636 0.343913817 1.869083714
#> [1980,] 0.0248654486 0.446291366 -0.127150940
#> [1981,] -1.1202400186 -1.296962573 -1.154477640
#> [1982,] 1.6762555618 2.185465189 3.327591110
#> [1983,] 0.2098630746 0.844255934 0.289856784
#> [1984,] 0.4801420556 0.893044285 0.277253270
#> [1985,] 0.7254871916 -0.563561117 -0.915652725
#> [1986,] 1.7654946174 2.312313074 2.753821375
#> [1987,] -0.8933879930 0.140976252 0.020467567
#> [1988,] -2.8159676402 -3.811131053 -4.221463213
#> [1989,] 0.4818093968 0.826428387 0.788616619
#> [1990,] -1.4569069646 -3.633436242 -3.489365233
#> [1991,] 0.4137585355 -0.182568589 0.602477942
#> [1992,] -0.3291566019 -1.058891630 -1.819936253
#> [1993,] 0.8981001349 2.464222453 3.028634400
#> [1994,] 0.8763355912 2.076480594 1.220959819
#> [1995,] 1.2061845056 0.962020290 1.160663037
#> [1996,] -1.3531900368 -1.455068046 -0.983696032
#> [1997,] -1.2004023291 -3.255841102 -4.277137962
#> [1998,] 0.2371050212 0.580201283 1.357305784
#> [1999,] -0.5525050394 -0.065386261 0.359972403
#> [2000,] 0.3408727449 1.037329727 0.812564449
#>
#> [[1]][[14]]$value[[1]]$decomposition
#> [1] "svd"
#>
#>
#>
#> [[1]][[14]]$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/>