r.R

Dmbewe

2021-05-23

```r
setwd("C:/Users/DMbewe/OneDrive - WRHI/Desktop/UCI HAR Dataset")

x_train <- read.table("./train/X_train.txt")
y_train <- read.table("./train/Y_train.txt")
sub_train <- read.table("./train/subject_train.txt")

x_test <- read.table("./test/X_test.txt")
y_test <- read.table("./test/Y_test.txt")
sub_test <- read.table("./test/subject_test.txt")

features <- read.table("./features.txt")

activity_labels <- read.table("./activity_labels.txt")

x <- rbind(x_train, x_test)
y <- rbind(y_train, y_test)
xy <- rbind(sub_train, sub_test)


colnames(x) <- "features"
colnames(y) <- "activity"
colnames(xy) <- "subject"

all <- cbind(xy, y, x)

all$activity <- factor(all$activity, levels = activity_labels[,1], labels =
activity_labels[,2])
all$subject <- as.factor(all$subject)

write.table(all, file = "./tidydata.txt", row.names = FALSE, col.names =
TRUE)
all
```

```
##      subject         activity    features          NA          NA
## 1          1          STANDING  0.28858451 -0.0202941710 -0.13290514
## 2          1          STANDING  0.27841883 -0.0164105680 -0.12352019
## 3          1          STANDING  0.27965306 -0.0194671560 -0.11346169
## 4          1          STANDING  0.27917394 -0.0262006460 -0.12328257
## 5          1          STANDING  0.27662877 -0.0165696550 -0.11536185
## 6          1          STANDING  0.27719877 -0.0100978500 -0.10513725
## 7          1          STANDING  0.27945388 -0.0196407760 -0.11002215
```

```
## 8     1      STANDING  0.27743247 -0.0304883030 -0.12536043
## 9     1      STANDING  0.27729342 -0.0217506980 -0.12075082
## 10    1      STANDING  0.28058569 -0.0099602983 -0.10606516
## 11    1      STANDING  0.27688027 -0.0127218050 -0.10343832
## 12    1      STANDING  0.27622817 -0.0214413020 -0.10820234
## 13    1      STANDING  0.27845700 -0.0204147610 -0.11273172
## 14    1      STANDING  0.27717497 -0.0147128020 -0.10675647
## 15    1      STANDING  0.29794572  0.0270939080 -0.06166812
## 16    1      STANDING  0.27920345 -0.0230201430 -0.12208028
## 17    1      STANDING  0.27903836 -0.0148003780 -0.11684896
## 18    1      STANDING  0.28013490 -0.0139169510 -0.10637048
## 19    1      STANDING  0.27773106 -0.0182107180 -0.10918803
## 20    1      STANDING  0.27556818 -0.0169796980 -0.11142918
## 21    1      STANDING  0.27756171 -0.0143184870 -0.10787724
## 22    1      STANDING  0.27715238 -0.0179833280 -0.10660117
## 23    1      STANDING  0.27567630 -0.0212642340 -0.11080122
## 24    1      STANDING  0.27920020 -0.0177144270 -0.10916135
## 25    1      STANDING  0.28171549 -0.0119106780 -0.10287513
## 26    1      STANDING  0.27899267 -0.0145310290 -0.10659617
## 27    1      STANDING  0.27573444 -0.0180188400 -0.10677578
## 28    1       SITTING  0.14450396  0.1892632600  0.06276932
## 29    1       SITTING  0.28725164 -0.0374550640 -0.14597431
## 30    1       SITTING  0.27999760 -0.0194840360 -0.10572355
## 31    1       SITTING  0.22184689  0.0341076750 -0.12361242
## 32    1       SITTING -0.04170131  0.1751024800  0.02555178
## 33    1       SITTING  0.01390367  0.1532960800  0.01624295
## 34    1       SITTING  0.30368927 -0.0042428053 -0.15085028
## 35    1       SITTING  0.29075969 -0.0240347600 -0.11673889
## 36    1       SITTING  0.27090823 -0.0144129680 -0.10652245
## 37    1       SITTING  0.27955340 -0.0170011470 -0.11051668
## 38    1       SITTING  0.27635864 -0.0161380880 -0.10803259
## 39    1       SITTING  0.23715407  0.0078251224 -0.12283791
## 40    1       SITTING  0.27310840  0.0065181116 -0.10947182
## 41    1       SITTING  0.28150539 -0.0184348590 -0.11139287
## 42    1       SITTING  0.27843225 -0.0196543020 -0.10797029
## 43    1       SITTING  0.27337960 -0.0099401064 -0.10839283
## 44    1       SITTING  0.27905615 -0.0162609700 -0.11281565
## 45    1       SITTING  0.27859910 -0.0199101420 -0.11118060
## 46    1       SITTING  0.27328142 -0.0111272090 -0.10634926
## 47    1       SITTING  0.27853812 -0.0161734320 -0.10970656
## 48    1       SITTING  0.27746121 -0.0174910160 -0.10635945
## 49    1       SITTING  0.27394057 -0.0131475840 -0.10543517
## 50    1       SITTING  0.27930326 -0.0205213830 -0.11323643
## 51    1       SITTING  0.27908720 -0.0190832420 -0.10588882
## 52    1        LAYING  0.40347433 -0.0150744040 -0.11816739
## 53    1        LAYING  0.27837321 -0.0205609640 -0.09682457
## 54    1        LAYING  0.27655526 -0.0178685500 -0.10762126
## 55    1        LAYING  0.27957476 -0.0172757220 -0.10948053
## 56    1        LAYING  0.27652699 -0.0168191000 -0.10798311
## 57    1        LAYING  0.27812334 -0.0171463030 -0.10801374
```

```
## 58      1            LAYING   0.27800654 -0.0178031700 -0.10896485
## 59      1            LAYING   0.28020640 -0.0183962600 -0.10748863
## 60      1            LAYING   0.28182774 -0.0186264740 -0.10527824
## 61      1            LAYING   0.27672941 -0.0172095480 -0.10563797
## 62      1            LAYING   0.27588359 -0.0161503090 -0.10882921
## 63      1            LAYING   0.27783021 -0.0176840540 -0.10570350
## 64      1            LAYING   0.27937115 -0.0176449530 -0.10818111
## 65      1            LAYING   0.01901615 -0.0070373566 -0.02833336
## 66      1            LAYING   0.34020850 -0.0364529840 -0.10625819
## 67      1            LAYING  -0.16642569 -0.1193525100  0.13303497
## 68      1            LAYING  -0.23910256 -0.0969043910  0.14803461
## 69      1            LAYING   0.34696848  0.0694086470 -0.20082552
## 70      1            LAYING   0.30383319  0.1036482000 -0.24533103
## 71      1            LAYING  -0.36120533 -0.2681211100  0.17689637
## 72      1            LAYING  -0.27706634 -0.6840965900  0.34665772
## 73      1            LAYING   0.25747650 -0.4138653400  0.01737419
## 74      1            LAYING   0.27683965 -0.0271476600 -0.12317480
## 75      1            LAYING   0.26865095  0.0164301540 -0.10372571
## 76      1            LAYING   0.28526329 -0.0088888110 -0.10374518
## 77      1            LAYING   0.28347732 -0.0075244582 -0.10928717
## 78      1            LAYING   0.27302712 -0.0101967570 -0.11115339
## 79      1           WALKING   0.28202157 -0.0376962180 -0.13489730
## 80      1           WALKING   0.25584075 -0.0645500290 -0.09518634
## 81      1           WALKING   0.25486723  0.0038147234 -0.12365809
## 82      1           WALKING   0.34337048 -0.0144462210 -0.16737697
## 83      1           WALKING   0.27623973 -0.0296384130 -0.14261631
## 84      1           WALKING   0.25546822  0.0212190630 -0.04894943
## 85      1           WALKING   0.32113983  0.0015817951 -0.04355370
## 86      1           WALKING   0.23466590 -0.0495477190 -0.11175723
## 87      1           WALKING   0.31263404 -0.0263677490 -0.13095121
## 88      1           WALKING   0.27691540 -0.0354862100 -0.08056918
## 89      1           WALKING   0.20530739 -0.0085082782 -0.11964696
## 90      1           WALKING   0.30699599 -0.0137869800 -0.18016197
## 91      1           WALKING   0.28151325 -0.0408008980 -0.13467496
## 92      1           WALKING   0.30388542  0.0027680377 -0.03861309
## 93      1           WALKING   0.35419290 -0.0125609350 -0.05868094
## 94      1           WALKING   0.22229785 -0.0186596830 -0.11718642
## 95      1           WALKING   0.21448125  0.0099387454 -0.12307300
## 96      1           WALKING   0.32731657 -0.0222558210 -0.14914390
## 97      1           WALKING   0.34905910 -0.0220037840 -0.15005217
## 98      1           WALKING   0.26468173 -0.0085919266 -0.10297373
## 99      1           WALKING   0.28431748 -0.0272058150 -0.21230304
## 100     1           WALKING   0.22172674 -0.0243769700 -0.07507641
## 101     1           WALKING   0.29097148 -0.0278104180 -0.04298254
## 102     1           WALKING   0.26108077 -0.0156356210 -0.10258842
## 103     1           WALKING   0.25242505  0.0062773455 -0.12518006
## 104     1           WALKING   0.35878664 -0.0169545050 -0.15477656
## 105     1           WALKING   0.25693500 -0.0105774010 -0.10544192
## 106     1           WALKING   0.29855414  0.0007944557 -0.04069567
## 107     1           WALKING   0.30804575 -0.0233004580 -0.07970154
```

```
## 108    1            WALKING  0.20356167 -0.0305052300 -0.13709513
## 109    1            WALKING  0.28056095 -0.0114246530 -0.15619795
## 110    1            WALKING  0.33216933 -0.0345858280 -0.15926922
## 111    1            WALKING  0.28703017 -0.0272399300 -0.11750002
## 112    1            WALKING  0.30159413 -0.0446530020 -0.08151395
## 113    1            WALKING  0.24608919 -0.0161754230 -0.11188336
## 114    1            WALKING  0.29272439 -0.0021398385 -0.14034852
## 115    1            WALKING  0.33156003 -0.0074950152 -0.13173868
## 116    1            WALKING  0.20201055 -0.0090379452 -0.07909586
## 117    1            WALKING  0.30363491 -0.0146567690 -0.04261383
## 118    1            WALKING  0.35919361 -0.0180797180 -0.07234686
## 119    1            WALKING  0.22442754 -0.0314643530 -0.12726298
## 120    1            WALKING  0.23995826 -0.0097107196 -0.12197022
## 121    1            WALKING  0.28972747  0.0153427200 -0.11667518
## 122    1            WALKING  0.30830537 -0.0198828450 -0.16044667
## 123    1            WALKING  0.32746543 -0.0356669600 -0.18182373
## 124    1            WALKING  0.23841102 -0.0231963890 -0.11255181
## 125    1            WALKING  0.18019430 -0.0177968460 -0.03934704
## 126    1 WALKING_DOWNSTAIRS  0.35845532  0.0179753850 -0.08415912
## 127    1 WALKING_DOWNSTAIRS  0.30171512 -0.0070493914 -0.09368145
## 128    1 WALKING_DOWNSTAIRS  0.28155172 -0.0161102890 -0.14009252
## 129    1 WALKING_DOWNSTAIRS  0.27395574 -0.0228992920 -0.12725614
## 130    1 WALKING_DOWNSTAIRS  0.29995717  0.0140821230 -0.08231040
## 131    1 WALKING_DOWNSTAIRS  0.26537379 -0.0171562110 -0.13877347
## 132    1 WALKING_DOWNSTAIRS  0.27763311 -0.0372675800 -0.10002093
## 133    1 WALKING_DOWNSTAIRS  0.26688016 -0.0023073023 -0.06372715
## 134    1 WALKING_DOWNSTAIRS  0.21070047 -0.0059687620 -0.10959150
## 135    1 WALKING_DOWNSTAIRS  0.28521305 -0.0202024590 -0.01102421
## 136    1 WALKING_DOWNSTAIRS  0.46994580 -0.0336241090 -0.14125420
## 137    1 WALKING_DOWNSTAIRS  0.23528441 -0.0145704670 -0.20841776
## 138    1 WALKING_DOWNSTAIRS  0.16691360 -0.0337328800 -0.13334869
## 139    1 WALKING_DOWNSTAIRS  0.44562097 -0.0119027090 -0.15116909
## 140    1 WALKING_DOWNSTAIRS  0.23179921 -0.0075220252 -0.05580101
## 141    1 WALKING_DOWNSTAIRS  0.28134949 -0.0007098312 -0.00869990
## 142    1 WALKING_DOWNSTAIRS  0.36248249 -0.0035526939 -0.18104462
## 143    1 WALKING_DOWNSTAIRS  0.43503687 -0.0065917495 -0.08290993
## 144    1 WALKING_DOWNSTAIRS  0.35119884  0.0218667280 -0.14942620
## 145    1 WALKING_DOWNSTAIRS  0.13046118 -0.0549969200 -0.13178649
## 146    1 WALKING_DOWNSTAIRS  0.31277629 -0.0504093730 -0.04302864
## 147    1 WALKING_DOWNSTAIRS  0.42595606  0.0245600000 -0.15095947
## 148    1 WALKING_DOWNSTAIRS  0.26749864 -0.0183194790 -0.16901282
## 149    1 WALKING_DOWNSTAIRS  0.15439416  0.0016045166 -0.01054862
## 150    1 WALKING_DOWNSTAIRS  0.20535149 -0.0038073578 -0.03262883
## 151    1   WALKING_UPSTAIRS  0.18360372 -0.0765587290 -0.04695610
## 152    1   WALKING_UPSTAIRS  0.27918273 -0.0369656770 -0.13360426
## 153    1   WALKING_UPSTAIRS  0.30116241 -0.0017592965 -0.10683037
## 154    1   WALKING_UPSTAIRS  0.29341097 -0.0187145180 -0.06615908
## 155    1   WALKING_UPSTAIRS  0.23030990  0.0021737117 -0.04310313
## 156    1   WALKING_UPSTAIRS  0.15851651  0.0042561454 -0.01877921
## 157    1   WALKING_UPSTAIRS  0.21524532 -0.0326280020 -0.11896558
```

```
## 158        1     WALKING_UPSTAIRS   0.27147742 -0.0307460910 -0.15623238
## 159        1     WALKING_UPSTAIRS   0.14085877 -0.0682617290 -0.07211572
## 160        1     WALKING_UPSTAIRS   0.23145946 -0.0133403120 -0.09236798
## 161        1     WALKING_UPSTAIRS   0.29569289 -0.0172910000 -0.09992782
## 162        1     WALKING_UPSTAIRS   0.34408292 -0.0196651590 -0.14195199
## 163        1     WALKING_UPSTAIRS   0.33299252 -0.0303122760 -0.11360054
## 164        1     WALKING_UPSTAIRS   0.31672153 -0.0239082550 -0.11075840
## 165        1     WALKING_UPSTAIRS   0.27425493 -0.0289537510 -0.15558324
## 166        1     WALKING_UPSTAIRS   0.26034404 -0.0336706900 -0.12730182
## 167        1     WALKING_UPSTAIRS   0.27771111 -0.0089315038 -0.08118135
## 168        1     WALKING_UPSTAIRS   0.22622757 -0.0537189430 -0.11252061
## 169        1     WALKING_UPSTAIRS   0.25960382 -0.0180971610 -0.11447381
## 170        1     WALKING_UPSTAIRS   0.34402821 -0.0358751280 -0.09423846
## 171        1     WALKING_UPSTAIRS   0.37052032 -0.0088810520 -0.15190137
## 172        1     WALKING_UPSTAIRS   0.27321360 -0.0125466310 -0.12786494
## 173        1     WALKING_UPSTAIRS   0.23124563 -0.0072225043 -0.03499555
## 174        1     WALKING_UPSTAIRS   0.25025528  0.0077234474 -0.05846276
## 175        1     WALKING_UPSTAIRS   0.23033751 -0.0218066970 -0.11877561
## 176        1     WALKING_UPSTAIRS   0.22969556 -0.0521657100 -0.11179085
## 177        1            STANDING   0.26076161 -0.0353706960 -0.13730782
##              NA           NA           NA            NA           NA
## 1   -0.99527860 -0.983110610 -0.913526450 -0.9951120800 -0.983184570
## 2   -0.99824528 -0.975300220 -0.960321990 -0.9988071900 -0.974914370
## 3   -0.99537956 -0.967187010 -0.978943960 -0.9965199400 -0.963668370
## 4   -0.99609149 -0.983402700 -0.990675100 -0.9970994700 -0.982749840
## 5   -0.99813862 -0.980817270 -0.990481630 -0.9983211300 -0.979671870
## 6   -0.99733496 -0.990486810 -0.995420030 -0.9976274000 -0.990217690
## 7   -0.99692104 -0.967185930 -0.983117830 -0.9970026800 -0.966096710
## 8   -0.99655926 -0.966728430 -0.981585330 -0.9964852500 -0.966313150
## 9   -0.99732847 -0.961245320 -0.983671560 -0.9975957600 -0.957236230
## 10  -0.99480344 -0.972758400 -0.986243870 -0.9954046200 -0.973663220
## 11  -0.99481511 -0.973076920 -0.985357020 -0.9955092700 -0.973947960
## 12  -0.99824595 -0.987213760 -0.992726590 -0.9982512700 -0.985996540
## 13  -0.99913488 -0.984680040 -0.996274240 -0.9990765400 -0.982937020
## 14  -0.99918834 -0.990526380 -0.993365010 -0.9992113500 -0.990687250
## 15  -0.98864079 -0.816698600 -0.901906530 -0.9889579500 -0.794280420
## 16  -0.99683904 -0.974848120 -0.983385510 -0.9970938900 -0.973331930
## 17  -0.99694116 -0.981865620 -0.982576530 -0.9972199800 -0.981619640
## 18  -0.99769492 -0.987515670 -0.990407440 -0.9980143200 -0.987954480
## 19  -0.99749074 -0.993221970 -0.996127950 -0.9979030500 -0.992710720
## 20  -0.99781139 -0.990522300 -0.997621040 -0.9982052200 -0.989469830
## 21  -0.99790424 -0.994311290 -0.995951660 -0.9983651700 -0.993604470
## 22  -0.99776322 -0.989957270 -0.996585670 -0.9982908200 -0.989668700
## 23  -0.99786211 -0.990090760 -0.994592570 -0.9983334500 -0.989472660
## 24  -0.99838929 -0.987307840 -0.990831590 -0.9988685200 -0.986771310
## 25  -0.99853388 -0.988489010 -0.993183670 -0.9986743300 -0.988543920
## 26  -0.99805969 -0.986069830 -0.993424240 -0.9980591600 -0.985192390
## 27  -0.99925496 -0.993668880 -0.994188800 -0.9994065400 -0.993620140
## 28  -0.90429967 -0.181936540 -0.443150510 -0.9011001900 -0.110812680
## 29  -0.98291504 -0.891604890 -0.941438110 -0.9844178100 -0.891372960
```

```
## 30   -0.99281839 -0.940350410 -0.981492660 -0.9930923800 -0.936927060
## 31   -0.81470826 -0.749418000 -0.571898890 -0.8786815200 -0.776894630
## 32   -0.75839283 -0.586537350 -0.439110190 -0.7741181700 -0.555350300
## 33   -0.80863778 -0.572746190 -0.626415420 -0.8062129700 -0.533810700
## 34   -0.95650333 -0.838671550 -0.943009530 -0.9620059400 -0.844820830
## 35   -0.97737449 -0.963840530 -0.962505030 -0.9776306000 -0.959382050
## 36   -0.99385604 -0.993178700 -0.993470300 -0.9938780000 -0.992130860
## 37   -0.99607594 -0.995781520 -0.998221680 -0.9962868700 -0.996369950
## 38   -0.99557733 -0.994543850 -0.994543720 -0.9962383700 -0.994201250
## 39   -0.97995358 -0.866193410 -0.968290470 -0.9801787800 -0.882315870
## 40   -0.99078294 -0.935065150 -0.990721560 -0.9924978700 -0.928562620
## 41   -0.99546804 -0.984330220 -0.990995140 -0.9959775100 -0.982309370
## 42   -0.99439029 -0.984562780 -0.991985780 -0.9950502300 -0.984521950
## 43   -0.99550580 -0.981767480 -0.993473630 -0.9957063900 -0.980919070
## 44   -0.99501877 -0.970446310 -0.989266120 -0.9948176400 -0.965149780
## 45   -0.99474489 -0.979495660 -0.987961520 -0.9944187000 -0.977348990
## 46   -0.99587640 -0.989110700 -0.993413220 -0.9961413900 -0.988049090
## 47   -0.99664602 -0.982974820 -0.994797970 -0.9969497800 -0.981851780
## 48   -0.99642843 -0.984673120 -0.990682660 -0.9967377500 -0.983150670
## 49   -0.99588454 -0.988012930 -0.988425530 -0.9965430300 -0.986734080
## 50   -0.99584854 -0.980700750 -0.993403810 -0.9961011700 -0.979568750
## 51   -0.99572983 -0.978967230 -0.991394010 -0.9961042500 -0.976663000
## 52   -0.91481115 -0.895231120 -0.891748110 -0.9176958900 -0.924623540
## 53   -0.98488259 -0.991118370 -0.982111780 -0.9879845400 -0.990362280
## 54   -0.99419460 -0.996371660 -0.995615140 -0.9949011500 -0.996359920
## 55   -0.99613535 -0.995811560 -0.998689150 -0.9963933300 -0.995474490
## 56   -0.99677544 -0.997256360 -0.995421640 -0.9971668700 -0.997107660
## 57   -0.99492812 -0.998359050 -0.992011430 -0.9955863600 -0.998076620
## 58   -0.99442540 -0.994872630 -0.994885820 -0.9949387900 -0.993994210
## 59   -0.99647493 -0.994068760 -0.991861310 -0.9972949100 -0.994338380
## 60   -0.99628711 -0.992193940 -0.990204480 -0.9972546400 -0.992927090
## 61   -0.99478811 -0.991031320 -0.993187220 -0.9958898600 -0.990624880
## 62   -0.99551063 -0.995548040 -0.994000800 -0.9961503400 -0.995344130
## 63   -0.99614315 -0.995968750 -0.994888600 -0.9963750200 -0.995646340
## 64   -0.99523683 -0.995810090 -0.994430450 -0.9955146800 -0.995338140
## 65   -0.66129361 -0.713352570 -0.701155170 -0.6939481300 -0.706557510
## 66   -0.95859648 -0.908055820 -0.984669480 -0.9568549600 -0.898493850
## 67   -0.63313536 -0.189775030 -0.319336290 -0.6238043000 -0.199675260
## 68   -0.63732529 -0.127692220 -0.258924030 -0.6436421900 -0.138550810
## 69   -0.80390335 -0.741742190 -0.605382340 -0.8268896900 -0.745656360
## 70   -0.75599409 -0.642570640 -0.695500700 -0.7675366000 -0.709977800
## 71   -0.59939182  0.532505730  0.004324026 -0.6641077700  0.502260250
## 72   -0.59641047  0.024682958 -0.160404490 -0.6318195000 -0.068856732
## 73   -0.91966606  0.075259481 -0.630715630 -0.9379860900  0.176796470
## 74   -0.97739515 -0.587599880 -0.970670280 -0.9784380600 -0.607459050
## 75   -0.98569313 -0.895905440 -0.988195080 -0.9873943800 -0.887866750
## 76   -0.99549458 -0.979827840 -0.995419070 -0.9958019100 -0.978672650
## 77   -0.99458009 -0.986763770 -0.996093340 -0.9952371600 -0.986064880
## 78   -0.99312530 -0.990001000 -0.995408210 -0.9935888500 -0.989887510
## 79   -0.32828019 -0.137153390 -0.189085940 -0.4048749500 -0.176791410
```

```
## 80   -0.22920689   0.016506077 -0.260310880 -0.2767640800   0.009066466
## 81   -0.27515786   0.013079871 -0.284371310 -0.3413410900  -0.026013386
## 82   -0.22992354   0.173910770 -0.213387510 -0.2828821400   0.144693100
## 83   -0.22657692   0.164287920 -0.122544960 -0.2395259300   0.140286870
## 84   -0.22453699   0.022312942 -0.113196240 -0.2506240700  -0.021988287
## 85   -0.23395567   0.034774517 -0.161930470 -0.2829590100   0.017454252
## 86   -0.24708664   0.055164926 -0.208563330 -0.3046829900   0.042704090
## 87   -0.35309860  -0.017382150 -0.127807600 -0.3952737400  -0.054388800
## 88   -0.26294183   0.111277810 -0.212700270 -0.3098902400   0.089606796
## 89   -0.26070490   0.027917204 -0.226545700 -0.3167757100  -0.038486506
## 90   -0.23902985   0.072865343 -0.247204440 -0.2825458900   0.008007804
## 91   -0.20097415   0.132354110 -0.220234230 -0.2431469000   0.106020500
## 92   -0.16865626   0.190335730 -0.140472600 -0.2051336600   0.101144140
## 93   -0.20842457   0.234790710 -0.159262870 -0.2456039300   0.135868610
## 94   -0.22054434   0.169816570 -0.212305660 -0.2723703800   0.127240580
## 95   -0.20551618   0.106006200 -0.210924430 -0.2698898500   0.074272815
## 96   -0.24864532   0.133229130 -0.179546970 -0.3069787200   0.113994260
## 97   -0.30312548   0.152606810 -0.174297780 -0.3566175400   0.106512100
## 98   -0.36323752   0.036867249 -0.244158990 -0.4256245500  -0.055040698
## 99   -0.18344442   0.141075880 -0.225689410 -0.2490801900   0.110614270
## 100  -0.11171737   0.111130280 -0.221832560 -0.1588871100   0.074157967
## 101  -0.13937030   0.038038012 -0.266840560 -0.1721507800   0.005201146
## 102  -0.17123888   0.201236070 -0.261588730 -0.2175600500   0.131643400
## 103  -0.23722530   0.223488380 -0.229013430 -0.2867850200   0.125792150
## 104  -0.25146160   0.270054990 -0.185019170 -0.2850229800   0.203244760
## 105  -0.23004356   0.187334550 -0.164254910 -0.2729924300   0.122931900
## 106  -0.19810732  -0.004637693 -0.185038090 -0.2466450100  -0.062917298
## 107  -0.19869979   0.134321990 -0.177237230 -0.2532674700   0.084887372
## 108  -0.24696440   0.298557830 -0.205753020 -0.2995261500   0.265095340
## 109  -0.27398450   0.258437880 -0.225787540 -0.3134400300   0.215057890
## 110  -0.29396729   0.189680540 -0.225274630 -0.3350734100   0.171763840
## 111  -0.31223717   0.127000960 -0.252283100 -0.3646878700   0.097290871
## 112  -0.17845378   0.242833560 -0.144868240 -0.2505071800   0.177586190
## 113  -0.22179285   0.067040367 -0.301514260 -0.2755572300   0.037551292
## 114  -0.25253682   0.041978126 -0.275238890 -0.2905228400  -0.001825484
## 115  -0.24591692   0.102938160 -0.233075590 -0.2860120500   0.065638348
## 116  -0.22076970   0.123136240 -0.221638120 -0.2715876800   0.072741887
## 117  -0.21530926   0.120917310 -0.218659400 -0.2532279700   0.067138965
## 118  -0.26279787   0.057066065 -0.248016780 -0.3079562800   0.027468701
## 119  -0.39294444  -0.020678437 -0.263385580 -0.4561860700  -0.055806451
## 120  -0.37078412  -0.072025636 -0.301673750 -0.4386254300  -0.140122280
## 121  -0.36879989  -0.083343414 -0.263346660 -0.4236500100  -0.178758990
## 122  -0.43900010   0.003312783 -0.208537660 -0.4859813800  -0.063575034
## 123  -0.36722034   0.034414774 -0.194023350 -0.4183853900   0.012209581
## 124  -0.31993668   0.027333313 -0.181980570 -0.3692229300   0.012502610
## 125  -0.37654341   0.023526725 -0.247051580 -0.4339499600  -0.041913200
## 126  -0.17198789  -0.188332450 -0.399555310 -0.2184084500  -0.246540690
## 127  -0.04014287  -0.141421270 -0.325831320 -0.0799181410  -0.182830280
## 128  -0.09466535  -0.007347987 -0.347491670 -0.1510529900  -0.142693160
## 129  -0.13338240   0.132265210 -0.336173700 -0.2115938000  -0.051626454
```

```
## 130   0.06926842   0.057800324 -0.235050280 -0.0418055300 -0.111044750
## 131   0.12036221   0.083343662 -0.221983620  0.0320873530 -0.048226393
## 132  -0.02176042  -0.032132086 -0.196557910 -0.0951717030 -0.160153280
## 133  -0.04996636  -0.247403450 -0.258588910 -0.1042891500 -0.341029860
## 134  -0.06421528  -0.202139040 -0.327663820 -0.1093601400 -0.302248680
## 135   0.12298877   0.081945720  0.049997153  0.0507690970  0.012863203
## 136   0.11546276   0.019113399 -0.034471360  0.0964744150 -0.082700007
## 137   0.09908960   0.300734700 -0.206496700  0.0519184250  0.068505255
## 138   0.05291009   0.265724520 -0.212712620 -0.0342287120  0.088087162
## 139   0.11820941  -0.051036543 -0.146922090  0.0724043040 -0.112394770
## 140   0.06368904  -0.017154892 -0.230357820  0.0001983481 -0.073383474
## 141   0.14664050  -0.157608040 -0.240120180  0.0611308470 -0.185350360
## 142   0.24954917  -0.211857110 -0.169262290  0.1813237200 -0.270562240
## 143   0.07845129  -0.098710248 -0.264045640  0.0463048800 -0.135872760
## 144   0.07617469  -0.100486840 -0.298087420  0.0447809420 -0.118499520
## 145  -0.10749685   0.106557650 -0.227501210 -0.1930328600  0.031338172
## 146   0.02628482   0.168277860 -0.186199530 -0.0746345550  0.090838808
## 147   0.09923964  -0.038196632 -0.272499050 -0.0061015318 -0.083141371
## 148  -0.04124829  -0.134212510 -0.310535480 -0.1255060200 -0.150170830
## 149  -0.02364854  -0.197488060 -0.291800710 -0.0808482990 -0.198536090
## 150   0.01930472  -0.229625310 -0.307646050 -0.0591499970 -0.268221010
## 151  -0.36751584  -0.099160728  0.020546431 -0.4127290700 -0.107322870
## 152  -0.35903189  -0.124112250 -0.102867760 -0.3942299000 -0.120456400
## 153  -0.36266589   0.001220042 -0.111537770 -0.4008372200 -0.001549374
## 154  -0.36815735   0.095662930 -0.019262368 -0.4305790900  0.108432320
## 155  -0.33525447  -0.020443574  0.031209990 -0.3989848200 -0.039489432
## 156  -0.40602178  -0.083613613 -0.012498101 -0.4667634100 -0.101566870
## 157  -0.40674365  -0.068915080  0.025753713 -0.4562998500 -0.053195878
## 158  -0.34169859  -0.152998560  0.021435303 -0.3803102000 -0.143961400
## 159  -0.23449858  -0.079448995 -0.033663540 -0.2973628500 -0.067637282
## 160  -0.31679100  -0.114259960 -0.071216960 -0.3488660200 -0.099204791
## 161  -0.35712019   0.041165280 -0.091122383 -0.3685297900  0.026051281
## 162  -0.36118484   0.019695865 -0.100724840 -0.3837373900  0.021786895
## 163  -0.42752783  -0.121213880 -0.090093246 -0.4673711700 -0.086933890
## 164  -0.42147434  -0.005497985 -0.017909026 -0.4617745000  0.049677113
## 165  -0.39644844  -0.096768344 -0.038192465 -0.4478273900 -0.073059471
## 166  -0.43384531  -0.237681500 -0.073172704 -0.4917180300 -0.242244780
## 167  -0.45755795  -0.209564240  0.007230816 -0.5092149900 -0.196811250
## 168  -0.35092567  -0.009298234  0.007788298 -0.3989858900  0.047077501
## 169  -0.35222794   0.048864663 -0.078109362 -0.4087199600  0.066438692
## 170  -0.39707126   0.167605700 -0.045335084 -0.4352063400  0.163309800
## 171  -0.44266976   0.120901210  0.057691449 -0.4813363600  0.115341900
## 172  -0.44615460   0.009590231 -0.031257360 -0.4884530800  0.022077931
## 173  -0.47091075   0.011840328 -0.055521071 -0.5327955500 -0.010658694
## 174  -0.38835593  -0.029383066  0.054298832 -0.4780865300 -0.053467542
## 175  -0.36143839  -0.147811890 -0.022630007 -0.4441045600 -0.129612070
## 176  -0.34368292  -0.170388440 -0.051609335 -0.4171838100 -0.189246460
## 177  -0.97372342  -0.929149900 -0.875000580 -0.9737571400 -0.920028550
##               NA           NA           NA           NA           NA
## 1    -0.923527020 -0.9347237800 -0.567378070 -0.7444125300  0.852947380
```

```
## 2     -0.957686220 -0.9430675100 -0.557851260 -0.8184086900  0.849307870
## 3     -0.977468590 -0.9386915500 -0.557851260 -0.8184086900  0.843608950
## 4     -0.989302500 -0.9386915500 -0.576158890 -0.8297114500  0.843608950
## 5     -0.990441130 -0.9424691200 -0.569173850 -0.8247052900  0.849095120
## 6     -0.995548900 -0.9424691200 -0.565683890 -0.8227661400  0.849095120
## 7     -0.983116270 -0.9409866300 -0.565683890 -0.8171890200  0.851040220
## 8     -0.982981760 -0.9409866300 -0.572638240 -0.8171890200  0.850327780
## 9     -0.984379280 -0.9405975800 -0.564175050 -0.8235269300  0.850327780
## 10    -0.985641950 -0.9400275100 -0.554593690 -0.8158503700  0.845442410
## 11    -0.985172470 -0.9400275100 -0.554593690 -0.8158503700  0.845442410
## 12    -0.993181880 -0.9439057800 -0.571422140 -0.8206949300  0.850532270
## 13    -0.996410310 -0.9439057800 -0.569704190 -0.8250336900  0.852068580
## 14    -0.992167530 -0.9433228600 -0.569357470 -0.8225147000  0.852034940
## 15    -0.888014600 -0.9259766900 -0.448465740 -0.7305788100  0.848666480
## 16    -0.984065350 -0.9417158000 -0.570939160 -0.8176345500  0.848666480
## 17    -0.981336040 -0.9417158000 -0.563499580 -0.8242149000  0.852573030
## 18    -0.992190120 -0.9420759800 -0.563499580 -0.8158917600  0.849851450
## 19    -0.996491820 -0.9448701200 -0.575091030 -0.8158917600  0.847154080
## 20    -0.997193030 -0.9456616300 -0.573341830 -0.8265822500  0.847154080
## 21    -0.995594810 -0.9414724200 -0.572958160 -0.8200225900  0.851612940
## 22    -0.996700450 -0.9414724200 -0.572958160 -0.8175196500  0.849686270
## 23    -0.994484510 -0.9445667200 -0.575287830 -0.8175196500  0.849686270
## 24    -0.989637390 -0.9436751900 -0.567803370 -0.8254370200  0.850015180
## 25    -0.993287180 -0.9425588300 -0.563869220 -0.8153987900  0.852528930
## 26    -0.995017880 -0.9425588300 -0.563869220 -0.8153987900  0.850440260
## 27    -0.993582950 -0.9428896100 -0.575869110 -0.8226647200  0.850440260
## 28    -0.400599350 -0.9318957800  0.042098681 -0.3365258000  0.716476230
## 29    -0.933360720 -0.9318957800 -0.499536810 -0.8246997200  0.826365550
## 30    -0.980669100 -0.9353890000 -0.565254760 -0.8225317300  0.847724930
## 31    -0.700709780 -0.7371515500 -0.318401870 -0.4733339900  0.503460780
## 32    -0.438735760 -0.7371515500 -0.212994260 -0.4733339900  0.503460780
## 33    -0.579393590 -0.9160637600 -0.212994260 -0.4804685000  0.566315760
## 34    -0.937194660 -0.9160637600 -0.438882930 -0.8171954400  0.801035790
## 35    -0.962253960 -0.9168252700 -0.571742320 -0.8200979800  0.842807570
## 36    -0.992788140 -0.9416171000 -0.571742320 -0.8200979800  0.842807570
## 37    -0.999036490 -0.9416171000 -0.570089420 -0.8236984500  0.850614610
## 38    -0.995407310 -0.9383115100 -0.570089420 -0.8236984500  0.850257810
## 39    -0.966096710 -0.9396369300 -0.519270860 -0.8235697100  0.813490010
## 40    -0.989584340 -0.9396369300 -0.519270860 -0.8235697100  0.833143080
## 41    -0.990283570 -0.9397887700 -0.568504610 -0.8213577600  0.845300680
## 42    -0.992617050 -0.9397887700 -0.564743100 -0.8213577600  0.845300680
## 43    -0.994863680 -0.9401202200 -0.564130640 -0.8224441100  0.848331980
## 44    -0.990246360 -0.9417154100 -0.564130640 -0.8235512900  0.848331980
## 45    -0.987604100 -0.9417154100 -0.570740220 -0.8235512900  0.848529040
## 46    -0.991539110 -0.9420120000 -0.566788550 -0.8261857700  0.847329500
## 47    -0.993457740 -0.9432431000 -0.566788550 -0.8257327200  0.847329500
## 48    -0.989338010 -0.9385725700 -0.569514770 -0.8204324100  0.846667510
## 49    -0.987736830 -0.9385725700 -0.569514770 -0.8204324100  0.846667510
## 50    -0.992913110 -0.9406837300 -0.570810470 -0.8246120900  0.849829470
## 51    -0.990588290 -0.9406837300 -0.566905440 -0.8193624700  0.844072430
```

```
## 52   -0.905894780 -0.7851039800 -0.410291660 -0.8004062900  0.841586140
## 53   -0.982189340 -0.9200511900 -0.573826870 -0.8004062900  0.841586140
## 54   -0.996627960 -0.9401639500 -0.573826870 -0.8201739400  0.844236910
## 55   -0.999005930 -0.9407731700 -0.575937160 -0.8259857700  0.850636120
## 56   -0.995739290 -0.9426726600 -0.575937160 -0.8192191300  0.847618060
## 57   -0.992590500 -0.9389740700 -0.577415620 -0.8138633200  0.847618060
## 58   -0.995450350 -0.9389740700 -0.577030730 -0.8138633200  0.846921770
## 59   -0.993439600 -0.9394526400 -0.574285500 -0.8078055100  0.846921770
## 60   -0.990996030 -0.9384491400 -0.573645970 -0.8078055100  0.845595680
## 61   -0.992794740 -0.9334585100 -0.573645970 -0.8183335500  0.845595680
## 62   -0.993878990 -0.9334585100 -0.574599090 -0.8183335500  0.846621610
## 63   -0.993973740 -0.9398813900 -0.575722000 -0.8224322900  0.850248230
## 64   -0.993719970 -0.9392213100 -0.576552800 -0.8246384000  0.849828640
## 65   -0.755421840 -0.8912835600 -0.373852040 -0.4512786700  0.251271490
## 66   -0.987138760 -0.8912835600 -0.556878860 -0.7970235100  0.840566450
## 67   -0.281088290 -0.9252079800 -0.241482210 -0.1209846700  0.263374020
## 68   -0.239633710 -0.8781488500 -0.241482210 -0.1209846700  0.263374020
## 69   -0.602669170 -0.8305606600 -0.332202620 -0.5283689700  0.598463850
## 70   -0.730463830 -0.7170811100 -0.182863750 -0.5603330800  0.574444060
## 71    0.048471827 -0.7170811100 -0.182863750  0.3154529700  0.022281712
## 72   -0.235159590 -0.8662961700 -0.249046540  0.3154529700  0.022281712
## 73   -0.613510330 -0.8662961700 -0.507343670 -0.4358277400  0.666418970
## 74   -0.967884490 -0.9204858500 -0.489785360 -0.8154626100  0.826782390
## 75   -0.988504870 -0.9299429300 -0.489785360 -0.8131266500  0.826782390
## 76   -0.995500680 -0.9377540600 -0.559911090 -0.8131266500  0.849950730
## 77   -0.996124180 -0.9377540600 -0.561409280 -0.8226049000  0.847850970
## 78   -0.994164880 -0.9365102200 -0.563324030 -0.8275369300  0.844619640
## 79   -0.199473780 -0.1547310000 -0.203759020 -0.1307524100  0.112070170
## 80   -0.287366860 -0.1547310000 -0.173983070 -0.1566268600  0.112070170
## 81   -0.320272030 -0.1755590400 -0.156809270 -0.1566268600  0.213171060
## 82   -0.237987500 -0.1527728200 -0.057800295 -0.2653815200  0.200085300
## 83   -0.148616890 -0.1527728200 -0.057800295 -0.1174760000  0.200085300
## 84   -0.099186333 -0.0734760940 -0.118225030 -0.0539080690  0.255051240
## 85   -0.140619330 -0.0734760940 -0.102133540 -0.0539080690  0.135622070
## 86   -0.204493450 -0.2092908900 -0.102133540 -0.1769860900  0.094155299
## 87   -0.095763059 -0.2903971600 -0.145546450 -0.1931565700  0.280536250
## 88   -0.233325980 -0.0685826050 -0.173888530 -0.1266541200  0.280536250
## 89   -0.251813910 -0.0685826050 -0.175343790 -0.1266541200  0.193931500
## 90   -0.261673890 -0.0912851760 -0.175343790 -0.2648770800  0.193931500
## 91   -0.241255640 -0.0912851760 -0.176214660 -0.2433105900  0.208489930
## 92   -0.120572420 -0.0008184209 -0.131933780 -0.1427280300  0.208489930
## 93   -0.128342800 -0.0008184209 -0.110456750 -0.1427280300  0.210525780
## 94   -0.196417170 -0.0749923020  0.043212402 -0.2524118600  0.159917060
## 95   -0.193725710 -0.0749923020  0.043212402 -0.2951200100  0.092366377
## 96   -0.159711890 -0.1149533900 -0.161677630 -0.2951200100  0.092366377
## 97   -0.141309140 -0.1780667800  0.022505371 -0.3439625100  0.207532850
## 98   -0.243230000 -0.2783284200  0.022505371 -0.1508064500  0.207532850
## 99   -0.221008680  0.0325220480 -0.066869228 -0.2734258900  0.090544446
## 100  -0.212427900  0.0325220480 -0.174265910 -0.2340191700  0.090544446
## 101  -0.259048850  0.0227368690 -0.174265910 -0.2340191700  0.092534401
```

```
## 102 -0.287320210  0.0227368690 -0.104127740 -0.1677339800  0.153241700
## 103 -0.257275910 -0.0663636860 -0.104127740 -0.1677339800  0.153241700
## 104 -0.202139300 -0.1585172600  0.172254240 -0.1773319000  0.161462270
## 105 -0.164820370 -0.1100105800  0.172254240 -0.1773319000  0.161462270
## 106 -0.139328360 -0.0191534760 -0.137662100 -0.3133307900  0.247951170
## 107 -0.164884920 -0.0191534760 -0.145096290 -0.1473044300  0.165534010
## 108 -0.245873370 -0.0859145260 -0.092162279 -0.1473044300  0.165534010
## 109 -0.239659800 -0.2130472200 -0.080235853 -0.2374846400  0.251780350
## 110 -0.231292200 -0.1988421800 -0.080235853 -0.2679153700  0.251780350
## 111 -0.259277380 -0.1988421800 -0.101380760 -0.2679153700  0.309447810
## 112 -0.147375440  0.1478701200  0.083004068 -0.1796726900 -0.014497572
## 113 -0.314204230  0.0323522400 -0.056035069 -0.2952291300  0.218593940
## 114 -0.282408270  0.0323522400 -0.113900900 -0.3396125100  0.268900780
## 115 -0.254474310 -0.0037115193 -0.113900900 -0.2625206500  0.272937160
## 116 -0.210426570 -0.1194853700 -0.104988760 -0.2381415600  0.237812840
## 117 -0.178174740 -0.1194853700 -0.100184450 -0.2221737600  0.120059240
## 118 -0.240457000 -0.1608592200 -0.100184450 -0.1623453500  0.120059240
## 119 -0.298589620 -0.2524977000 -0.176628930 -0.1623453500  0.177313240
## 120 -0.311927960 -0.1930890900 -0.169514280 -0.2371132900  0.094598858
## 121 -0.277213280 -0.1930890900  0.084097764 -0.0998753580  0.094598858
## 122 -0.223715270 -0.1809480800  0.084097764 -0.0998753580  0.325593050
## 123 -0.196416420 -0.0501307170  0.003359421 -0.1679128000  0.324958490
## 124 -0.190036230 -0.0501307170  0.003359421 -0.1679128000  0.263273250
## 125 -0.242823650 -0.2291594700 -0.118677530 -0.2268948400  0.109909370
## 126 -0.363534790  0.2442249400 -0.077151742 -0.5013617700  0.225643140
## 127 -0.281561800  0.1996760100 -0.121837960 -0.5158285600  0.212703980
## 128 -0.315866430  0.1996760100 -0.034023846 -0.5158285600  0.212703980
## 129 -0.318214360  0.3363504900 -0.034023846 -0.3725180600  0.210398270
## 130 -0.209609220  0.5314906300  0.103553510 -0.2715937600  0.153315970
## 131 -0.186744950  0.5314906300  0.103553510 -0.2715937600  0.153315970
## 132 -0.150903880  0.4288109700 -0.204003930 -0.4038229300  0.322584310
## 133 -0.240102340  0.4288109700 -0.167198700 -0.4038229300  0.067419025
## 134 -0.325643420  0.1586783400 -0.167198700 -0.3708848500  0.067419025
## 135 -0.014688400  0.5445119800 -0.131463990 -0.1267080400  0.060543611
## 136 -0.048396212  0.5445119800 -0.034346562 -0.2250395800  0.072793049
## 137 -0.186606190  0.3996593800 -0.004119991 -0.2126197400  0.072793049
## 138 -0.165376500  0.4121196700 -0.004119991 -0.2126197400  0.113783620
## 139 -0.066237734  0.4603322600 -0.141348800 -0.3255981900  0.113783620
## 140 -0.182779150  0.4603322600 -0.045989902 -0.3255981900 -0.042975331
## 141 -0.230891200  0.6364078900 -0.045989902 -0.2618154600 -0.042975331
## 142 -0.144910920  0.6364078900 -0.082590017 -0.2618154600 -0.186297470
## 143 -0.236600480  0.1248593300 -0.159407170 -0.4009151300 -0.080068708
## 144 -0.262092080  0.3456974600 -0.159407170 -0.4009151300 -0.047336394
## 145 -0.239703890  0.3456974600 -0.177330140 -0.0003026163 -0.047336394
## 146 -0.161996270  0.3432398600  0.008622833 -0.0003026163 -0.002160725
## 147 -0.219161720  0.3432398600  0.008622833 -0.3213664200 -0.083023253
## 148 -0.276276370  0.1843531700 -0.075418581 -0.2770793200 -0.083023253
## 149 -0.261083670  0.1548170400 -0.179786360 -0.2770793200 -0.145450480
## 150 -0.256730550  0.1597298200 -0.179786360 -0.3849030100 -0.145450480
## 151  0.087381154 -0.2209385000 -0.156306180 -0.1734842900  0.145239960
```

```
## 152  -0.027792432  -0.3191361300  -0.156306180  -0.2850892500   0.145239960
## 153  -0.028194046  -0.2695178100  -0.186506440  -0.2907416500   0.237048120
## 154   0.027044075  -0.1698481800  -0.046241968  -0.1123823100   0.288252910
## 155   0.097693296  -0.1698481800  -0.046241968  -0.1123823100   0.183689080
## 156   0.094817271  -0.2329470900  -0.172488350  -0.1748224500   0.183689080
## 157   0.089389785  -0.2329470900  -0.155299250  -0.1012032800   0.074915972
## 158   0.051974091  -0.1609324100  -0.155299250  -0.1012032800   0.074915972
## 159  -0.003288865  -0.0843499270  -0.140584060  -0.1489671300   0.068893691
## 160  -0.019111858  -0.0843499270  -0.140584060  -0.2494309300   0.183545320
## 161  -0.046491370  -0.2501009600  -0.103696640  -0.2637468100   0.299718360
## 162  -0.066112412  -0.2151169500  -0.103696640  -0.2188592200   0.336163850
## 163  -0.034332956  -0.2151169500  -0.119477710  -0.2188592200   0.263159030
## 164   0.065574401  -0.1978664300  -0.119477710  -0.2413949200   0.263159030
## 165   0.010030572  -0.1978664300  -0.211335560  -0.2413949200   0.292039230
## 166  -0.051791478  -0.2742241900  -0.215837290  -0.1997045100   0.292039230
## 167   0.068844658  -0.4092425900  -0.215837290  -0.1997045100   0.311494540
## 168   0.023588898  -0.0611878210  -0.092216233  -0.0572545590   0.258156120
## 169  -0.034318676  -0.0611878210  -0.092216233  -0.2034331000   0.258156120
## 170  -0.013183113  -0.1143630700  -0.080474276  -0.1553401500   0.336579930
## 171   0.096208498  -0.2494750700  -0.010268523  -0.1553401500   0.392471290
## 172   0.017644308  -0.2494750700  -0.010268523  -0.2247580000   0.291196440
## 173   0.008757936  -0.1330914700  -0.018965860  -0.0696922770   0.291196440
## 174   0.101209930  -0.0819144360  -0.018965860  -0.0696922770   0.212277060
## 175  -0.001755883  -0.0075010747  -0.247433040  -0.0826108350   0.212277060
## 176   0.005103513   0.0807192740  -0.248092770  -0.2628381600   0.216132190
## 177  -0.885369010  -0.9371733900  -0.555058400  -0.7171582000   0.821181900
##               NA             NA             NA             NA             NA             NA
## 1     0.68584458   0.81426278   -0.965522790   -0.9999446   -0.999863030   -0.9946122
## 2     0.68584458   0.82263681   -0.981930110   -0.9999913   -0.999788380   -0.9984054
## 3     0.68240094   0.83934417   -0.983477770   -0.9999691   -0.999659870   -0.9994695
## 4     0.68240094   0.83786929   -0.986093280   -0.9999755   -0.999736000   -0.9995037
## 5     0.68324978   0.83786929   -0.992653110   -0.9999906   -0.999855880   -0.9997566
## 6     0.69558572   0.84592156   -0.993927700   -0.9999855   -0.999856990   -0.9999174
## 7     0.67434716   0.83359122   -0.986836710   -0.9999818   -0.999658340   -0.9996339
## 8     0.67041013   0.83238324   -0.976851420   -0.9999798   -0.999341070   -0.9991636
## 9     0.67041013   0.83238324   -0.983295070   -0.9999854   -0.999527830   -0.9994260
## 10    0.68475694   0.83845531   -0.986540740   -0.9999628   -0.999661710   -0.9997179
## 11    0.68475694   0.83845531   -0.987882600   -0.9999647   -0.999723880   -0.9996665
## 12    0.68652760   0.84601343   -0.994623600   -0.9999911   -0.999886490   -0.9998790
## 13    0.68652760   0.84601343   -0.995116080   -0.9999963   -0.999877260   -0.9999189
## 14    0.69264730   0.84634960   -0.996564090   -0.9999967   -0.999935980   -0.9998887
## 15    0.68064999   0.83820463   -0.903805530   -0.9998037   -0.989399810   -0.9911975
## 16    0.68064999   0.83820463   -0.984401950   -0.9999814   -0.999720990   -0.9993663
## 17    0.68889470   0.83839767   -0.989296070   -0.9999822   -0.999858070   -0.9995147
## 18    0.69387601   0.83839767   -0.994906530   -0.9999866   -0.999903770   -0.9998227
## 19    0.69259112   0.84722607   -0.998142860   -0.9999866   -0.999963180   -0.9999440
## 20    0.69259112   0.84750921   -0.997418060   -0.9999879   -0.999946500   -0.9999566
## 21    0.69476646   0.84750921   -0.998101070   -0.9999893   -0.999957700   -0.9999417
## 22    0.68945922   0.84986038   -0.997651210   -0.9999884   -0.999941000   -0.9999489
## 23    0.68945922   0.84137235   -0.995625270   -0.9999883   -0.999912630   -0.9999074
```

```
## 24     0.69190301 0.84137235 -0.995125550 -0.9999918 -0.999920070 -0.9998368
## 25     0.69354066 0.84726168 -0.994401500 -0.9999897 -0.999881400 -0.9998450
## 26     0.69188515 0.84156459 -0.995654540 -0.9999899 -0.999897410 -0.9998891
## 27     0.69127318 0.84156459 -0.998241990 -0.9999964 -0.999966690 -0.9999052
## 28     0.65581306 0.80898559 -0.536972890 -0.9914736 -0.793222920 -0.8142862
## 29     0.65581306 0.80898559 -0.932711740 -0.9997627 -0.996611660 -0.9955748
## 30     0.66274101 0.83760928 -0.976273490 -0.9999427 -0.999086000 -0.9995797
## 31     0.66074284 0.56843660 -0.806564850 -0.9815261 -0.982399810 -0.9139550
## 32     0.66074284 0.56843660 -0.456423630 -0.9494491 -0.899421390 -0.8290030
## 33     0.68182878 0.80528959 -0.578948430 -0.9669935 -0.911417130 -0.9111721
## 34     0.67680924 0.80528959 -0.911972110 -0.9987354 -0.994145050 -0.9950998
## 35     0.67680924 0.81998135 -0.970097120 -0.9996133 -0.999527320 -0.9987467
## 36     0.69495193 0.84887263 -0.994365200 -0.9999463 -0.999951600 -0.9998897
## 37     0.69495193 0.84887263 -0.998606430 -0.9999751 -0.999980410 -0.9999736
## 38     0.69609189 0.84248372 -0.997548970 -0.9999714 -0.999971610 -0.9999155
## 39     0.61497281 0.82462455 -0.929803510 -0.9993852 -0.994967950 -0.9987982
## 40     0.69578249 0.84388289 -0.972195390 -0.9999144 -0.997942600 -0.9998334
## 41     0.68978423 0.84388289 -0.992114390 -0.9999676 -0.999890170 -0.9998275
## 42     0.68819188 0.83996554 -0.992597950 -0.9999605 -0.999884060 -0.9998632
## 43     0.68819188 0.83996554 -0.990729040 -0.9999675 -0.999773530 -0.9998944
## 44     0.68743749 0.83576201 -0.986971800 -0.9999662 -0.999719340 -0.9997716
## 45     0.68743749 0.83576201 -0.989036070 -0.9999639 -0.999827590 -0.9997575
## 46     0.69343071 0.84604695 -0.992144270 -0.9999706 -0.999870580 -0.9998875
## 47     0.68862147 0.84630959 -0.993628140 -0.9999803 -0.999877900 -0.9999176
## 48     0.68862147 0.84630959 -0.993017500 -0.9999788 -0.999896310 -0.9998289
## 49     0.69277077 0.84349892 -0.991802410 -0.9999717 -0.999897990 -0.9997690
## 50     0.68652617 0.84349892 -0.991304280 -0.9999734 -0.999834550 -0.9998572
## 51     0.68652617 0.84576881 -0.990811060 -0.9999726 -0.999828420 -0.9998418
## 52     0.64041374 0.75883118 -0.904895490 -0.9928372 -0.997508100 -0.9932045
## 53     0.69019753 0.84273468 -0.986603760 -0.9998215 -0.999929810 -0.9994139
## 54     0.69242714 0.84273468 -0.997546780 -0.9999585 -0.999982630 -0.9999351
## 55     0.69248940 0.84496832 -0.998675720 -0.9999756 -0.999980570 -0.9999862
## 56     0.69485529 0.84496832 -0.998741240 -0.9999812 -0.999987880 -0.9999321
## 57     0.69248521 0.84642265 -0.997291590 -0.9999658 -0.999993220 -0.9998638
## 58     0.69146754 0.84642265 -0.996636850 -0.9999609 -0.999974540 -0.9999215
## 59     0.68809863 0.84568916 -0.997101980 -0.9999777 -0.999967700 -0.9998597
## 60     0.68809863 0.84568916 -0.995754000 -0.9999740 -0.999954470 -0.9998101
## 61     0.69064738 0.84568719 -0.995338490 -0.9999644 -0.999950280 -0.9998781
## 62     0.69403351 0.84568719 -0.997111900 -0.9999705 -0.999977400 -0.9999046
## 63     0.69403351 0.84748043 -0.997367340 -0.9999765 -0.999980920 -0.9999122
## 64     0.69480408 0.84827034 -0.996767080 -0.9999680 -0.999980130 -0.9999134
## 65     0.62851296 0.82389085 -0.716353580 -0.9281152 -0.983134580 -0.9474955
## 66     0.64503959 0.83286288 -0.943011510 -0.9981802 -0.997371380 -0.9996763
## 67     0.09490725 0.65067851 -0.467347200 -0.8919004 -0.853596740 -0.7033182
## 68     0.09490725 0.65067851 -0.301045490 -0.8793803 -0.840912330 -0.6541897
## 69     0.60982627 0.68917794 -0.640409750 -0.9790891 -0.972867060 -0.9141120
## 70     0.50463775 0.63477766 -0.596274090 -0.9692435 -0.948120300 -0.9276806
## 71    -0.51352667 0.46493267  0.009812189 -0.8364375 -0.435339890 -0.4280870
## 72    -0.51352667 0.46493267  0.274770380 -0.8554493  0.004366233 -0.3769169
## 73     0.01556461 0.82678325 -0.431068890 -0.9963669 -0.493116230 -0.9122025
```

```
## 74    0.43482983 0.82678325 -0.876054380 -0.9996488 -0.965986980 -0.9988813
## 75    0.69347377 0.83982133 -0.957095450 -0.9998209 -0.995515120 -0.9997445
## 76    0.69347377 0.84833835 -0.989544160 -0.9999591 -0.999722680 -0.9999015
## 77    0.69762776 0.84539717 -0.990374430 -0.9999555 -0.999749400 -0.9999431
## 78    0.69269801 0.84539717 -0.991160620 -0.9999432 -0.999855820 -0.9999200
## 79    0.15669144 0.41137698 -0.215440880 -0.7730649 -0.854761990 -0.7020233
## 80    0.12274328 0.41137698 -0.122735700 -0.7015888 -0.796130450 -0.7517358
## 81    0.12274328 0.44828835 -0.161977710 -0.7359010 -0.800720650 -0.7671751
## 82    0.07358484 0.38456178 -0.063473349 -0.7013638 -0.734191260 -0.7151081
## 83    0.05239311 0.36207499 -0.020750206 -0.6996558 -0.738225830 -0.6516491
## 84    0.05239311 0.36207499 -0.049866654 -0.6979802 -0.795262460 -0.6409019
## 85    0.15348790 0.41833620 -0.077454350 -0.7049459 -0.792373400 -0.6770720
## 86    0.10959213 0.36118826 -0.101384630 -0.7149169 -0.782954360 -0.7168641
## 87   -0.02305703 0.39875442 -0.148595910 -0.7891772 -0.813001520 -0.6566977
## 88   -0.02305703 0.47103177 -0.106408810 -0.7270851 -0.760975650 -0.7186393
## 89    0.06192051 0.44933141 -0.133331540 -0.7243844 -0.795578690 -0.7291554
## 90    0.07793456 0.38524718 -0.104773030 -0.7090227 -0.777616640 -0.7357045
## 91    0.04994565 0.38524718 -0.063314299 -0.6795539 -0.751526730 -0.7239774
## 92   -0.26602514 0.41204260 -0.001055331 -0.6531175 -0.726064680 -0.6599858
## 93   -0.26602514 0.41204260 -0.022468802 -0.6842913 -0.706129370 -0.6776426
## 94    0.01085331 0.40025118 -0.053494999 -0.6943638 -0.736035220 -0.7193823
## 95    0.07643325 0.40025118 -0.056379852 -0.6823687 -0.762497790 -0.7182126
## 96    0.07643325 0.42173551 -0.068276892 -0.7159603 -0.752109000 -0.6937207
## 97   -0.03123712 0.42173551 -0.095751198 -0.7548387 -0.743640880 -0.6897870
## 98   -0.03123712 0.42478312 -0.202498030 -0.7958969 -0.792043090 -0.7412388
## 99   -0.02955400 0.29244527 -0.044668533 -0.6654109 -0.748559850 -0.7128115
## 100 -0.02955400 0.43593574 -0.011597699 -0.6037691 -0.761550450 -0.7244772
## 101  0.05328024 0.43974894 -0.056920865 -0.6284922 -0.791504400 -0.7499626
## 102 -0.32877705 0.43974894 -0.049153661 -0.6553419 -0.721789900 -0.7527790
## 103 -0.32877705 0.46632037 -0.070727463 -0.7076966 -0.710490730 -0.7306137
## 104 -0.18790104 0.36563093 -0.043306159 -0.7172401 -0.689283880 -0.6969557
## 105 -0.18790104 0.36563093 -0.045108240 -0.7022418 -0.728065470 -0.6849633
## 106  0.10262708 0.39489952 -0.075059617 -0.6771773 -0.807747180 -0.6934129
## 107  0.02419919 0.39489952 -0.054231809 -0.6775532 -0.751613720 -0.6932936
## 108 -0.16290617 0.40683418 -0.042613154 -0.7140928 -0.674971390 -0.7136866
## 109 -0.16290617 0.43603360 -0.060869031 -0.7351527 -0.694839040 -0.7254435
## 110 -0.01070852 0.44651917 -0.089186604 -0.7488488 -0.726528290 -0.7246439
## 111 -0.01070852 0.45319139 -0.136891450 -0.7621528 -0.754665310 -0.7465708
## 112 -0.11356479 0.36811424 -0.023573535 -0.6612234 -0.700994190 -0.6694212
## 113 -0.08873174 0.46296125 -0.112216950 -0.6957504 -0.780020940 -0.7782646
## 114  0.12318129 0.43468713 -0.118343390 -0.7193249 -0.789735330 -0.7601723
## 115  0.08322802 0.43468713 -0.093483447 -0.7138206 -0.764947770 -0.7329919
## 116 -0.04471410 0.42944109 -0.068212129 -0.6940048 -0.756394580 -0.7247132
## 117 -0.04471410 0.42944109 -0.057009540 -0.6907541 -0.757454310 -0.7175503
## 118  0.04733612 0.44194523 -0.121883830 -0.7256381 -0.784076300 -0.7419523
## 119  0.13697205 0.37431264 -0.235433940 -0.8138358 -0.814024080 -0.7534728
## 120  0.14484587 0.37431264 -0.247832040 -0.8004216 -0.833060150 -0.7781071
## 121  0.02558510 0.46636993 -0.235228100 -0.7994264 -0.835260790 -0.7538739
## 122  0.02558510 0.43328785 -0.232781210 -0.8411229 -0.805269540 -0.7128553
## 123  0.09768447 0.36231623 -0.169823080 -0.7979570 -0.792528740 -0.6986302
```

```
## 124   0.10678975 0.36231623 -0.138650380 -0.7671242 -0.795876510 -0.6979173
## 125   0.08081697 0.41996436 -0.206838260 -0.8024042 -0.797436640 -0.7362033
## 126   0.14336935 0.54248885 -0.174733100 -0.6546991 -0.869747710 -0.8340692
## 127   0.12997272 0.42536788 -0.058272515 -0.5382940 -0.856749360 -0.7927951
## 128  -0.19373284 0.42536788 -0.095511401 -0.5891349 -0.809356590 -0.8043962
## 129  -0.22828834 0.46726714 -0.105280690 -0.6233648 -0.752514130 -0.7987318
## 130  -0.22828834 0.30548818  0.009638008 -0.4276110 -0.782024760 -0.7341452
## 131  -0.23469758 0.30548818  0.071396474 -0.3719150 -0.773312880 -0.7248411
## 132  -0.23469758 0.28458405 -0.024781276 -0.5206432 -0.817936440 -0.7083035
## 133   0.04991037 0.28458405 -0.094949244 -0.5477459 -0.889319250 -0.7479284
## 134   0.04991037 0.34677635 -0.108239830 -0.5602714 -0.876010490 -0.7942046
## 135  -0.04399357 0.06836439  0.154693670 -0.3689963 -0.773875250 -0.4927203
## 136  -0.04399357 0.06836439  0.115735180 -0.3699548 -0.798673990 -0.5801221
## 137  -0.59110576 0.28058569  0.125728710 -0.3951181 -0.674200210 -0.7006542
## 138  -0.59110576 0.41835549  0.085981120 -0.4425532 -0.690886500 -0.7188578
## 139  -0.03675092 0.31721199  0.106225010 -0.3686619 -0.825560140 -0.6693221
## 140  -0.03675092 0.31721199  0.052314383 -0.4332227 -0.812902830 -0.7278861
## 141   0.12064436 0.32660596  0.045678036 -0.3422508 -0.861729050 -0.7239383
## 142  -0.03123002 0.17253731  0.106409990 -0.2179277 -0.878862390 -0.6808656
## 143   0.13961058 0.44911368  0.043607949 -0.4128887 -0.842316720 -0.7534826
## 144   0.15397543 0.44911368  0.037151093 -0.4192342 -0.840389800 -0.7736598
## 145  -0.14532402 0.43608380 -0.037886698 -0.5962901 -0.761003080 -0.7291866
## 146  -0.14532402 0.43608380  0.048410661 -0.4723697 -0.734733250 -0.6947072
## 147   0.05741544 0.42841653  0.021180007 -0.3908814 -0.817776230 -0.7572385
## 148   0.05741544 0.42841653 -0.069972254 -0.5394486 -0.854545660 -0.7784103
## 149   0.16428642 0.44211554 -0.038386541 -0.5194290 -0.874173270 -0.7581262
## 150   0.16428642 0.45603991 -0.050518629 -0.4786884 -0.884193470 -0.7736259
## 151   0.11676394 0.37135921 -0.124637570 -0.7968672 -0.836312140 -0.5279935
## 152   0.24376706 0.49275083 -0.143300280 -0.7932437 -0.850465810 -0.6370141
## 153   0.09134202 0.49329446 -0.111983060 -0.7954543 -0.805660460 -0.6447931
## 154   0.09134202 0.38349808 -0.093361317 -0.7990000 -0.768171480 -0.5660472
## 155   0.14049287 0.38349808 -0.095180321 -0.7772771 -0.813633830 -0.5176327
## 156   0.21346028 0.51661759 -0.139942100 -0.8194054 -0.836431730 -0.5509770
## 157   0.20070781 0.38520671 -0.125675550 -0.8219056 -0.831618940 -0.5286799
## 158   0.20070781 0.38520671 -0.114645420 -0.7819803 -0.860387480 -0.5293569
## 159   0.24392763 0.41117757 -0.065918940 -0.7019802 -0.831081480 -0.5791028
## 160   0.26539705 0.41117757 -0.113205700 -0.7648621 -0.847819450 -0.6120642
## 161   0.04193614 0.38584412 -0.096237377 -0.7919513 -0.790464700 -0.6284856
## 162   0.04193614 0.38584412 -0.104586920 -0.7937310 -0.798924700 -0.6345883
## 163   0.27341933 0.54210912 -0.178751200 -0.8341889 -0.849885980 -0.6277213
## 164   0.21188424 0.44099563 -0.110682580 -0.8310131 -0.808571800 -0.5674862
## 165   0.21188424 0.44099563 -0.145693330 -0.8165235 -0.841593730 -0.5815910
## 166   0.35248359 0.45933642 -0.238334280 -0.8383462 -0.886393310 -0.6135089
## 167   0.30127391 0.48506667 -0.206716980 -0.8515603 -0.878378480 -0.5443597
## 168   0.20866908 0.46029854 -0.088307992 -0.7874863 -0.807688740 -0.5449233
## 169   0.01471095 0.49486833 -0.103032950 -0.7887962 -0.787382460 -0.6180138
## 170   0.01471095 0.48308101 -0.094280583 -0.8160125 -0.736395250 -0.5906338
## 171   0.08351172 0.39160844 -0.085301987 -0.8416273 -0.757349480 -0.4967290
## 172   0.14915890 0.39160844 -0.141958610 -0.8453003 -0.802825240 -0.5784163
## 173   0.16869689 0.58928617 -0.189900160 -0.8582898 -0.801815070 -0.5915369
```

```
## 174   0.16869689  0.47515276 -0.137478170 -0.8114579 -0.816531960 -0.4990239
## 175   0.20617590  0.47515276 -0.163468630 -0.7943342 -0.858990900 -0.5714132
## 176   0.10447987  0.39451851 -0.169908030 -0.7828300 -0.864105650 -0.5961763
## 177   0.65114657  0.80024157 -0.925233590 -0.9994869 -0.998176830 -0.9901697
##              NA          NA          NA          NA          NA
## 1    -0.99423081 -0.9876139200 -0.943219990 -0.407747070 -0.67933751
## 2    -0.99915036 -0.9778655000 -0.948224780 -0.714891660 -0.50093000
## 3    -0.99713008 -0.9648098900 -0.974675000 -0.592235140 -0.48582066
## 4    -0.99718043 -0.9837991200 -0.986006790 -0.627446260 -0.85093004
## 5    -0.99800428 -0.9812318600 -0.991324650 -0.786552530 -0.55947687
## 6    -0.99758385 -0.9918468100 -0.995413570 -0.751869080 -0.45477250
## 7    -0.99686258 -0.9724023600 -0.982863830 -0.637184960 -0.51475133
## 8    -0.99576798 -0.9758468700 -0.986828570 -0.633239420 -0.74387744
## 9    -0.99735109 -0.9572119300 -0.985840640 -0.683117240 -0.52481198
## 10   -0.99616279 -0.9798092300 -0.982810720 -0.550721320 -0.29455303
## 11   -0.99586811 -0.9802646400 -0.982755160 -0.628997330 -0.39674770
## 12   -0.99747424 -0.9848678000 -0.992936290 -0.838021920 -0.77507130
## 13   -0.99838369 -0.9806247800 -0.995275600 -0.849672190 -0.67399747
## 14   -0.99808164 -0.9928902900 -0.990088370 -0.888214740 -0.55377311
## 15   -0.98937379 -0.7695368300 -0.869028710 -0.163202860  0.05464478
## 16   -0.99668414 -0.9750486400 -0.983843720 -0.627970940 -0.66763441
## 17   -0.99667618 -0.9835947600 -0.977652920 -0.645632950 -0.48190674
## 18   -0.99790967 -0.9901020300 -0.993708160 -0.642111680 -0.49609317
## 19   -0.99748035 -0.9938378500 -0.995221860 -0.701819180 -0.75322464
## 20   -0.99843035 -0.9903538100 -0.994458050 -0.805919610 -0.66103907
## 21   -0.99822682 -0.9930609200 -0.993999100 -0.742251030 -0.60838995
## 22   -0.99823553 -0.9903690500 -0.995307400 -0.742251030 -0.73493716
## 23   -0.99824944 -0.9907111700 -0.994559360 -0.796050840 -0.81314755
## 24   -0.99928724 -0.9869605300 -0.987914960 -0.728911850 -0.62171508
## 25   -0.99844717 -0.9906838400 -0.993550360 -0.640677550 -0.45340072
## 26   -0.99728846 -0.9861393900 -0.997367870 -0.667770640 -0.51727554
## 27   -0.99912839 -0.9937126100 -0.992245890 -0.826873100 -0.75315631
## 28   -0.89712813 -0.1586247100 -0.401964070 -0.484722270  0.55583606
## 29   -0.98674576 -0.9085151800 -0.920034970 -0.238788550 -0.48263791
## 30   -0.99233797 -0.9549199000 -0.980902710 -0.496178520 -0.39770723
## 31   -0.99272564 -0.9421593900 -0.966505160 -0.453268710  0.13570009
## 32   -0.79149227 -0.5493111000 -0.517773070 -0.514607260  0.67312385
## 33   -0.79951264 -0.5302394900 -0.556589280 -0.366055220  0.72545068
## 34   -0.97072907 -0.9108420800 -0.932381890  0.073575726 -0.21818565
## 35   -0.98013024 -0.9614380300 -0.962324150 -0.213254610 -0.62233741
## 36   -0.99291320 -0.9918392300 -0.992170400 -0.688861400 -0.57831391
## 37   -0.99617470 -0.9966613500 -0.999311610 -0.627894910 -0.72337814
## 38   -0.99648186 -0.9940441400 -0.994741910 -0.690415600 -0.66445583
## 39   -0.98122406 -0.9321343900 -0.964292640 -0.791228330  0.08287955
## 40   -0.99420750 -0.9433963800 -0.987561540 -0.627446260  0.01436901
## 41   -0.99620975 -0.9812344000 -0.989586250 -0.555017150 -0.61174758
## 42   -0.99449186 -0.9855708300 -0.993678520 -0.584878270 -0.66021127
## 43   -0.99597520 -0.9800857800 -0.997818110 -0.725621050 -0.37377648
## 44   -0.99359831 -0.9659149300 -0.989972550 -0.591934660 -0.45169492
## 45   -0.99281538 -0.9779629000 -0.985006900 -0.570772550 -0.61318133
```

```
## 46    -0.99582312 -0.9875016900 -0.985386140 -0.702793240 -0.45550397
## 47    -0.99697219 -0.9793413100 -0.988903610 -0.667770640 -0.54961143
## 48    -0.99674188 -0.9841429500 -0.987147090 -0.675878980 -0.62023971
## 49    -0.99691383 -0.9871586400 -0.986182570 -0.733786590 -0.51639401
## 50    -0.99620323 -0.9816437800 -0.993828670 -0.615318100 -0.64253876
## 51    -0.99617222 -0.9773868800 -0.989003440 -0.607805080 -0.57518399
## 52    -0.92019919 -0.9729584600 -0.954596390  0.583721850 -0.40393562
## 53    -0.99110849 -0.9895981200 -0.981874250 -0.445464390 -0.79809120
## 54    -0.99512477 -0.9961562500 -0.996809810 -0.616394250 -0.78410799
## 55    -0.99600159 -0.9951915500 -0.996705630 -0.604512570 -0.77437048
## 56    -0.99696253 -0.9966034300 -0.994295670 -0.714891660 -0.77437048
## 57    -0.99624960 -0.9972086500 -0.991896090 -0.616394250 -0.79877241
## 58    -0.99554629 -0.9928160400 -0.995109730 -0.611174350 -0.76878471
## 59    -0.99793501 -0.9937788800 -0.993413980 -0.622899960 -0.77748596
## 60    -0.99761679 -0.9935592500 -0.989723690 -0.567846940 -0.78192551
## 61    -0.99679960 -0.9911294100 -0.988586210 -0.624357260 -0.67236287
## 62    -0.99625439 -0.9943962700 -0.993335670 -0.649984480 -0.67668474
## 63    -0.99591133 -0.9960694400 -0.991374760 -0.627970940 -0.78614445
## 64    -0.99560128 -0.9952810800 -0.991652950 -0.577257850 -0.77437048
## 65    -0.75922954 -0.7802864900 -0.907667290  0.030495821 -0.16670018
## 66    -0.95160020 -0.9077704800 -0.988497560  0.241292310 -0.51040234
## 67    -0.65549242 -0.4613556600 -0.214138710 -0.564789290 -0.17171626
## 68    -0.64749960 -0.2810607100 -0.087491445 -0.295051710  0.04512077
## 69    -0.89942304 -0.8303006400 -0.725723830  0.554659710  0.42107625
## 70    -0.81183653 -0.8324965900 -0.800535240  0.503502540  0.62055374
## 71    -0.75472288  0.0632644140  0.012373240 -0.465699320  0.03428017
## 72    -0.67833686 -0.3248009100 -0.320818760 -0.393086310 -0.95624852
## 73    -0.97069784  0.2044971500 -0.629301610 -0.006705565 -0.57308512
## 74    -0.97902185 -0.7850371200 -0.966586230 -0.272660360  0.10707749
## 75    -0.98817875 -0.8820409100 -0.988077260 -0.551420800  0.11030984
## 76    -0.99553290 -0.9798405400 -0.994794810 -0.477550060 -0.32158971
## 77    -0.99556790 -0.9886543700 -0.995488860 -0.500495710 -0.35621467
## 78    -0.99403820 -0.9897574000 -0.990271080 -0.656383130 -0.45118231
## 79    -0.54527636 -0.4915179200 -0.341296890  0.423705880  0.28635107
## 80    -0.27767761 -0.2125918100 -0.386869960  0.345317360  0.26495523
## 81    -0.43453613 -0.3974883300 -0.528744930  0.308493850  0.48325410
## 82    -0.35526547 -0.2723163400 -0.483873100  0.447831070  0.42468923
## 83    -0.28293314 -0.1740794100 -0.314610960  0.397098660  0.39536522
## 84    -0.28357535 -0.3716844500 -0.004629248  0.356123700  0.48573092
## 85    -0.39200046 -0.2643995100 -0.058662513  0.370128680  0.41582094
## 86    -0.38763499 -0.1489891300 -0.200404370  0.330104930  0.25655498
## 87    -0.46625697 -0.3544908400 -0.076900473  0.363369090  0.38204084
## 88    -0.29764436 -0.1708154400 -0.369228440  0.336503580  0.40761230
## 89    -0.36000131 -0.3506569600 -0.394175730  0.281977450  0.40393269
## 90    -0.35622399 -0.3714799400 -0.485423090  0.429938650  0.44071518
## 91    -0.30603274 -0.2271455700 -0.381958890  0.431275220  0.37753839
## 92    -0.22616169 -0.3230490100 -0.005093158  0.399281970  0.51925191
## 93    -0.27199844 -0.2626198000  0.018179973  0.517487880  0.49287166
## 94    -0.39629127 -0.1647681700 -0.144772600  0.350932730  0.41025759
## 95    -0.38984835 -0.3150491400 -0.132556470  0.400553530  0.47671299
```

```
## 96   -0.38306925 -0.2796432600 -0.096385115  0.471568880  0.40857812
## 97   -0.40965361 -0.1995802000 -0.056776265  0.429785030  0.42362731
## 98   -0.50384930 -0.4159871900 -0.209101620  0.360953960  0.45187411
## 99   -0.36271559 -0.1636839500 -0.229219800  0.409664140  0.42145870
## 100  -0.21947512 -0.2556960000 -0.213168260  0.398138400  0.46242807
## 101  -0.21474300 -0.3181338300 -0.274014920  0.491053230  0.35408097
## 102  -0.26230788 -0.2319103300 -0.461255730  0.385341100  0.43844100
## 103  -0.40954905 -0.3160903700 -0.437954790  0.354555310  0.50452885
## 104  -0.36536591 -0.3034065700 -0.338537450  0.429938650  0.42746130
## 105  -0.33536337 -0.3042891300 -0.110096690  0.247740750  0.44686067
## 106  -0.30931735 -0.4585518000  0.010603724  0.318389480  0.47501350
## 107  -0.33998624 -0.3127312200 -0.006492470  0.389324620  0.47501350
## 108  -0.37498611 -0.1328346800 -0.372071620  0.297189870  0.41558288
## 109  -0.32657958 -0.1131935500 -0.315921990  0.454130740  0.39906969
## 110  -0.35970459 -0.2160754900 -0.285541560  0.466928040  0.41998743
## 111  -0.48881652 -0.2283680900 -0.402597770  0.308493850  0.44466118
## 112  -0.41769726 -0.1832299700 -0.182997460  0.387756230  0.32258277
## 113  -0.39691527 -0.2748367400 -0.418877780  0.209348850  0.36932975
## 114  -0.38423546 -0.3429665000 -0.366497720  0.345317360  0.44141242
## 115  -0.38133441 -0.3398889600 -0.352038220  0.421124870  0.44676279
## 116  -0.33496221 -0.3500113000 -0.106612920  0.222146150  0.45706325
## 117  -0.27451614 -0.3542493700 -0.060935457  0.367352610  0.43230608
## 118  -0.40854691 -0.2484770900 -0.118421810  0.447732090  0.41982622
## 119  -0.56690291 -0.2526008000 -0.402061690  0.206933720  0.39008629
## 120  -0.53743946 -0.5295776000 -0.356425070  0.235671390  0.46513035
## 121  -0.50198755 -0.5338465200 -0.343366770  0.487063030  0.55465083
## 122  -0.54632953 -0.4234245300 -0.345404100  0.528430330  0.43749521
## 123  -0.52596181 -0.2129023800 -0.211614310  0.377902720  0.35178419
## 124  -0.50920134 -0.3248566500 -0.174129470  0.314405960  0.37483750
## 125  -0.53372235 -0.3962859600 -0.184808770  0.303588520  0.46693409
## 126  -0.34035644 -0.4593600600 -0.314060560  0.350571790  0.35255745
## 127  -0.17173650 -0.4088450900 -0.233499730  0.232528320  0.20892813
## 128  -0.33847831 -0.4480790100 -0.267648590  0.148147080  0.28562890
## 129  -0.45856694 -0.5040468300 -0.311711580  0.041264651  0.34777810
## 130  -0.41805877 -0.4593998400 -0.159690110  0.064051608  0.47977839
## 131  -0.31910878 -0.3785245400 -0.118431680  0.022408159  0.37460868
## 132  -0.30289020 -0.4580034800 -0.096735238  0.098459982  0.30611561
## 133  -0.21821831 -0.5948519300 -0.198808690  0.123107910  0.39065002
## 134  -0.23030376 -0.5747093700 -0.330279400  0.098013803  0.33825446
## 135  -0.09182886 -0.4144979900 -0.124048200  0.173130630  0.41256235
## 136   0.04715731 -0.5160730500 -0.020420545  0.333601900  0.32411717
## 137  -0.13650256 -0.4252218600 -0.141360530  0.135905210  0.45655582
## 138  -0.27822398 -0.3266200600 -0.170778770  0.135905210  0.47958899
## 139   0.01128835 -0.4058237100 -0.054803304  0.406952180  0.48627756
## 140  -0.16241486 -0.2607558600 -0.104361740  0.296230310  0.43263578
## 141  -0.17888416 -0.3955887600 -0.206551900  0.333601900  0.34226897
## 142   0.10777722 -0.4733117600 -0.168216010  0.370911950  0.35030030
## 143  -0.07592030 -0.3609062300 -0.191331350  0.597842960  0.39273158
## 144  -0.08556861 -0.2819233400 -0.189454520  0.327203250  0.36847375
## 145  -0.36545717 -0.2824336400 -0.289392470  0.141748430  0.24294618
```

```
## 146 -0.31823875 -0.2273337700 -0.223166670   0.362098170   0.16895801
## 147 -0.29126799 -0.3700819500 -0.210079350   0.290791230   0.34241874
## 148 -0.29528437 -0.3519844500 -0.208965940   0.260366370   0.31866893
## 149 -0.19502547 -0.3172981800 -0.320863920   0.342902230   0.45205337
## 150 -0.26132380 -0.4460255800 -0.190347500   0.359196500   0.36552765
## 151 -0.49610412 -0.3202596300  0.045699248   0.436503180   0.15016008
## 152 -0.45589802 -0.2955678800  0.067126613   0.506997990   0.27355114
## 153 -0.45474937 -0.2582979300  0.111541200   0.558604320   0.42345884
## 154 -0.49178827 -0.0566921490 -0.049627250   0.511649510   0.39314750
## 155 -0.54068387 -0.3107702900  0.049531730   0.437448910   0.40867320
## 156 -0.60216277 -0.3766249300  0.229974130   0.240501650   0.43775432
## 157 -0.55522241 -0.2735287100  0.103245320   0.332520060   0.28016993
## 158 -0.49019940 -0.3298157100 -0.019151011   0.561019450   0.28111573
## 159 -0.35360888 -0.2519376200  0.064958717   0.304510340   0.16572748
## 160 -0.41538442 -0.3105502000  0.077363849   0.550637290   0.31543503
## 161 -0.41239356 -0.2662524600  0.108678380   0.647113550   0.35699414
## 162 -0.43291422 -0.0793423880 -0.053430929   0.651392630   0.33819620
## 163 -0.57219401 -0.1837781700 -0.098844948   0.601476270   0.30574344
## 164 -0.56107834 -0.0709801500  0.131555370   0.558604320   0.36334551
## 165 -0.54742158 -0.1866018800  0.017211579   0.455107570   0.19822373
## 166 -0.62414424 -0.4343128800 -0.026607326   0.469854980   0.10251750
## 167 -0.57334681 -0.3780246200  0.205820670   0.492202710   0.22907828
## 168 -0.47865828  0.0003086425  0.016855061   0.538764750   0.17091661
## 169 -0.51678046 -0.0853701180 -0.109298000   0.519616550   0.34846479
## 170 -0.51142984 -0.1150975100 -0.153314310   0.475840800   0.38890416
## 171 -0.57427108 -0.1707687600  0.170103500   0.506258970   0.41867725
## 172 -0.57935277 -0.1770358400  0.105957330   0.469435470   0.30675626
## 173 -0.64018163 -0.2644476300  0.037494402   0.337774490   0.38293855
## 174 -0.61209828 -0.2814436000 -0.038751081   0.287416530   0.42468923
## 175 -0.55616082 -0.2940824500 -0.008681401   0.272204100   0.28404111
## 176 -0.51392864 -0.3577785100  0.093680558   0.246000680   0.23797018
## 177 -0.97828984 -0.9277396500 -0.918530900  -0.458626270  -0.60368037
##               NA            NA            NA            NA            NA
## 1    -0.6021218700  0.929293510 -0.853011140   0.359909760 -0.058526382
## 2    -0.5709790600  0.611627160 -0.329548620   0.284213210  0.284594540
## 3    -0.5709790600  0.273024840 -0.086308698   0.337201510 -0.164738700
## 4    -0.9118715700  0.061435711  0.074839555   0.198204030 -0.264307330
## 5    -0.7614338400  0.313275530 -0.131207730   0.191160850  0.086903625
## 6    -0.5508815400  0.390052110 -0.182272380   0.158751500  0.187312560
## 7    -0.5365527600  0.360460180 -0.233335090   0.226456710  0.069525313
## 8    -0.8224081200  0.363063950 -0.300719100   0.346866580 -0.063693617
## 9    -0.7585241200  0.358267710 -0.253308620   0.266929210 -0.124250260
## 10   -0.4797107700  0.192862600 -0.021212436   0.037914663  0.190540170
## 11   -0.4239002100  0.345507600 -0.173995630   0.178122810  0.169443890
## 12   -0.6025762100  0.342965930 -0.323938110   0.371005910 -0.107567610
## 13   -0.7546591900  0.157461990 -0.046057965   0.048849273  0.004906740
## 14   -0.5508815400  0.412097030 -0.128236910   0.265079770  0.067705297
## 15    0.0730028600  0.157862840 -0.160336380   0.190318760 -0.321830340
## 16   -0.7616251100  0.291043700 -0.160034290   0.144970720  0.067883442
## 17   -0.6769158400  0.193144860 -0.040289908   0.109504970 -0.046524407
```

```
## 18   -0.5445591600   0.335716020 -0.136045540   0.205666820 -0.047574216
## 19   -0.6698117500   0.322572020 -0.135412570 -0.018095622   0.364225470
## 20   -0.7291389200   0.284945380 -0.121780530 -0.074247996   0.536003280
## 21   -0.6252615300   0.405067990 -0.217908430   0.176361910   0.255021920
## 22   -0.6046132200   0.445365150 -0.249919670   0.282190170 -0.114231300
## 23   -0.6925983500   0.322554000 -0.126927060   0.121102910   0.089860259
## 24   -0.6092054700   0.295756720 -0.075732760 -0.027520221   0.238771700
## 25   -0.4727479100   0.176466720 -0.011826038 -0.029310417   0.205731450
## 26   -0.5546308900   0.300732380 -0.138537240   0.288761400 -0.089848413
## 27   -0.5725111400   0.504025500 -0.195202460   0.266260620 -0.098672529
## 28    0.1738077000 -0.041077609   0.013076571   0.073864994 -0.318717240
## 29   -0.6928231100   0.092021479 -0.094523029   0.043629598 -0.163651590
## 30   -0.4734231900   0.323712230 -0.275756360   0.143518800 -0.148109330
## 31   -0.2202206700 -0.343954990   0.212233630 -0.045386022 -0.033376283
## 32    0.4934333400 -0.390833480   0.270712140 -0.030774429 -0.172074320
## 33    0.2610604000 -0.185872800   0.166933740   0.017569638 -0.359703950
## 34   -0.7228462000 -0.070904087 -0.040270944 -0.054590187   0.097401421
## 35   -0.5211628700   0.189093260 -0.086808630 -0.103538640 -0.138056050
## 36   -0.5710668900   0.199256600 -0.148482760 -0.076110358   0.033457894
## 37   -0.7257973300   0.292179620 -0.239373220   0.288675030 -0.360761420
## 38   -0.6079623900   0.200566830 -0.160644950   0.255441040 -0.265838970
## 39   -0.6466394100   0.017079776   0.029881469 -0.001446967 -0.293755040
## 40   -0.6032063000 -0.022325008   0.062825176   0.086942735 -0.310534020
## 41   -0.6344021900   0.029612674   0.037375697 -0.040398082   0.218167510
## 42   -0.5762437400   0.057191441   0.089458701 -0.245310350   0.417355880
## 43   -0.6116637100   0.148767900 -0.024023285 -0.159301940   0.372665790
## 44   -0.6746952600   0.191700270 -0.094974188 -0.178918110   0.311769880
## 45   -0.6193924600   0.225848040 -0.090667000 -0.111683430   0.163934320
## 46   -0.5618116300   0.182799630   0.016764152 -0.069466124   0.097918287
## 47   -0.6324921500   0.222439520   0.073739020 -0.159330040   0.265688630
## 48   -0.5225168000   0.204487100   0.055450248 -0.089250166   0.102674800
## 49   -0.5078488400   0.245613210 -0.112750520   0.254890820 -0.292521780
## 50   -0.7294754900   0.295985110 -0.193780100   0.228139980 -0.126825700
## 51   -0.5162352600   0.298592390 -0.139160890   0.135872690   0.013412649
## 52   -0.2687902600 -0.363920440   0.317029510 -0.251313730   0.043180800
## 53   -0.2995051500   0.002718461 -0.052910795   0.019408991 -0.044117436
## 54   -0.6136930600   0.109425620 -0.049453623 -0.187832830   0.388618600
## 55   -0.6987927500   0.192407560 -0.050628914 -0.031237388   0.401260570
## 56   -0.6380496300   0.286518250 -0.135153280   0.057308621   0.392755650
## 57   -0.6076725400   0.204485470 -0.031294075 -0.071679080   0.489052250
## 58   -0.6630663100   0.145169960   0.004176386 -0.108410230   0.495194800
## 59   -0.5893517300   0.189229750 -0.055480743   0.024945515   0.271965090
## 60   -0.5193342700   0.150169880 -0.024122557 -0.051364175   0.312012330
## 61   -0.5499224800   0.192201970 -0.012556749 -0.117735730   0.548150430
## 62   -0.6190153600   0.287750100 -0.064772433 -0.063304191   0.588991820
## 63   -0.5533773300   0.392567920 -0.185940770   0.217984280   0.364975680
## 64   -0.6137056000   0.370626610 -0.153877340   0.156934520   0.285926940
## 65    0.0959806810 -0.036349402 -0.117841300   0.060712407   0.027187625
## 66   -0.4970811200 -0.185692640   0.174121460 -0.279583460   0.132654040
## 67    0.3564189000 -0.481224240   0.324892090 -0.206791490   0.120194550
```

```
## 68    0.5761387700 -0.466783130  0.310922480 -0.211029070  0.137501630
## 69   -0.3887821000 -0.413736630  0.325654640 -0.307366600  0.165425580
## 70   -0.6325677000 -0.278009750  0.380699770 -0.546169280  0.249501470
## 71    0.3897210300 -0.254435340  0.236801110 -0.184037950 -0.034750647
## 72    0.9133893400 -0.268960010  0.205321380 -0.066560942 -0.127284020
## 73    0.1852226500 -0.396414960  0.384982000 -0.125533900 -0.021215416
## 74   -0.6369990900  0.067963238 -0.018980373  0.140465460 -0.338375920
## 75   -0.4598929800  0.129928850  0.003840868  0.130168820 -0.237697540
## 76   -0.5192258000  0.184712730 -0.081654752 -0.002233010  0.118187040
## 77   -0.6498549200  0.181507390 -0.094858756  0.127913310 -0.025653212
## 78   -0.6733648100  0.188611880  0.009761330 -0.050900430  0.251905980
## 79   -0.0320073930 -0.591173970  0.683983800 -0.557770190  0.348688700
## 80    0.1012768100 -0.540624480  0.569795300 -0.369516240  0.171044700
## 81   -0.0359126260 -0.358261000  0.377803610 -0.288019180  0.236873040
## 82   -0.0275614640 -0.516604710  0.601612760 -0.563007550  0.391750950
## 83    0.0022025540 -0.623747140  0.728816530 -0.761506100  0.536872780
## 84    0.0757575350 -0.484377460  0.523175500 -0.575652300  0.531365950
## 85    0.2164453500 -0.568698140  0.672865970 -0.628274320  0.436001800
## 86    0.0911921860 -0.593228300  0.722126770 -0.595063330  0.312589850
## 87    0.0182221240 -0.354359420  0.195413300  0.183952890 -0.112109160
## 88    0.0339949690 -0.309839060  0.235180590 -0.018028955  0.050807906
## 89   -0.1061597700 -0.367341470  0.381181210 -0.286606910  0.239761360
## 90   -0.1519668200 -0.476275940  0.565515280 -0.528986600  0.381785720
## 91    0.0136448460 -0.540021220  0.605052780 -0.595133720  0.467729780
## 92    0.1995130100 -0.477016560  0.463486770 -0.365671050  0.324426210
## 93    0.1550421100 -0.249389840  0.180936340  0.025768637  0.035541806
## 94    0.0341850470 -0.272955580  0.207026260  0.145677280 -0.212714290
## 95    0.0134919850 -0.433940240  0.442077920 -0.151952620 -0.025964285
## 96   -0.0031555232 -0.519559750  0.559812550 -0.307260110  0.091938147
## 97   -0.0210265720 -0.347411990  0.313735690  0.069717608 -0.187205940
## 98    0.0784970170 -0.265973090  0.252183110  0.059798120 -0.098621961
## 99   -0.0740343860 -0.262225430  0.199957920  0.023418298  0.033717385
## 100   0.1820406000 -0.099962929 -0.000296568  0.212866810 -0.018902183
## 101   0.1821851100 -0.199466390  0.118289100  0.094814216  0.026381769
## 102  -0.0095968208 -0.128394990  0.067622570  0.130313470 -0.033672441
## 103  -0.0546093560 -0.284371320  0.289925560 -0.181360040  0.118996050
## 104  -0.0036477533 -0.490218190  0.570008210 -0.515714040  0.342494800
## 105   0.1034204400 -0.450627230  0.473563480 -0.370034450  0.266231140
## 106   0.1833086300 -0.441665450  0.437818150 -0.321074250  0.247230360
## 107   0.0488814900 -0.299850350  0.316926400 -0.208392160  0.231341040
## 108  -0.0261546350 -0.135302340  0.096031586  0.102478070 -0.019376659
## 109  -0.0520209620 -0.108210660  0.020622529  0.211630930 -0.094788605
## 110  -0.0501206760 -0.113138890  0.059871689  0.159722870 -0.040398044
## 111   0.0790804640 -0.148221090  0.127997570  0.074237982  0.013975387
## 112   0.0646412740 -0.274395050  0.287745760 -0.296471720  0.393096860
## 113  -0.0418132290 -0.190552140  0.200520400 -0.134714380  0.211183110
## 114  -0.0928738100 -0.311794870  0.359476980 -0.309509360  0.275257700
## 115  -0.0488003130 -0.522390360  0.588291390 -0.533950440  0.388874860
## 116   0.0747478180 -0.449174590  0.472036340 -0.358672410  0.243533800
## 117   0.2061698100 -0.441834490  0.484235600 -0.361462890  0.240303390
```

```
## 118   0.1016019400 -0.488369640  0.581030290 -0.478360470  0.310306240
## 119  -0.1379733700 -0.309385510  0.319794090 -0.167899090  0.115317500
## 120  -0.0845238080 -0.438267680  0.450063750 -0.179890060  0.045067124
## 121  -0.0448950800 -0.294024920  0.288959110 -0.037652155  0.029502472
## 122  -0.0539735790 -0.133616160  0.108636570  0.068942181  0.025369425
## 123  -0.0663228970 -0.316763940  0.341109390 -0.099724507  0.074865080
## 124   0.0446844390 -0.418403090  0.419060180 -0.179617730  0.096209503
## 125   0.0988821870 -0.411298410  0.458348230 -0.304195430  0.160889570
## 126   0.2194424500 -0.293143250  0.229463380 -0.114496880  0.105618190
## 127   0.1846420900 -0.444154780  0.432128590 -0.378887780  0.285895970
## 128   0.1153448800 -0.455941940  0.498215320 -0.520628360  0.393765810
## 129   0.1001139500 -0.593795200  0.647288590 -0.612513460  0.389275180
## 130   0.1728482900 -0.412399190  0.383345810 -0.374085280  0.377599820
## 131   0.1620754900 -0.421978570  0.446205350 -0.508139770  0.475390120
## 132   0.2608363300 -0.482684980  0.591050980 -0.789742910  0.697456820
## 133   0.3237573600 -0.391228020  0.409579520 -0.578256420  0.621914430
## 134   0.1950677000 -0.585966580  0.630218840 -0.669075950  0.518975390
## 135   0.4877274000 -0.097506372  0.061074712 -0.105104280  0.255578760
## 136   0.1825891800 -0.410432700  0.387774570 -0.331766860  0.285901620
## 137  -0.0344534320 -0.350085150  0.292700300 -0.107002070  0.055744237
## 138  -0.0009498576 -0.134710840  0.055728804 -0.035137256  0.217298400
## 139  -0.0123743430 -0.308909010  0.240359600 -0.300679380  0.444082980
## 140   0.2064360800 -0.818455760  0.916678850 -0.895520810  0.545080110
## 141   0.3092265300 -0.413866820  0.365163780 -0.264482290  0.241515010
## 142   0.0521021390 -0.343882660  0.244160470 -0.206885550  0.324315440
## 143   0.3048596500 -0.504317760  0.391953620 -0.128738400  0.041415955
## 144   0.2027336600 -0.547478530  0.543217230 -0.471579980  0.324462560
## 145   0.0375585570 -0.487637500  0.529644120 -0.397568460  0.156998320
## 146   0.1680204400 -0.374674260  0.360484380 -0.311340260  0.302404300
## 147   0.0965528770 -0.219740960  0.078076163 -0.064348505  0.325747650
## 148   0.0840663040 -0.225823750  0.090883749  0.156515790 -0.119747380
## 149   0.3535869900 -0.231744200  0.156970920 -0.047146681  0.069141442
## 150   0.3139735300 -0.439111820  0.413408380 -0.418311160  0.384174520
## 151   0.1271431400 -0.239109050  0.011042400  0.322400720 -0.196053380
## 152  -0.0921892250 -0.409604790  0.196007360  0.127804580 -0.064948177
## 153  -0.0152623160 -0.532527870  0.314020740  0.003113331  0.025224810
## 154  -0.0120416680 -0.597718620  0.429118060 -0.127129610  0.046959369
## 155  -0.0236134790 -0.681925190  0.639045950 -0.429372190  0.186087950
## 156   0.1368050800 -0.650261300  0.630620180 -0.460570190  0.235254890
## 157   0.0009848169 -0.407681670  0.307785270 -0.068017371  0.008084339
## 158  -0.1142156700 -0.270585570  0.103740500  0.194482200 -0.174735140
## 159   0.1692938700 -0.489026340  0.385898960 -0.128208540  0.027407828
## 160   0.0125566280 -0.682644720  0.649145320 -0.491076010  0.283134850
## 161   0.0034781290 -0.523938160  0.384887970 -0.128153110  0.094952254
## 162  -0.0365011660 -0.490941160  0.386307950 -0.170955630  0.140485550
## 163  -0.0936023070 -0.498781980  0.421714290 -0.230499390  0.130583380
## 164  -0.0960944580 -0.386907270  0.297268010 -0.100517110  0.051122023
## 165  -0.0242020180 -0.438680990  0.340330670 -0.165758490  0.131280110
## 166   0.0233953890 -0.608429720  0.474863450 -0.259557110  0.191215290
## 167   0.0138246600 -0.898101920  0.853048770 -0.631418900  0.313082780
```

```
## 168 -0.0567048630 -0.613807990  0.515689500 -0.297360490  0.152320470
## 169 -0.0727641950 -0.635166530  0.667339340 -0.654072740  0.437746540
## 170 -0.0319636780 -0.589611910  0.633658780 -0.729616430  0.597021770
## 171 -0.1146203100 -0.558701580  0.450593390 -0.225689050  0.125340070
## 172 -0.0924236970 -0.579889500  0.535804280 -0.331519990  0.109244040
## 173 -0.0209813690 -0.631871230  0.651930250 -0.547877660  0.273993330
## 174  0.0081106992 -0.703640170  0.744597700 -0.700904200  0.441379710
## 175 -0.0624176640 -0.470634960  0.382185200 -0.241799390  0.191889440
## 176  0.0110962410 -0.144525200 -0.101993230  0.536670670 -0.416208410
## 177 -0.5139643600  0.380895630 -0.480753200  0.370982360 -0.272128960
##                NA           NA           NA           NA           NA
## 1    0.256891540 -0.2248476300  0.264105720 -0.095245630  0.278851430
## 2    0.115705420 -0.0909625290  0.294310410 -0.281210570  0.085988430
## 3    0.017150129 -0.0745069330  0.342256310 -0.332564480  0.239280530
## 4    0.072545240 -0.1553198300  0.323153950 -0.170812960  0.294938390
## 5    0.257615350 -0.2725046600  0.434727760 -0.315375070  0.439744370
## 6    0.259951040 -0.2432295800  0.421736150 -0.418460050  0.558461370
## 7    0.064297470 -0.0764385420  0.138057290 -0.036769477  0.231400820
## 8    0.144124230 -0.1323485200  0.083232381  0.041631384  0.137191760
## 9    0.215323920 -0.1833617400  0.171744820 -0.068957077  0.241830690
## 10   0.039721557  0.0542831630  0.037268005  0.081551086  0.172339930
## 11  -0.020162546  0.1360335500 -0.114405550  0.243374640  0.300912390
## 12   0.235922600 -0.1293530200  0.019638015  0.118295860  0.538257010
## 13   0.296516220 -0.1794091400  0.137175900 -0.132036790  0.270602020
## 14   0.289136320 -0.2406154500  0.315222780 -0.152404110  0.180577600
## 15  -0.315401540  0.2793659000 -0.307210570  0.342621200 -0.082974088
## 16   0.145616030 -0.1928500100  0.055579133  0.249270420  0.337573550
## 17   0.339750700 -0.4080555000  0.428692340 -0.094966866  0.273914970
## 18   0.203594900 -0.2265879500  0.379312610 -0.213396000  0.101400720
## 19   0.201387330 -0.1142847700  0.279528990 -0.092519141  0.461361840
## 20   0.211987610 -0.2041487800  0.415982240 -0.271716740  0.542898470
## 21   0.294129430 -0.2519759000  0.356811300 -0.080195620  0.405044320
## 22   0.398447520 -0.1764248200  0.091882618  0.180639090  0.467338930
## 23   0.340898190 -0.1410933000  0.146087330  0.045064128  0.490784270
## 24   0.246238890 -0.1153847400  0.231171920 -0.086456111  0.351227630
## 25   0.213469490 -0.0983188850  0.087367711 -0.024368358  0.420898360
## 26   0.302416390 -0.1819083400  0.235430960 -0.197368130  0.424560540
## 27   0.491563350 -0.2709413200  0.390317470 -0.136461800  0.469383000
## 28  -0.278188480 -0.1041512100  0.460328950 -0.113998240 -0.199215080
## 29   0.011063994 -0.1891503900  0.140096300  0.263917250  0.346852340
## 30   0.071376294 -0.0987947740  0.121245860 -0.066884481  0.325286230
## 31  -0.330124390  0.1908590100  0.197532240 -0.272524840 -0.514783580
## 32  -0.395643240  0.2474132900  0.129830950 -0.266952550 -0.562262560
## 33  -0.382767480  0.2675858800  0.007159938 -0.121738890 -0.526427430
## 34  -0.079986244 -0.0810142350  0.252911740 -0.115908860 -0.046817772
## 35   0.227396010 -0.1164919900  0.020521702 -0.082812933  0.138924960
## 36   0.409985330 -0.2477613700  0.187653690 -0.105722200  0.247351690
## 37   0.548167910 -0.2600207800  0.335884780 -0.005254272  0.254746100
## 38   0.370014280 -0.1341372000  0.204989030  0.202021960  0.158442520
## 39  -0.005336678 -0.1414161600  0.205519290  0.036843872  0.230766310
```

```
## 40    0.187278850 -0.1363554400 -0.043027660  0.148135700  0.387736390
## 41    0.133611040 -0.0090804460 -0.088710679  0.087291085  0.542863900
## 42    0.174122500 -0.0626187900  0.142431740 -0.288364180  0.402224860
## 43    0.085742459 -0.0104302020  0.104622020 -0.270504640  0.442195370
## 44    0.126279480 -0.0984208730  0.200836130 -0.275738380  0.429979080
## 45    0.160953200 -0.1262682200  0.173531050 -0.149182190  0.279916780
## 46    0.088536874 -0.0192859120 -0.029191587  0.060362799  0.279593410
## 47    0.158289630 -0.0800336960  0.160691440 -0.235479410  0.419951170
## 48    0.152621390 -0.0777623110  0.210891920 -0.283849480  0.331691160
## 49    0.031403406  0.0450463650 -0.008690351 -0.061957306  0.129767920
## 50    0.128943470 -0.0374806950  0.068094598 -0.184350100  0.120957390
## 51    0.285717630 -0.2161437100  0.352186590 -0.492946660  0.574831790
## 52   -0.100244130  0.2072715900 -0.066508561  0.123356070 -0.033834846
## 53    0.252844480 -0.1953368500  0.337589760 -0.142774740  0.179027880
## 54    0.450364780 -0.1163839600  0.212953820  0.331626540  0.503316370
## 55    0.426478440 -0.1957671300  0.121385070  0.138669190  0.697890960
## 56    0.521486740 -0.2398845600  0.162534190  0.095447434  0.361396060
## 57    0.551478380 -0.1572222600  0.238561230  0.194335090  0.319016370
## 58    0.371025210 -0.1708357600  0.335132840 -0.085124294  0.592081260
## 59    0.331136810 -0.1835558100  0.306873820 -0.071205754  0.478564050
## 60    0.400116850 -0.1755523400  0.200165900  0.141784490  0.316482390
## 61    0.375964030 -0.1247687900  0.152171650  0.150972650  0.528204130
## 62    0.294713640 -0.0865432510  0.128665020  0.048109777  0.529869360
## 63    0.251510560 -0.0830417910  0.103853950  0.179160260  0.474851370
## 64    0.316038130 -0.1595443100  0.229183560  0.108421510  0.406346870
## 65    0.268714420 -0.1550531100  0.207974200 -0.395867810  0.130175100
## 66    0.018214905 -0.0535710050  0.096326304 -0.060786251  0.493676410
## 67   -0.439595110  0.1979092600  0.174966540 -0.050118166 -0.401426430
## 68   -0.452208960  0.2177996900  0.149630160 -0.041662706 -0.392480650
## 69   -0.582091400  0.4916594100 -0.223571500  0.049749659 -0.234779890
## 70   -0.182293670  0.1027110100  0.121860770 -0.165107700 -0.239063190
## 71    0.124739470 -0.2590739200  0.190372940  0.281312320  0.226219930
## 72    0.112903100 -0.2689744300  0.164318720  0.322219910  0.241217830
## 73   -0.243696740 -0.0171006660  0.105608870  0.269794930  0.138795910
## 74   -0.344951990  0.1849106000 -0.197277650  0.459644100  0.104451920
## 75    0.019988252 -0.0428410350  0.023039236  0.046529021  0.190998770
## 76    0.273450410 -0.2266677100  0.248239970 -0.246495880  0.223657050
## 77    0.176448590 -0.2009530100  0.284066430 -0.221300730  0.590226190
## 78    0.163669370 -0.1382942500  0.216841280 -0.139590440  0.561776640
## 79   -0.332824170  0.3472535900  0.021748796 -0.037175619 -0.359137740
## 80   -0.272079630  0.3151566900 -0.018700378  0.085267569 -0.296888420
## 81   -0.227291630  0.2941444800 -0.056331793  0.170810090 -0.140111230
## 82   -0.284317090  0.2524097300  0.107313620 -0.030951290 -0.255217840
## 83   -0.110085530  0.1033205300  0.182838030  0.051521508 -0.294830640
## 84   -0.038607873  0.0203432580  0.331436720 -0.130172010 -0.145139290
## 85   -0.339112930  0.3054055500  0.107101820 -0.087435648 -0.280386160
## 86   -0.294387020  0.3202738700  0.003213260  0.082661190 -0.046723433
## 87   -0.257976630  0.3126983000 -0.060445461  0.157674160 -0.378853520
## 88   -0.247183120  0.2970966800 -0.015439454  0.082144030 -0.319519210
## 89   -0.287710580  0.3109580400 -0.035570442  0.127943860  0.015840810
```

```
## 90   -0.203726680   0.1972008000   0.117503040   0.039183592   0.019868157
## 91   -0.105545340   0.1440038800   0.086517927   0.209293900  -0.343595330
## 92   -0.145109510   0.1850365900   0.101290150   0.077128123  -0.459848330
## 93   -0.163633770   0.1845414100   0.172140700  -0.082594026  -0.027307394
## 94   -0.180753120   0.1795860900   0.169752360  -0.051157113   0.180353080
## 95   -0.174978090   0.1172829100   0.292726930  -0.128605170  -0.045890031
## 96   -0.165293660   0.1003057000   0.265526830  -0.060027178  -0.097022697
## 97   -0.258083620   0.2531429200   0.112156740  -0.036864631  -0.154819090
## 98   -0.015831158   0.0293320320   0.373938080  -0.237065150  -0.260421360
## 99   -0.121299950   0.0980179450   0.266272480  -0.077554408  -0.066816063
## 100  -0.177667140   0.1825870300   0.126185560   0.029409435   0.171717960
## 101  -0.087401519   0.1198354700   0.150945500   0.040829324   0.029152114
## 102   0.006717813   0.0609450000   0.232754770  -0.036036531  -0.145995630
## 103  -0.132175980   0.2354126700   0.012072938   0.116996600  -0.289368580
## 104  -0.246038000   0.3486361100  -0.104422270   0.202573410  -0.423242080
## 105  -0.181556770   0.2100914800   0.130293040  -0.023674632  -0.326679980
## 106  -0.295012320   0.3454584400  -0.076575015   0.136605810  -0.092106155
## 107  -0.450456640   0.5449600800  -0.305119030   0.288358230  -0.256007550
## 108  -0.154433600   0.1384084700   0.251757590  -0.146312780  -0.191695400
## 109  -0.098627211   0.1069889000   0.238732190  -0.111796570  -0.110312710
## 110  -0.213215770   0.2542038400   0.007768695   0.104255760  -0.011388186
## 111  -0.217110450   0.2564765200   0.020288262   0.080936992  -0.027525798
## 112   0.025663163  -0.0004257475   0.349915180  -0.135533450   0.067880681
## 113  -0.110245860   0.1027229300   0.258088000  -0.110743130   0.301428220
## 114  -0.240059600   0.2873076100  -0.071521409   0.214622270   0.028365527
## 115  -0.339057010   0.3506357600  -0.059986020   0.128113350   0.036100119
## 116  -0.425973300   0.4337252700  -0.057460742   0.004456846  -0.101499690
## 117  -0.518035780   0.5823158400  -0.278740350   0.152091180  -0.501352630
## 118  -0.140911580   0.1483045900   0.209372710  -0.081490291  -0.403291080
## 119   0.078179964  -0.1076578600   0.498984530  -0.209047090  -0.350903850
## 120   0.022051555  -0.0696932010   0.442516860  -0.176214210  -0.639707930
## 121  -0.163741650   0.1889557800   0.118791660   0.040714600  -0.598906830
## 122   0.280944450  -0.2670904200   0.588937910  -0.125077140  -0.364450990
## 123   0.259370060  -0.2735552200   0.643523440  -0.187981280  -0.434683500
## 124  -0.255967990   0.2346311000   0.184395140  -0.119715050  -0.455061280
## 125  -0.400068310   0.3933364600  -0.001928335  -0.059729438  -0.219760900
## 126  -0.184432830   0.2944643500  -0.182178970   0.291649180  -0.137140010
## 127  -0.116886560   0.2026681600  -0.041671669   0.152385560   0.073648543
## 128  -0.187675540   0.2192000700   0.035220798   0.087195767   0.120496670
## 129  -0.280602430   0.3511408900  -0.191763710   0.342699680   0.117884730
## 130  -0.220700580   0.3066213800  -0.167624550   0.337959730   0.036617940
## 131  -0.226891480   0.2893104900  -0.048568110   0.124824410  -0.185206640
## 132  -0.116922280   0.1521410500   0.171923750  -0.102328330  -0.081664014
## 133   0.045983262  -0.0132058510   0.457431460  -0.372765620   0.272004620
## 134  -0.066195022   0.0622798030   0.386481850  -0.304945120   0.450696940
## 135  -0.043594722   0.1237666100  -0.043619384   0.337744320   0.282544220
## 136  -0.075891847   0.1495233900   0.028593659   0.141032670  -0.019663977
## 137  -0.212919020   0.1757138900   0.195642300  -0.131103370   0.214289150
## 138  -0.318122800   0.2610644900   0.156473790  -0.159882200  -0.146363820
## 139  -0.420374040   0.5399345900  -0.517418420   0.567294120  -0.283577930
```

```
## 140 -0.373329900  0.4866995700 -0.396968630  0.464013130 -0.109756390
## 141 -0.032483386  0.1600979200 -0.028353331  0.207001780  0.157719210
## 142  0.057359241  0.0494426280 -0.001642887  0.185688650  0.175611290
## 143 -0.136862130  0.1834983800  0.108167490 -0.027739660 -0.085464475
## 144 -0.031529052  0.0401418040  0.281400580 -0.187341700 -0.001120027
## 145 -0.123501890  0.0613505580  0.373007200 -0.295364220 -0.341143780
## 146 -0.177954950  0.2041519500  0.104951110 -0.052918842 -0.288053200
## 147 -0.030179831 -0.0131843460  0.294516980 -0.063430192 -0.209266620
## 148 -0.257712810  0.2209989000  0.036561326  0.072770942 -0.003707074
## 149 -0.042191173  0.0457569200  0.196741560 -0.064067725  0.204858880
## 150  0.002861036  0.0718496940  0.253604490 -0.185173360  0.154597260
## 151 -0.115746230 -0.0301626490  0.184199060  0.151481780 -0.791639360
## 152  0.061950317 -0.2260980500  0.273869420  0.277957020 -0.804012470
## 153 -0.286479650  0.1534930700  0.080078707  0.099290902 -0.562488060
## 154 -0.267184850  0.1561435100  0.098751183  0.038994057 -0.445146080
## 155 -0.338030260  0.2373290700  0.110238880 -0.086384109 -0.667968010
## 156 -0.539302140  0.4628698600 -0.125150540  0.025775308 -0.717082360
## 157 -0.509471880  0.4508486900 -0.219260070  0.207681570 -0.206249370
## 158 -0.271213490  0.2439986000 -0.077232648  0.204334740 -0.227643020
## 159 -0.367799060  0.2588590900 -0.016059795  0.102088770 -0.235240040
## 160 -0.351012950  0.2755848600 -0.123506650  0.250969590 -0.612169940
## 161 -0.242620320  0.0928894200  0.221633400 -0.082850261 -0.801762220
## 162 -0.205943120  0.0241771740  0.313948120 -0.137282770 -0.533335950
## 163 -0.453325310  0.3811530400 -0.134686050  0.098215626 -0.300581250
## 164 -0.232781630  0.1113115500  0.195538450 -0.121291290 -0.552492770
## 165 -0.199136580  0.0700295010  0.245271520 -0.151138170 -0.705009390
## 166 -0.430080310  0.3185192000 -0.019404992  0.018831169 -0.539807290
## 167 -0.283015450  0.1072774400  0.229423680 -0.096823173 -0.342062680
## 168 -0.408156660  0.3836150300 -0.311423180  0.391219810 -0.369402630
## 169 -0.399492750  0.4045768600 -0.285487000  0.337467710 -0.386248640
## 170 -0.420701520  0.3907066900 -0.225654950  0.266525740 -0.235485820
## 171 -0.443625820  0.2973949800  0.046925047  0.001476705 -0.254219820
## 172 -0.498057340  0.4239923700 -0.077111727 -0.028484519 -0.376683240
## 173 -0.513960430  0.4558338000 -0.115380450 -0.028878566 -0.426075060
## 174 -0.478823680  0.3746423900  0.034431714 -0.109842560 -0.234426680
## 175 -0.429142440  0.3062293000  0.111168950 -0.153023670 -0.161968030
## 176 -0.233625800  0.1411219100  0.285041700 -0.329475070 -0.412206980
## 177  0.263649570 -0.4028759900  0.581176130 -0.414252660  0.287904090
##               NA            NA            NA           NA           NA
## 1   -0.4650845700  0.4919359600 -0.1908835600  3.763139e-01  0.4351291900
## 2   -0.0221526940 -0.0166565350 -0.2206435000 -1.342866e-02 -0.0726918900
## 3   -0.1362035900  0.1738631800 -0.2994927800 -1.246984e-01 -0.1811047900
## 4   -0.3060809900  0.4821478300 -0.4701287100 -3.056930e-01 -0.3626540500
## 5   -0.2690689500  0.1794141900 -0.0889519540 -1.558043e-01 -0.1897627100
## 6   -0.2183436400  0.1651380700  0.0809201640 -2.099792e-01 -0.1510636500
## 7   -0.1145772800  0.3192043600 -0.4877686300 -9.585211e-02 -0.1357287500
## 8   -0.0922898500  0.3723690900 -0.7209128200 -1.616342e-01 -0.0171201530
## 9   -0.1944194700  0.2167579800 -0.3380264600 -1.647907e-01 -0.0337674930
## 10   0.0359950780 -0.1849299800  0.3511563100 -1.762412e-01 -0.4476509200
## 11  -0.0764445390  0.0819571560  0.1526787400  8.503662e-03 -0.3559162100
```

```
## 12   -0.2084456500   0.3559463900  -0.1304113100  -2.672387e-01  -0.1189710900
## 13    0.0343579120  -0.0704393430   0.0992572330  -3.523584e-02  -0.1563049500
## 14    0.0503658580  -0.0398358070  -0.0099919957   4.361884e-02  -0.1438525800
## 15    0.0273442900  -0.0464711720  -0.0865416920   8.218719e-01   0.7376562400
## 16   -0.2611671200   0.1767284200  -0.2222396200   3.295932e-01   0.2379994400
## 17   -0.2299320000   0.0757292870   0.0059085062   2.804974e-01   0.1271124200
## 18   -0.0072708945   0.0764150620  -0.1536606100   1.533626e-01  -0.0975735370
## 19   -0.2424503500   0.4173039100  -0.1549636600   1.908747e-01  -0.0450073060
## 20   -0.3334753000   0.4021775900  -0.0091204808   1.109392e-01   0.0744527590
## 21   -0.0904448590   0.0351363290   0.1328816000   6.714224e-02  -0.0393856530
## 22   -0.0741434560   0.0376235250   0.0379021180   1.161994e-01   0.1088122700
## 23   -0.2044076100   0.2276470000  -0.1967579900  -9.775865e-02   0.0844064520
## 24   -0.1605728800   0.1230979100  -0.0108207830  -4.120247e-02  -0.0394245740
## 25   -0.1373397900  -0.0726038540  -0.0086808411  -2.237021e-01  -0.0466234400
## 26   -0.0825305880  -0.1097924300   0.0540301000   1.319459e-01   0.2785706400
## 27   -0.1145901900   0.0496297950   0.0068977860   1.426626e-01   0.0793481940
## 28   -0.0983379910   0.0522281560   0.2625271500  -9.908432e-01  -0.9503355000
## 29   -0.3109658100   0.2099489200  -0.2601296800  -9.293134e-01  -0.2998083800
## 30   -0.2249110300   0.1842237800  -0.1718655100  -8.382442e-01  -0.7140091900
## 31    0.2779876200  -0.2609884700   0.3172446400  -2.631720e-02  -0.8579878700
## 32    0.3356559200  -0.3271514200   0.3160262600  -4.892716e-01  -0.9089087700
## 33    0.3777123300  -0.4860664900   0.3861566400  -9.611652e-01  -0.9416896300
## 34   -0.0362247140  -0.0321262270   0.0118890680  -9.105816e-01  -0.7060142100
## 35   -0.2137495900   0.2455276100  -0.2235954900  -9.451948e-01  -0.9112514000
## 36   -0.0809433900  -0.0519341930   0.0334616650  -5.623617e-01  -0.4679289900
## 37    0.0417224020  -0.1674697000   0.0557440600  -4.251698e-01  -0.2564186800
## 38    0.0209145010  -0.0839147440  -0.0045875060  -3.349185e-01  -0.5646424600
## 39   -0.1766165500   0.1062915400  -0.1298770600   9.110737e-02   0.5857231800
## 40   -0.2012507300   0.2772433400  -0.1681964300  -6.881026e-01  -0.0222095940
## 41   -0.3659120000   0.4879536100  -0.1930705600  -6.803092e-02  -0.2792003400
## 42   -0.1936941100   0.3537402800  -0.2504119000  -2.315565e-01  -0.3338132900
## 43   -0.1640573300   0.1855428400  -0.1078811500  -2.289923e-01   0.1080880400
## 44   -0.2747942800   0.2391392800  -0.1466137700  -5.385251e-01   0.1242124000
## 45   -0.2054861500   0.2775709800  -0.3087187800  -5.766916e-01  -0.2441089900
## 46   -0.2128244200   0.3921244600  -0.4336237300  -3.622969e-01  -0.1043611500
## 47   -0.2752608900   0.3677397700  -0.2733398000  -2.837671e-01   0.1016747400
## 48   -0.1853089300   0.1027103300   0.0060812922  -1.916099e-01  -0.2662754100
## 49   -0.0076323155  -0.1013955100   0.2084324800  -2.892202e-01  -0.2060593800
## 50    0.0019993688  -0.0159953090  -0.0153526560  -5.236563e-01  -0.2633436800
## 51   -0.3625181400   0.4163129600  -0.5402690100  -4.481583e-01  -0.3518577300
## 52   -0.0317707730  -0.0287789280   0.0128146290   4.925994e-01  -0.5933367600
## 53   -0.0696168360  -0.0330752700  -0.0935487080  -3.881451e-01   0.5962099400
## 54   -0.1907860500   0.1591167500   0.2422421300  -1.994605e-01   0.0250798850
## 55   -0.3570996500   0.3261610000  -0.0387592710  -3.877175e-01   0.1967152600
## 56   -0.1018538400   0.0162145500   0.0156270060  -2.767338e-01  -0.0395383950
## 57   -0.0693687910   0.0745028220  -0.0808127140  -5.694415e-04  -0.1881217000
## 58   -0.2644133100   0.2103004200   0.0668922700  -3.353533e-02  -0.2156226000
## 59   -0.2709050600   0.1480591500   0.1160284900  -1.883330e-01  -0.1380708100
## 60   -0.1493709500   0.1015070100  -0.0275602460  -3.311530e-01  -0.0677771880
## 61   -0.2627504900   0.1678713400  -0.0339976270  -3.658637e-01   0.0241406570
```

```
## 62   -0.2397901300   0.1770855900   0.0144263590  -2.719595e-01   0.0269060960
## 63   -0.1712985500   0.1198520700   0.0037223769  -2.070442e-01   0.1487609600
## 64   -0.1168215900   0.1344284200  -0.1509985600  -2.744124e-01  -0.0482352410
## 65   -0.1995546600   0.1824384000  -0.1560980000  -8.649975e-01  -0.8984320900
## 66   -0.1442340900   0.0831693480  -0.0304638580  -8.359855e-01   0.0295945210
## 67    0.3453962500  -0.7042606300   0.6669891000   7.966513e-01  -0.7210751300
## 68    0.3261378600  -0.6809566900   0.6648192900   8.357193e-01  -0.7336288200
## 69    0.0421106840  -0.2161692500   0.3981980900   7.864741e-01  -0.9356094000
## 70    0.1385018600  -0.1017970400   0.0011950869  -2.549271e-01  -0.7239503500
## 71   -0.5449354000   0.6713644400  -0.0603801020   6.580470e-01  -0.5159215700
## 72   -0.5641856200   0.6807938600  -0.0687677270   2.399444e-01  -0.3606972800
## 73   -0.1697146000   0.0809009070  -0.0914833480   3.300118e-01  -0.5381249000
## 74   -0.1089153000   0.2341724000  -0.3718035000  -7.455521e-01  -0.4760578400
## 75   -0.1419442700   0.4113344700  -0.4960309800  -4.057715e-01  -0.0631068440
## 76   -0.0689450390   0.1097676300   0.0033595921   1.395107e-02  -0.1592971300
## 77   -0.2107159900   0.3013578800   0.0222558070   2.427848e-01   0.0072197632
## 78   -0.2438362800   0.3187082700  -0.1143007500   1.611274e-02  -0.0512715210
## 79    0.2969900000  -0.1576192900  -0.0746068730  -1.248457e-01  -0.0092711975
## 80    0.3202996200  -0.2042059300  -0.0823224150  -2.121580e-01  -0.0600914350
## 81    0.1423576300   0.0376951070  -0.2759246900  -1.877042e-01  -0.0799682800
## 82    0.2795879000  -0.2120235000  -0.0317331370  -1.957822e-01  -0.1583939700
## 83    0.3113916000  -0.2297358500  -0.0092529195  -2.249659e-01  -0.1841479000
## 84    0.1705442900  -0.1038877300  -0.0732325830  -1.517764e-01  -0.0490540000
## 85    0.3376504100  -0.3865694700   0.1522166200  -4.230655e-02   0.0252521420
## 86    0.0957258450  -0.0009630676  -0.1766156900  -4.756858e-02  -0.0696981330
## 87    0.2887892800  -0.0650766730  -0.1957878300  -2.038029e-01  -0.0330518080
## 88    0.3816976100  -0.3255126200  -0.0225411370  -2.104071e-01  -0.0674707490
## 89    0.0363202360   0.0648191620  -0.2339910400  -2.024814e-01  -0.0612493110
## 90    0.0049017780   0.1395022500  -0.3087620200  -1.955245e-01  -0.1614084700
## 91    0.4158694200  -0.3691926500   0.0001826986  -2.539221e-01  -0.2604583400
## 92    0.5263249100  -0.4780653800   0.0295739430  -2.397798e-01  -0.1092546800
## 93    0.0881346380   0.0434915880  -0.2708236900  -1.448785e-01  -0.0656227310
## 94   -0.1632129900   0.3696232900  -0.4168269900  -1.211412e-01  -0.1515387900
## 95   -0.0009332269   0.3627513900  -0.5266380000  -1.282992e-01  -0.1807586400
## 96    0.0667015530   0.1312837800  -0.2271152000  -1.194589e-01  -0.1798802500
## 97    0.1187552900   0.0793781760  -0.2269273000  -9.337665e-02  -0.1896241300
## 98    0.3376085400  -0.3465425000   0.0681288830  -3.242290e-02  -0.1216794800
## 99    0.0660974830   0.0681246290  -0.1848185900  -1.287626e-01  -0.1187349000
## 100  -0.1504359700   0.2415308000  -0.2485343300  -2.196403e-01  -0.2083377700
## 101   0.0019719244   0.0773905880  -0.2038505700  -2.790335e-01  -0.1681998700
## 102   0.2243709000  -0.1140440900  -0.1642301400  -3.515681e-01  -0.1529819600
## 103   0.3361691200  -0.1830344600  -0.1797897200  -2.635498e-01  -0.1672245000
## 104   0.4473442100  -0.3045292300  -0.0909549910  -2.257563e-01  -0.2195934000
## 105   0.2775608800  -0.0370754150  -0.2397102900  -2.492598e-01  -0.2462450900
## 106   0.0699016080  -0.0747419570   0.0161344070  -1.625452e-01  -0.0655205790
## 107   0.3366432200  -0.4570654400   0.2370159300  -9.036127e-02  -0.0005706278
## 108   0.2388684700  -0.1982052900   0.0042301328  -8.775835e-02  -0.0816043880
## 109   0.0857172650   0.1716284100  -0.3559197500  -9.515534e-02  -0.1668995900
## 110   0.0025366473   0.1690989200  -0.2848542700  -1.086301e-01  -0.1655157200
## 111  -0.0285421060   0.2331187100  -0.2898922600  -9.795726e-02  -0.1229533900
```

```
## 112   0.0249368910   0.0830339640  -0.2322868700   5.006771e-05   0.0200129540
## 113  -0.2983603600   0.5172938900  -0.4946185200  -1.706633e-01  -0.1411361300
## 114   0.0496699390  -0.0524966390  -0.0955234370  -2.054664e-01  -0.1420662700
## 115   0.0158957710  -0.0380736800  -0.0233619180  -3.005895e-01  -0.1468962200
## 116   0.1120752300   0.0051628872  -0.1785690200  -2.878529e-01  -0.2219912000
## 117   0.5654004200  -0.5878516600   0.1525981500  -1.252213e-01  -0.1109243700
## 118   0.4524769100  -0.5212030100   0.2385484700  -8.552456e-02  -0.0092789012
## 119   0.3926830700  -0.4726183800   0.2439408600  -1.206398e-01  -0.0928198750
## 120   0.6935114500  -0.7725431300   0.3400122700  -2.223586e-01  -0.1326753600
## 121   0.6176235100  -0.6530555800   0.3071236800  -1.374920e-01  -0.1123680000
## 122   0.3978868700  -0.5328418400   0.3430759200  -3.712748e-02  -0.1108601800
## 123   0.4525502700  -0.4328987300   0.0939083820  -7.622737e-02  -0.1858889600
## 124   0.4128586800  -0.2371259600  -0.0630533340  -8.712714e-02  -0.1924057100
## 125   0.1669533100  -0.0031563144  -0.1275783800  -1.265371e-01  -0.1133089000
## 126   0.2134513000  -0.0174529920  -0.3993340100  -5.871938e-01  -0.2691976300
## 127   0.1258533800  -0.2220307000  -0.0538405820  -6.596103e-01  -0.1535011800
## 128   0.1320681600  -0.1871316400  -0.0385648930  -5.753611e-01  -0.1041986400
## 129   0.1374156600  -0.1782515300  -0.0910097570  -4.923729e-01  -0.2614545900
## 130   0.1959418500  -0.2149386700  -0.0191101170  -3.377426e-01  -0.1969422100
## 131   0.3791193900  -0.2360264200  -0.1122121600  -2.651824e-01  -0.2678067000
## 132   0.2848450500  -0.1495702400  -0.2307625000  -3.612827e-01  -0.3545122700
## 133  -0.0972052890   0.3475180800  -0.5080114800  -3.336542e-01  -0.0830835860
## 134  -0.1716386500   0.3118637600  -0.3841874900  -3.953582e-01  -0.0405647990
## 135  -0.1143704100   0.3026597700  -0.3317991900  -6.094743e-01  -0.2593937000
## 136   0.1489371900   0.0536147230  -0.2171496500  -3.820610e-01  -0.1592693500
## 137  -0.0282579430   0.2760362100  -0.4243693500  -3.724306e-01  -0.1634404100
## 138   0.3422565200  -0.3518843300   0.0066161681  -4.865320e-01  -0.0624772830
## 139   0.4549318500  -0.5591216100   0.2166410300  -4.783699e-01  -0.0786091990
## 140   0.1937679200   0.0201547800  -0.3244115100  -4.367121e-01  -0.1582265900
## 141   0.0385445310   0.1458362200  -0.3213856600  -4.280787e-01  -0.1666911100
## 142   0.0249746670   0.1180420000  -0.2455756100  -5.220044e-01  -0.1576972000
## 143   0.1897842500  -0.1060551700  -0.2190495700  -6.762635e-01  -0.3523453600
## 144   0.1196990900  -0.0108645610  -0.2968996800  -6.200635e-01  -0.1697550300
## 145   0.4178201700  -0.1645274300  -0.2511849300  -4.855151e-01  -0.0353774010
## 146   0.3515502600  -0.1307255000  -0.2059653400  -4.099663e-01   0.1556703400
## 147   0.2747174400  -0.1178965700  -0.2246371100  -3.733151e-01   0.0995227460
## 148   0.1079727800   0.0976901300  -0.4067888800  -4.819404e-01  -0.3182052400
## 149  -0.0678631230   0.3236749900  -0.5670279400  -5.570271e-01  -0.1561753800
## 150  -0.0524024260   0.3752422600  -0.6058914100  -4.733197e-01   0.0049905294
## 151   0.6938141800  -0.4964436300   0.0002531773  -3.359355e-01  -0.2625037600
## 152   0.6685706900  -0.4552497800   0.0340995950  -3.240915e-01  -0.2406694300
## 153   0.3642503300  -0.2081744000   0.0710996500  -1.982296e-01  -0.2302770200
## 154   0.3474768600  -0.4542314800   0.3476278000  -3.287347e-01  -0.2200770600
## 155   0.6023791100  -0.5664682600   0.1837341500  -3.642974e-01  -0.0970454190
## 156   0.6235328500  -0.5245986900   0.1212132400  -2.579861e-01   0.1153262300
## 157   0.0078347186   0.1628089300  -0.1095510000  -3.052085e-01   0.0146259940
## 158   0.0286060340   0.1484822700  -0.0978122300  -2.624055e-01  -0.1184024100
## 159   0.0655124200   0.0660600740  -0.0644211610  -4.141810e-01  -0.2820551200
## 160   0.4375746400  -0.2082051700  -0.0415364860  -5.370451e-01  -0.3022801800
## 161   0.7373444600  -0.6629277700   0.1900764600  -2.916280e-01  -0.1349240800
```

```
## 162   0.4432709300 -0.3872781400   0.1189593500 -2.549968e-01 -0.0590951140
## 163   0.1141510800 -0.0478693860   0.0688108540 -3.683786e-01 -0.1209229900
## 164   0.3655813300 -0.2220653200   0.0533876020 -3.404903e-01 -0.1740523100
## 165   0.5665475800 -0.5582636600   0.3124497500 -4.582023e-01 -0.2369811000
## 166   0.3535893000 -0.2665289000   0.1520805200 -4.795939e-01 -0.2697363900
## 167   0.1367191700 -0.0397797130   0.0562613880 -5.030460e-01 -0.1877710300
## 168   0.0571998980  0.2540648200  -0.1564583200 -3.493923e-01 -0.2034586800
## 169   0.1964214800 -0.0463825880  -0.0064542750 -3.951242e-01 -0.2843702600
## 170   0.0940144090 -0.0824709350   0.0925669680 -3.025821e-01 -0.0523579470
## 171   0.0564540520  0.0494732690  -0.0021022500 -2.911580e-01 -0.0690125940
## 172   0.2078236100 -0.1109792400   0.0445997120 -3.970664e-01 -0.2196671900
## 173   0.2699612900 -0.2462209700   0.1762448100 -3.177100e-01 -0.1666055300
## 174  -0.0029246991  0.1212560000   0.0196167960 -2.993451e-01 -0.1516071700
## 175  -0.0881849380  0.1570079200   0.0822624100 -3.921217e-01 -0.1675507700
## 176   0.3075624400 -0.3796028800   0.2657120700 -4.929229e-01 -0.1580665000
## 177  -0.3961197300  0.3778852700  -0.2034921100  7.751888e-01 -0.8093484700
##                NA             NA             NA            NA            NA
NA
## 1     0.660790330  0.96339614 -0.14083968  0.115374940 -0.9852497 -
0.98170843
## 2     0.579381690  0.96656113 -0.14155127  0.109378810 -0.9974113 -
0.98944741
## 3     0.608900140  0.96687810 -0.14200984  0.101883920 -0.9995740 -
0.99286582
## 4     0.507458870  0.96761519 -0.14397645  0.099850143 -0.9966456 -
0.98139281
## 5     0.599212960  0.96822440 -0.14875022  0.094485896 -0.9984293 -
0.98809824
## 6     0.180424440  0.96794820 -0.14820997  0.091909715 -0.9989793 -
0.98675389
## 7     0.610845430  0.96792950 -0.14428214  0.093144628 -0.9993325 -
0.98857468
## 8     0.561421070  0.96849148 -0.14670536  0.091708159 -0.9981183 -
0.97295996
## 9     0.724234330  0.96848115 -0.15437401  0.085118255 -0.9977894 -
0.97564510
## 10    0.391866580  0.96841804 -0.15630201  0.080874470 -0.9973622 -
0.99050162
## 11    0.227308620  0.96920266 -0.15236144  0.081258077 -0.9972646 -
0.98648794
## 12    0.165559700  0.96925328 -0.15006376  0.082931213 -0.9981272 -
0.99482045
## 13    0.113964530  0.96899630 -0.15236210  0.083150803 -0.9991516 -
0.98730738
## 14    0.097965304  0.96904398 -0.15414125  0.081819604 -0.9995776 -
0.99425118
## 15    0.945344720  0.94489486 -0.29262334 -0.021435523 -0.9640453 -
0.81461226
## 16    0.538730940  0.95201342 -0.26311695 -0.003576163 -0.9950938 -
0.97591253
```

```
## 17    0.538345120  0.95272437 -0.26509148 -0.007708992 -0.9992805 -
0.99197906
## 18    0.128379300  0.95306401 -0.26471825 -0.011556695 -0.9986322 -
0.99238313
## 19    0.030811416  0.95360569 -0.26305774 -0.011094388 -0.9987754 -
0.99697129
## 20    0.255497580  0.95359464 -0.26348997 -0.011425851 -0.9987486 -
0.99585747
## 21    0.205717490  0.95313551 -0.26343690 -0.012458678 -0.9990282 -
0.99464403
## 22    0.119597260  0.95318325 -0.26189643 -0.012015606 -0.9990405 -
0.99499448
## 23    0.107562320  0.95309294 -0.26245862 -0.011512171 -0.9983326 -
0.99198868
## 24    0.436502030  0.95273161 -0.26500697 -0.012703514 -0.9984994 -
0.99227999
## 25    0.265221870  0.95321880 -0.26504320 -0.013126421 -0.9974938 -
0.99145541
## 26    0.281048870  0.95419361 -0.26194319 -0.011180786 -0.9979682 -
0.98848774
## 27    0.256807040  0.95458893 -0.26049928 -0.009959401 -0.9990051 -
0.99730066
## 28    0.985945370  0.87409866  0.04247915  0.333094490 -0.8141894 -
0.25461649
## 29    0.438984800  0.83566368  0.16067501  0.399821730 -0.9603877 -
0.89611252
## 30    0.735455530  0.83695957  0.15187734  0.386467650 -0.9826391 -
0.94642426
## 31   -0.362711770  0.83878762  0.15070183  0.383451810 -0.9920382 -
0.96233892
## 32    0.325029660  0.81080506  0.19559534  0.387131970 -0.8047433 -
0.73280728
## 33    0.887389320  0.70308608  0.31406786  0.439774030 -0.5963284 -
0.53455402
## 34    0.373015880  0.61825810  0.40950272  0.481298500 -0.9054497 -
0.85046281
## 35    0.814631890  0.62206550  0.41986657  0.468627990 -0.9519610 -
0.96299035
## 36    0.308468120  0.62745102  0.41503721  0.464231030 -0.9869493 -
0.99214128
## 37    0.267577420  0.62532313  0.41648854  0.464947740 -0.9950577 -
0.99652110
## 38    0.120851880  0.62577398  0.41685730  0.464395730 -0.9961608 -
0.99837049
## 39    0.049251575  0.89093772  0.11359108  0.330322140 -0.9388229 -
0.87952195
## 40    0.147510370  0.87653997  0.12558056  0.325205860 -0.9767786 -
0.91534904
## 41   -0.101087750  0.87482213  0.14006721  0.324410570 -0.9940478 -
0.98811386
```

```
## 42    0.103092620   0.87646180   0.13923610   0.323579560 -0.9972549 -
0.98846264
## 43    0.088823542   0.87645385   0.13843401   0.323398800 -0.9976094 -
0.98843377
## 44    0.206697500   0.87538094   0.14222283   0.323512710 -0.9966802 -
0.98347532
## 45    0.359774940   0.87579788   0.14258451   0.321947710 -0.9951444 -
0.98746407
## 46    0.007964409   0.87599536   0.14162959   0.320476100 -0.9958218 -
0.99035562
## 47   -0.052470967   0.87478155   0.14485798   0.320539350 -0.9977143 -
0.98795319
## 48    0.204900100   0.87474639   0.14560336   0.320387080 -0.9984551 -
0.99311540
## 49   -0.173582140   0.87423160   0.14572717   0.321629610 -0.9956679 -
0.99051998
## 50    0.078122989   0.87324201   0.14758583   0.322335760 -0.9969555 -
0.99150766
## 51    0.633790140   0.87410872   0.14567730   0.320873340 -0.9950862 -
0.98598512
## 52   -0.618319770  -0.25504375   0.77465873   0.589776550 -0.7837423 -
0.98892557
## 53   -0.476377820  -0.21014776   0.77390470   0.585119780 -0.9603428 -
0.98897778
## 54   -0.233307950  -0.20876483   0.77171208   0.589947270 -0.9887928 -
0.99756896
## 55   -0.428179090  -0.20956406   0.77109662   0.590104670 -0.9959341 -
0.99846505
## 56   -0.276611570  -0.20874807   0.77103706   0.589413970 -0.9994640 -
0.99862466
## 57   -0.075398299  -0.20871697   0.77129107   0.589334710 -0.9996283 -
0.99920964
## 58   -0.251328290  -0.20863346   0.77135108   0.589634870 -0.9992131 -
0.99941854
## 59   -0.283274690  -0.20856027   0.77074870   0.590017040 -0.9983419 -
0.99632270
## 60   -0.096512059  -0.20760682   0.76992271   0.590450400 -0.9957312 -
0.99797044
## 61   -0.206230140  -0.20636268   0.76929590   0.591305860 -0.9981733 -
0.99728100
## 62   -0.260664140  -0.20649916   0.76915180   0.592143220 -0.9976890 -
0.99731442
## 63   -0.247479800  -0.20702615   0.76962832   0.592192320 -0.9988680 -
0.99778162
## 64   -0.177281500  -0.20699211   0.76946735   0.592916550 -0.9992740 -
0.99791058
## 65    0.691729760   0.04474389   0.75845367   0.504936070 -0.3121336 -
0.77139191
## 66   -0.041688365  -0.04772783   0.76866913   0.540988150 -0.9064059 -
0.91499999
```

```
## 67   -0.461665340 -0.04169984  0.75554154  0.547425350 -0.8556327 -
0.96354752
## 68   -0.532594680 -0.18770377  0.70262213  0.637227850 -0.3369456 -
0.68559820
## 69   -0.914462910 -0.35145953  0.65518574  0.731109760 -0.7064025 -
0.83510249
## 70    0.094941460 -0.33939193  0.69709740  0.702091160 -0.7865452 -
0.78429151
## 71   -0.260423970 -0.36048000  0.71643717  0.662979600 -0.5721728 -
0.72466654
## 72    0.314430860 -0.57349604  0.52510468  0.779763280 -0.2424105
0.06945978
## 73   -0.825469120 -0.74182101  0.16014065  0.949543310 -0.8332242
0.13696674
## 74    0.332536210 -0.75672502 -0.05899586  0.999349900 -0.9738034 -
0.69035884
## 75   -0.259137660 -0.75607738 -0.06842049  0.994296730 -0.9834978 -
0.87756222
## 76    0.078549045 -0.75875146 -0.04599824  0.995772900 -0.9941360 -
0.97831578
## 77    0.157062240 -0.75643925 -0.04004269  0.997321920 -0.9919405 -
0.97934351
## 78   -0.162162880 -0.75507694 -0.03458935  0.996835350 -0.9972049 -
0.98764316
## 79    0.247024760  0.94530277 -0.24594143 -0.032164781 -0.9840476 -
0.92892805
## 80    0.239350960  0.94111300 -0.25203524 -0.032883452 -0.9839625 -
0.91749933
## 81    0.280470320  0.94636390 -0.26427810 -0.025575066 -0.9628101 -
0.95613091
## 82    0.446540470  0.95244515 -0.25983791 -0.026131065 -0.9811001 -
0.96439894
## 83    0.503659760  0.94712514 -0.25710034 -0.028422611 -0.9769275 -
0.98859597
## 84    0.465737800  0.94574875 -0.25477781 -0.026521446 -0.9853150 -
0.98019454
## 85    0.334366090  0.95021213 -0.24482976 -0.023627905 -0.9899452 -
0.95439711
## 86    0.259616370  0.94913033 -0.23690505 -0.022201127 -0.9803215 -
0.98391850
## 87    0.347224970  0.94691727 -0.26205559 -0.020235796 -0.9850642 -
0.94652431
## 88    0.424385690  0.94686993 -0.25580058 -0.035627962 -0.9908289 -
0.98245209
## 89    0.358005120  0.94541890 -0.25466811 -0.032057504 -0.9889889 -
0.99000079
## 90    0.396404620  0.94193674 -0.25575938 -0.026832917 -0.9878370 -
0.99383300
## 91    0.452535810  0.93746757 -0.25840003 -0.034867064 -0.9840391 -
0.97922640
```

```
## 92    0.434800920  0.93719527 -0.26621211 -0.034423250 -0.9822816 -
0.97078768
## 93    0.389819050  0.94782306 -0.26539900 -0.030585939 -0.9586719 -
0.96268320
## 94    0.317656120  0.95736507 -0.25851158 -0.030633221 -0.9807135 -
0.97632552
## 95    0.252580010  0.95473147 -0.25421267 -0.027618421 -0.9775431 -
0.97978106
## 96    0.336067170  0.94502756 -0.25147834 -0.024245992 -0.9732221 -
0.98866929
## 97    0.365513520  0.94334390 -0.24400324 -0.020724365 -0.9806463 -
0.95426823
## 98    0.324977520  0.94864827 -0.23438221 -0.018602576 -0.9887960 -
0.97559339
## 99    0.379440700  0.95641810 -0.26000305 -0.014160474 -0.9843450 -
0.98581160
## 100   0.395027210  0.95149993 -0.26356251 -0.039357122 -0.9601321 -
0.97861400
## 101   0.345712350  0.93851389 -0.26841916 -0.036339041 -0.9554587 -
0.97999716
## 102   0.386319410  0.93447152 -0.26936496 -0.030656862 -0.9811307 -
0.98894779
## 103   0.444574460  0.93776033 -0.26882859 -0.029314983 -0.9808154 -
0.99280021
## 104   0.545241750  0.93861575 -0.26828456 -0.026783007 -0.9814576 -
0.98200461
## 105   0.546922750  0.94075878 -0.25886389 -0.022928327 -0.9796220 -
0.95156888
## 106   0.413462940  0.95022231 -0.24907103 -0.018489407 -0.9594804 -
0.98406972
## 107   0.385749290  0.95683540 -0.24566304 -0.019715884 -0.9903853 -
0.98497605
## 108   0.390250260  0.95367537 -0.24255418 -0.023026076 -0.9889260 -
0.97937972
## 109   0.370870810  0.95226274 -0.25175686 -0.027116144 -0.9889067 -
0.94058126
## 110   0.424762080  0.94715881 -0.26440906 -0.035544763 -0.9733357 -
0.98034353
## 111   0.472902730  0.94365045 -0.26163413 -0.037628000 -0.9850143 -
0.96833214
## 112   0.499493490  0.94214757 -0.26420665 -0.037871942 -0.9262345 -
0.96044242
## 113   0.307210210  0.93159584 -0.26943482 -0.042872935 -0.9699187 -
0.98357181
## 114   0.388260950  0.94120320 -0.26925779 -0.034422365 -0.9741355 -
0.99192517
## 115   0.437574850  0.94630634 -0.26574318 -0.028554153 -0.9891130 -
0.97095515
## 116   0.389925890  0.94588224 -0.25529462 -0.022558174 -0.9896079 -
0.96304916
```

```
## 117  0.373280620  0.94257515 -0.25166426 -0.018301776 -0.9851838 -
0.98449420
## 118  0.298070140  0.94245852 -0.24934122 -0.016543639 -0.9831646 -
0.97002206
## 119  0.248143450  0.94799378 -0.24400902 -0.015916994 -0.9808739 -
0.98222762
## 120  0.275796590  0.95185590 -0.24777784 -0.017583652 -0.9933037 -
0.97523911
## 121  0.237502190  0.95268931 -0.24891956 -0.014215047 -0.9912135 -
0.97557178
## 122  0.312852590  0.95074425 -0.24149087 -0.014232674 -0.9870756 -
0.96948759
## 123  0.381762720  0.94991264 -0.23802568 -0.023208265 -0.9880026 -
0.98395277
## 124  0.364609070  0.95276814 -0.24024162 -0.033980221 -0.9862233 -
0.97476554
## 125  0.387301680  0.95142625 -0.24835088 -0.038483845 -0.9832895 -
0.95824054
## 126  0.120421110  0.93118552 -0.25003777 -0.026669006 -0.9366332 -
0.91397002
## 127  0.041603719  0.94706198 -0.23048890 -0.015551600 -0.9471599 -
0.95272005
## 128  0.071074551  0.95929939 -0.22041560 -0.014579347 -0.9785118 -
0.95484817
## 129  0.195361170  0.95898314 -0.21665616 -0.031045351 -0.9676842 -
0.95994870
## 130  0.137684220  0.94946250 -0.21744640 -0.036024083 -0.9635954 -
0.97040129
## 131  0.183162710  0.95466327 -0.20692497 -0.027482422 -0.9487934 -
0.93986119
## 132  0.182668000  0.95827116 -0.20727327 -0.036413327 -0.9616209 -
0.93799153
## 133  0.096413638  0.94976646 -0.21600426 -0.031406912 -0.9796801 -
0.97145637
## 134  0.142835600  0.95162211 -0.21071237 -0.013487900 -0.9798854 -
0.97360748
## 135  0.277342390  0.92083549 -0.26701193 -0.051933496 -0.9591147 -
0.90075178
## 136  0.133450560  0.92721895 -0.25752830 -0.011311073 -0.9624321 -
0.96161030
## 137  0.081019280  0.93801097 -0.26552471 -0.015999014 -0.9372166 -
0.96250323
## 138 -0.020962886  0.94298012 -0.27697935 -0.035236286 -0.9295431 -
0.93761467
## 139 -0.020648704  0.93458522 -0.27671301 -0.029104678 -0.9458572 -
0.94321497
## 140 -0.050985504  0.93800984 -0.26721322 -0.042852110 -0.9473033 -
0.97576691
## 141 -0.057222989  0.93926427 -0.26240716 -0.043152518 -0.9497375 -
0.94888385
```

```
## 142   0.064195925   0.93532883 -0.24875006 -0.018502531 -0.9678132 -
0.93956362
## 143   0.180315470   0.92422997 -0.27642083 -0.041170073 -0.9656368 -
0.94905377
## 144   0.049455720   0.93348850 -0.26237699 -0.019666744 -0.9663403 -
0.96371409
## 145   0.025268676   0.94520270 -0.25496927 -0.023947567 -0.9636784 -
0.95649404
## 146   0.171408010   0.92813939 -0.26799814 -0.026685084 -0.8785750 -
0.91110726
## 147   0.151538060   0.90796935 -0.26554180 -0.006803997 -0.9265299 -
0.90091162
## 148   0.096656078   0.93019322 -0.24940844 -0.026064489 -0.9026325 -
0.94146904
## 149   0.061848157   0.94256743 -0.25374076 -0.049375638 -0.9632741 -
0.94586130
## 150  -0.001724545   0.93764095 -0.24851100 -0.025796334 -0.9767899 -
0.94593098
## 151   0.077315195   0.93935459 -0.28099607 -0.078229890 -0.8814893 -
0.86283115
## 152   0.123851100   0.90782845 -0.31639379 -0.062484236 -0.9438434 -
0.91908816
## 153   0.066836285   0.90332145 -0.32878069 -0.069753369 -0.9739034 -
0.97957926
## 154   0.133423260   0.91286572 -0.32537586 -0.070078815 -0.9533301 -
0.97152051
## 155   0.068098424   0.91968631 -0.32327736 -0.053728890 -0.9530637 -
0.97686191
## 156   0.053885783   0.91447109 -0.31989706 -0.032413446 -0.9543291 -
0.96181342
## 157   0.171681820   0.91307417 -0.31665935 -0.021065113 -0.9681337 -
0.96260378
## 158   0.171939090   0.91214896 -0.32596046 -0.035425357 -0.9684791 -
0.94864843
## 159   0.109609180   0.93206988 -0.31920065 -0.063759757 -0.8644789 -
0.80015145
## 160   0.265972390   0.90583998 -0.35284871 -0.058087649 -0.9689315 -
0.96771294
## 161   0.148378360   0.89842695 -0.35619280 -0.058276382 -0.9562027 -
0.97438339
## 162   0.053414827   0.89521737 -0.35579600 -0.053499951 -0.9649149 -
0.97201836
## 163  -0.005304138   0.89888016 -0.35213276 -0.053521841 -0.9730049 -
0.98288170
## 164   0.147253780   0.89888028 -0.34765868 -0.048482583 -0.9744700 -
0.97518215
## 165   0.255294000   0.89996176 -0.34767434 -0.048123723 -0.9779851 -
0.96474944
## 166   0.148876350   0.89560464 -0.35903232 -0.063491643 -0.9659016 -
0.94798389
```

```
## 167   0.141583590  0.89102832 -0.36713357 -0.068768534 -0.9822345 -
0.98446433
## 168   0.128253490  0.92556435 -0.32223589 -0.055344152 -0.8909106 -
0.86268873
## 169   0.253814330  0.90540474 -0.34505404 -0.057998853 -0.9702714 -
0.97679659
## 170   0.220374600  0.89978807 -0.35076356 -0.057967327 -0.9609998 -
0.96626817
## 171   0.138790740  0.89780902 -0.35321481 -0.043385721 -0.9651225 -
0.97155621
## 172   0.121377090  0.90029946 -0.34325537 -0.049161113 -0.9692264 -
0.95575938
## 173   0.172933200  0.89509790 -0.33758462 -0.058038101 -0.9640560 -
0.98239283
## 174   0.157232250  0.89390779 -0.34204157 -0.047549591 -0.9692694 -
0.98083407
## 175   0.130051740  0.89933954 -0.34513520 -0.043482550 -0.9702121 -
0.98846584
## 176   0.272313490  0.90021460 -0.34601613 -0.055663886 -0.9782337 -
0.98595434
## 177  -0.393310780  0.92902391 -0.33682804  0.016850711 -0.9419545 -
0.93673484
##              NA          NA          NA          NA          NA          NA
## 1    -0.8776250 -0.9850014 -0.98441622 -0.8946774  0.89205451 -0.16126549
## 2    -0.9316387 -0.9978836 -0.98961366 -0.9332404  0.89206031 -0.16134256
## 3    -0.9929172 -0.9996353 -0.99260493 -0.9929343  0.89240056 -0.16371122
## 4    -0.9784764 -0.9964569 -0.98096181 -0.9784558  0.89381715 -0.16371122
## 5    -0.9787449 -0.9984112 -0.98865390 -0.9789355  0.89381715 -0.16678620
## 6    -0.9973064 -0.9990540 -0.98658395 -0.9974188  0.89368344 -0.16697042
## 7    -0.9920159 -0.9993531 -0.98892160 -0.9916701  0.89336965 -0.16557052
## 8    -0.9765688 -0.9980319 -0.97316420 -0.9774092  0.89420478 -0.16557052
## 9    -0.9689613 -0.9977448 -0.97608723 -0.9685698  0.89420478 -0.16788110
## 10   -0.9967423 -0.9974103 -0.99063400 -0.9977465  0.89477777 -0.17596367
## 11   -0.9946927 -0.9973858 -0.98585056 -0.9947444  0.89494092 -0.17248553
## 12   -0.9923011 -0.9981043 -0.99494978 -0.9922891  0.89494092 -0.17248553
## 13   -0.9936129 -0.9991870 -0.98674895 -0.9936141  0.89436796 -0.17260590
## 14   -0.9951105 -0.9996147 -0.99420710 -0.9954154  0.89436796 -0.17551413
## 15   -0.8678738 -0.9649788 -0.81020875 -0.8613914  0.87758813 -0.27775430
## 16   -0.9711946 -0.9959044 -0.97876537 -0.9738571  0.87815990 -0.27775430
## 17   -0.9710365 -0.9992863 -0.99344395 -0.9711787  0.87815990 -0.28062914
## 18   -0.9907275 -0.9986487 -0.99196677 -0.9911836  0.87888016 -0.28303343
## 19   -0.9949339 -0.9987843 -0.99737161 -0.9954827  0.87908726 -0.28300845
## 20   -0.9942280 -0.9987563 -0.99563345 -0.9942105  0.87908726 -0.28300845
## 21   -0.9967510 -0.9990762 -0.99477697 -0.9968874  0.87877147 -0.28187025
## 22   -0.9953633 -0.9989448 -0.99516342 -0.9952745  0.87861680 -0.28149769
## 23   -0.9970673 -0.9982740 -0.99192076 -0.9972250  0.87861680 -0.28149769
## 24   -0.9929260 -0.9984813 -0.99229577 -0.9926404  0.87858596 -0.28236083
## 25   -0.9947593 -0.9973815 -0.99183216 -0.9950022  0.87914624 -0.28155480
## 26   -0.9904706 -0.9978003 -0.98821777 -0.9901275  0.87998110 -0.28034554
## 27   -0.9977377 -0.9990039 -0.99721134 -0.9977446  0.87998110 -0.28034554
```

```
## 28   -0.3424433 -0.8070290 -0.24906181 -0.3549577  0.86053314  0.15158093
## 29   -0.9108816 -0.9662215 -0.90545900 -0.9083802  0.79063055  0.15158093
## 30   -0.9644004 -0.9835012 -0.95026012 -0.9702931  0.76602185  0.14608124
## 31   -0.9623296 -0.9925898 -0.96697260 -0.9714350  0.76878451  0.14121255
## 32   -0.8496976 -0.8195177 -0.74514483 -0.8815670  0.76878451  0.28506416
## 33   -0.6429910 -0.5821263 -0.52328313 -0.6281372  0.76859123  0.39183539
## 34   -0.9152725 -0.9188814 -0.86731314 -0.9140773  0.61323374  0.39281965
## 35   -0.9415983 -0.9529873 -0.96211598 -0.9452406  0.55810315  0.39281965
## 36   -0.9884872 -0.9861994 -0.99189720 -0.9879712  0.55810315  0.37855379
## 37   -0.9938105 -0.9949611 -0.99714640 -0.9936415  0.55392299  0.37855379
## 38   -0.9954126 -0.9960857 -0.99843319 -0.9953390  0.55365758  0.37906927
## 39   -0.9647259 -0.9370363 -0.89325027 -0.9636576  0.83656109  0.15701761
## 40   -0.9916416 -0.9796389 -0.91606771 -0.9937261  0.81832977  0.11045559
## 41   -0.9961098 -0.9939807 -0.99017454 -0.9959886  0.80223406  0.11069293
## 42   -0.9971592 -0.9974884 -0.98802014 -0.9977504  0.80246354  0.11069293
## 43   -0.9988424 -0.9977252 -0.98925193 -0.9988615  0.80246354  0.11265524
## 44   -0.9991578 -0.9966432 -0.98346329 -0.9993407  0.80216168  0.11441559
## 45   -0.9886546 -0.9947974 -0.98675171 -0.9881493  0.80274896  0.11441559
## 46   -0.9941439 -0.9957103 -0.99081959 -0.9944415  0.80274896  0.11452424
## 47   -0.9973055 -0.9979398 -0.98776196 -0.9973337  0.80180866  0.11586273
## 48   -0.9960581 -0.9983953 -0.99274591 -0.9961168  0.80079378  0.11586273
## 49   -0.9901727 -0.9956591 -0.99086978 -0.9896259  0.80079378  0.11802751
## 50   -0.9945719 -0.9969030 -0.99145343 -0.9949638  0.80001788  0.11814495
## 51   -0.9937360 -0.9948941 -0.98530425 -0.9936164  0.80081269  0.11814495
## 52   -0.8953808 -0.7796283 -0.98909036 -0.9055274 -0.27190525  0.72922751
## 53   -0.9653030 -0.9683850 -0.98870172 -0.9646424 -0.27190525  0.72922751
## 54   -0.9960094 -0.9893967 -0.99792362 -0.9968297 -0.27211860  0.72518563
## 55   -0.9987791 -0.9956783 -0.99845471 -0.9988421 -0.27787264  0.72357116
## 56   -0.9967349 -0.9995290 -0.99865509 -0.9966065 -0.27787264  0.72351873
## 57   -0.9971625 -0.9996943 -0.99926437 -0.9971102 -0.27772943  0.72351892
## 58   -0.9987835 -0.9992598 -0.99942256 -0.9987474 -0.27768159  0.72356338
## 59   -0.9965147 -0.9984296 -0.99625293 -0.9965923 -0.27682849  0.72356338
## 60   -0.9981241 -0.9955722 -0.99822398 -0.9980635 -0.27547292  0.72298922
## 61   -0.9933964 -0.9981769 -0.99721976 -0.9931961 -0.27528116  0.72195521
## 62   -0.9965967 -0.9975811 -0.99729412 -0.9965500 -0.27528116  0.72215517
## 63   -0.9964700 -0.9988919 -0.99784323 -0.9965204 -0.27572579  0.72219350
## 64   -0.9950377 -0.9993249 -0.99781397 -0.9950940 -0.27609877  0.72219350
## 65   -0.6209975 -0.3463535 -0.79902122 -0.6530078  0.36664438  0.74614387
## 66   -0.9878637 -0.9030288 -0.91242159 -0.9878156 -0.09105842  0.74614387
## 67   -0.8983603 -0.8844499 -0.97152843 -0.9206798 -0.09105842  0.71852391
## 68   -0.3907488 -0.3078933 -0.66781494 -0.3652307 -0.09120731  0.71852391
## 69   -0.7065995 -0.7410485 -0.83631900 -0.7287563 -0.23357869  0.67692652
## 70   -0.6899307 -0.7788886 -0.78295239 -0.6857142 -0.35176655  0.70576907
## 71   -0.7863002 -0.5989351 -0.77322415 -0.8119443 -0.35176655  0.72043391
## 72   -0.1476819 -0.2195045  0.05988672 -0.1234625 -0.36339946  0.72043391
## 73   -0.5178259 -0.8591859  0.15004568 -0.5374864 -0.68315372  0.50525393
## 74   -0.9568793 -0.9745790 -0.73395513 -0.9556052 -0.81772530  0.09076908
## 75   -0.9854585 -0.9825428 -0.87564566 -0.9863543 -0.81772530 -0.07110420
## 76   -0.9885718 -0.9941699 -0.98286882 -0.9888310 -0.82280100 -0.06639006
## 77   -0.9983059 -0.9918655 -0.97885908 -0.9983689 -0.82113745 -0.06068677
```

```
## 78   -0.9960833 -0.9972554 -0.98833037 -0.9958561 -0.82113745 -0.05754990
## 79   -0.9325598 -0.9865515 -0.93444225 -0.9397844  0.88005207 -0.25256414
## 80   -0.9490782 -0.9858119 -0.91446769 -0.9566974  0.87317213 -0.25256414
## 81   -0.9719092 -0.9630463 -0.95550839 -0.9740660  0.88473147 -0.27006233
## 82   -0.9643039 -0.9816725 -0.96820399 -0.9652198  0.88473147 -0.27325496
## 83   -0.9604447 -0.9757712 -0.98942987 -0.9599760  0.88234561 -0.27359495
## 84   -0.9662646 -0.9852974 -0.98295056 -0.9668785  0.87717278 -0.26542148
## 85   -0.9701761 -0.9900187 -0.95326326 -0.9712599  0.87895496 -0.25345705
## 86   -0.9687767 -0.9804183 -0.98404849 -0.9680894  0.87912691 -0.25323378
## 87   -0.8370938 -0.9865643 -0.95768667 -0.8419270  0.87654171 -0.27383035
## 88   -0.9147133 -0.9914056 -0.98228034 -0.9231029  0.87538079 -0.27206794
## 89   -0.9285539 -0.9894366 -0.98995807 -0.9259279  0.87538079 -0.27206794
## 90   -0.9510834 -0.9899453 -0.99398517 -0.9506659  0.87181197 -0.27410086
## 91   -0.9524709 -0.9837584 -0.97989689 -0.9577725  0.86906632 -0.27426143
## 92   -0.9603479 -0.9845209 -0.97154156 -0.9634490  0.87263433 -0.27708484
## 93   -0.9732537 -0.9583923 -0.96349389 -0.9724703  0.88764409 -0.27328392
## 94   -0.9730825 -0.9811481 -0.97884135 -0.9726283  0.88908035 -0.27328392
## 95   -0.9689511 -0.9788154 -0.97912892 -0.9711268  0.88908035 -0.26921671
## 96   -0.9739678 -0.9709738 -0.99016108 -0.9745560  0.88010356 -0.26817522
## 97   -0.9614655 -0.9791910 -0.95258657 -0.9643194  0.87458005 -0.25028837
## 98   -0.9677170 -0.9901340 -0.97807457 -0.9681611  0.87816668 -0.25028837
## 99   -0.8278583 -0.9865829 -0.98709706 -0.8279639  0.88664463 -0.27561477
## 100  -0.9450995 -0.9624718 -0.97989128 -0.9516853  0.88545050 -0.27945590
## 101  -0.9482406 -0.9556560 -0.98116711 -0.9526254  0.88316066 -0.28078848
## 102  -0.9771160 -0.9809819 -0.98960618 -0.9777125  0.86635680 -0.28655943
## 103  -0.9765402 -0.9810480 -0.99434940 -0.9769933  0.86989396 -0.28658282
## 104  -0.9733533 -0.9828515 -0.98484244 -0.9741249  0.86989396 -0.27842743
## 105  -0.9627157 -0.9817354 -0.95010451 -0.9646511  0.88003559 -0.26691190
## 106  -0.9646843 -0.9572755 -0.98641169 -0.9658217  0.88649664 -0.26691190
## 107  -0.9677330 -0.9914962 -0.98547467 -0.9708897  0.88649664 -0.26023389
## 108  -0.9769005 -0.9899890 -0.97989691 -0.9768821  0.88304560 -0.25765371
## 109  -0.9599631 -0.9899727 -0.93726268 -0.9619633  0.88192907 -0.25765371
## 110  -0.9534891 -0.9718849 -0.98270185 -0.9563858  0.88192907 -0.27423586
## 111  -0.9536512 -0.9862648 -0.96775974 -0.9562875  0.87501694 -0.27087232
## 112  -0.9339864 -0.9201434 -0.95869297 -0.9300542  0.88880570 -0.27450605
## 113  -0.9657571 -0.9707412 -0.98416902 -0.9687329  0.86740799 -0.28172208
## 114  -0.9599043 -0.9754735 -0.99197930 -0.9609811  0.87494868 -0.28707714
## 115  -0.9685259 -0.9903001 -0.97290746 -0.9707441  0.87494868 -0.27223115
## 116  -0.9536348 -0.9904693 -0.96123405 -0.9563447  0.87444833 -0.26764716
## 117  -0.9730631 -0.9856214 -0.98505566 -0.9732698  0.87372448 -0.26764716
## 118  -0.9675878 -0.9855547 -0.97077551 -0.9691922  0.87610052 -0.26019008
## 119  -0.9654091 -0.9806823 -0.98198317 -0.9660454  0.87770547 -0.26019008
## 120  -0.9720661 -0.9936926 -0.97391806 -0.9733163  0.87967040 -0.26026651
## 121  -0.9692397 -0.9917804 -0.97672467 -0.9701710  0.88150210 -0.25878406
## 122  -0.9538519 -0.9876906 -0.97069110 -0.9533395  0.88150210 -0.25582598
## 123  -0.9420806 -0.9889337 -0.98384881 -0.9542371  0.88006761 -0.25442954
## 124  -0.9536163 -0.9872036 -0.97562728 -0.9532280  0.88227103 -0.25442954
## 125  -0.9563340 -0.9839801 -0.95906358 -0.9579043  0.88227103 -0.25447335
## 126  -0.9243229 -0.9363511 -0.90955760 -0.9275042  0.87762900 -0.24563032
## 127  -0.9576926 -0.9501464 -0.96075859 -0.9613339  0.88533288 -0.24239658
```

```
## 128  -0.9379008 -0.9787076 -0.95654129 -0.9417943    0.89149757 -0.22692770
## 129  -0.8877400 -0.9694957 -0.96075280 -0.8955854    0.89149757 -0.22692770
## 130  -0.9231824 -0.9659178 -0.97006138 -0.9298336    0.89041087 -0.23018371
## 131  -0.9265631 -0.9468116 -0.93970358 -0.9282202    0.89911060 -0.21335217
## 132  -0.9020917 -0.9644133 -0.93672362 -0.9042207    0.89911060 -0.21335217
## 133  -0.8968745 -0.9814308 -0.97090315 -0.8893506    0.88381909 -0.22561488
## 134  -0.9541306 -0.9804641 -0.97710971 -0.9624668    0.88529275 -0.22736706
## 135  -0.8046598 -0.9591158 -0.90260051 -0.7981927    0.86122098 -0.26775483
## 136  -0.8733863 -0.9663829 -0.96043347 -0.8835338    0.86193314 -0.26775483
## 137  -0.8453429 -0.9427734 -0.96940866 -0.8510353    0.89573844 -0.27425888
## 138  -0.8866828 -0.9276175 -0.93583588 -0.8815521    0.89573844 -0.27803545
## 139  -0.9001673 -0.9507211 -0.94053423 -0.9015043    0.89471726 -0.27970303
## 140  -0.8586344 -0.9444960 -0.97589741 -0.8472010    0.88382428 -0.27967171
## 141  -0.8540047 -0.9479281 -0.95123739 -0.8463569    0.88382428 -0.26187200
## 142  -0.9309032 -0.9663582 -0.94102842 -0.9455538    0.87229250 -0.25779844
## 143  -0.9081459 -0.9634241 -0.95051935 -0.9093625    0.86509399 -0.28334968
## 144  -0.9119875 -0.9703318 -0.96272825 -0.9113935    0.86907565 -0.27441265
## 145  -0.8794782 -0.9655898 -0.96447870 -0.8741596    0.88566643 -0.26297790
## 146  -0.8637939 -0.8749914 -0.90849912 -0.8613479    0.88566643 -0.26297790
## 147  -0.8905265 -0.9254110 -0.89959722 -0.8958176    0.86823587 -0.25422571
## 148  -0.8068552 -0.8988002 -0.94057255 -0.7942401    0.87884277 -0.25422571
## 149  -0.9116543 -0.9615243 -0.94599371 -0.9128009    0.87884277 -0.25432613
## 150  -0.8497507 -0.9772517 -0.94349905 -0.8494498    0.87233970 -0.25926055
## 151  -0.8159506 -0.8795637 -0.86285283 -0.8104719    0.90079381 -0.26524516
## 152  -0.9477867 -0.9438424 -0.91879986 -0.9516422    0.85772789 -0.30609790
## 153  -0.9422135 -0.9739663 -0.98030469 -0.9419928    0.83980952 -0.34053938
## 154  -0.9235535 -0.9561587 -0.97152084 -0.9281716    0.85578691 -0.33498294
## 155  -0.8740531 -0.9552706 -0.97834965 -0.8818617    0.85874440 -0.33498294
## 156  -0.9069198 -0.9574852 -0.96565882 -0.9105711    0.85874440 -0.32447691
## 157  -0.9006000 -0.9715476 -0.96334430 -0.9031788    0.85018603 -0.32447691
## 158  -0.8443183 -0.9687665 -0.94730955 -0.8592964    0.85018603 -0.32829126
## 159  -0.8845049 -0.8627256 -0.79911975 -0.8880344    0.90450272 -0.27441919
## 160  -0.9449536 -0.9738348 -0.97381295 -0.9501129    0.85140038 -0.35104229
## 161  -0.9339169 -0.9580409 -0.97531355 -0.9356815    0.83457614 -0.36845172
## 162  -0.9403388 -0.9674005 -0.97236555 -0.9391509    0.83068058 -0.36739010
## 163  -0.9326014 -0.9747787 -0.98385244 -0.9305905    0.83408007 -0.36506228
## 164  -0.9109204 -0.9777273 -0.97675249 -0.9127088    0.83408007 -0.35897921
## 165  -0.9214327 -0.9812248 -0.96660902 -0.9229699    0.83363914 -0.35897921
## 166  -0.9015606 -0.9671021 -0.94988374 -0.9084903    0.83363914 -0.35901861
## 167  -0.9143448 -0.9842908 -0.98432912 -0.9181932    0.82193230 -0.37906566
## 168  -0.9000224 -0.8939026 -0.86329753 -0.9108653    0.89189045 -0.29667249
## 169  -0.9333011 -0.9747395 -0.97865030 -0.9370900    0.84791417 -0.35023616
## 170  -0.8964131 -0.9630843 -0.96894848 -0.9005420    0.83457602 -0.35949153
## 171  -0.8949603 -0.9673889 -0.97316497 -0.9016426    0.83457602 -0.35894558
## 172  -0.8984024 -0.9736226 -0.95435213 -0.9017826    0.83562655 -0.34974295
## 173  -0.9056410 -0.9665123 -0.98501391 -0.9169679    0.83562655 -0.34974295
## 174  -0.8909574 -0.9707464 -0.98123248 -0.8937157    0.82917445 -0.35453055
## 175  -0.9296949 -0.9751292 -0.98917212 -0.9322659    0.83302655 -0.36125164
## 176  -0.8972809 -0.9802907 -0.98610197 -0.9013528    0.83302655 -0.36007293
## 177  -0.8609530 -0.9421767 -0.93420554 -0.8770154    0.87990029 -0.33799141
```

```
##                NA          NA          NA          NA          NA
NA
## 1     0.1246597700  0.97743631 -0.12321341  0.05648273 -0.375425960
0.8994686
## 2     0.1225857300  0.98452014 -0.11489334  0.10276411 -0.383429550
0.9078289
## 3     0.0945658430  0.98677010 -0.11489334  0.10276411 -0.401601600
0.9086678
## 4     0.0934246740  0.98682105 -0.12133575  0.09575265 -0.400278090
0.9106207
## 5     0.0916823890  0.98743352 -0.12183357  0.09405935 -0.400476520
0.9122347
## 6     0.0833471210  0.98772183 -0.12183357  0.09405935 -0.409358500
0.9115026
## 7     0.0852057250  0.98772183 -0.12009236  0.09408513 -0.416761170
0.9114530
## 8     0.0852057250  0.98792586 -0.12855866  0.08589826 -0.412938330
0.9129427
## 9     0.0844736590  0.98775397 -0.12976410  0.08320776 -0.409741760
0.9129154
## 10    0.0734881970  0.98775397 -0.12976410  0.08304755 -0.415967090
0.9127482
## 11    0.0735985160  0.98782618 -0.12692295  0.08304755 -0.424134380
0.9148287
## 12    0.0746622150  0.98861347 -0.12340878  0.08312911 -0.425805890
0.9149627
## 13    0.0746622150  0.98861347 -0.12646746  0.08377174 -0.419471890
0.9142811
## 14    0.0740879000  0.98889992 -0.12646746  0.08355774 -0.418105800
0.9144075
## 15   -0.0073619503  0.94674897 -0.31953731 -0.04733557 -0.219787170
0.8509581
## 16   -0.0073619503  0.96863457 -0.24813963 -0.01484361 -0.333948070
0.8695097
## 17   -0.0084768639  0.97277627 -0.23590783 -0.01077803 -0.316175690
0.8713723
## 18   -0.0167097920  0.97297016 -0.23590783 -0.01077803 -0.306254790
0.8722630
## 19   -0.0192574400  0.97325777 -0.23427394 -0.01058620 -0.310957810
0.8736839
## 20   -0.0192574400  0.97336429 -0.23399273 -0.01039970 -0.308919580
0.8736549
## 21   -0.0200732030  0.97318829 -0.23399273 -0.01041187 -0.307186790
0.8724505
## 22   -0.0197855860  0.97318829 -0.23351308 -0.01041187 -0.312462240
0.8725757
## 23   -0.0197855860  0.97269154 -0.23493193 -0.01014215 -0.312454430
0.8723389
## 24   -0.0197913840  0.97263986 -0.23580584 -0.01141315 -0.303045530
0.8713914
```

```
## 25  -0.0199391930  0.97263986 -0.23580584 -0.01141315 -0.300880270
0.8726692
## 26  -0.0182799050  0.97384493 -0.23540523 -0.01116071 -0.312623080
0.8752269
## 27  -0.0182088790  0.97436858 -0.23064937 -0.00831573 -0.319047640
0.8762644
## 28   0.4068831600  0.84957326 -0.19754314  0.11301998  0.081578730
0.6724476
## 29   0.4068831600  0.84957326  0.12128980  0.38425838  0.291067140
0.5770921
## 30   0.3914289800  0.85049913  0.16770112  0.38425838  0.233984890
0.5801554
## 31   0.3761470800  0.85834757  0.16770112  0.36469057  0.226249370
0.5845521
## 32   0.4400583000  0.71629126  0.17443494  0.36126111  0.304187750
0.5194724
## 33   0.4854609600  0.62498772  0.19868948  0.36126111  0.559439660
0.2813885
## 34   0.4854609600  0.62498772  0.34623514  0.45720250  0.766441230
0.0975391
## 35   0.4787752700  0.62614858  0.43370891  0.46379792  0.768050350
0.1048971
## 36   0.4534725600  0.65132063  0.43370891  0.46379792  0.753542700
0.1156769
## 37   0.4534725600  0.65132063  0.43508944  0.46583901  0.755307270
0.1113663
## 38   0.4529781600  0.65179327  0.43715959  0.46583901  0.755700590
0.1122771
## 39   0.3287717600  0.89503171  0.11467318  0.32643081  0.083786145
0.7130412
## 40   0.3181697800  0.89495487  0.11750282  0.32643081  0.074987893
0.6769695
## 41   0.3137014900  0.89495487  0.15705003  0.32602192  0.108899690
0.6726854
## 42   0.3133852700  0.89682418  0.16094201  0.32550439  0.107575190
0.6767512
## 43   0.3122672100  0.89708448  0.16094201  0.32550439  0.104898750
0.6767314
## 44   0.3122672100  0.89639725  0.16114168  0.32537929  0.113428940
0.6740698
## 45   0.3122656000  0.89639725  0.16424515  0.32168640  0.111031090
0.6751046
## 46   0.3112591100  0.89651331  0.16424515  0.32168640  0.104885390
0.6755942
## 47   0.3095069700  0.89631390  0.16504084  0.32193868  0.111487380
0.6725834
## 48   0.3104782100  0.89631390  0.16844061  0.32197110  0.113037040
0.6724961
## 49   0.3119598000  0.89443607  0.16844061  0.32197110  0.115703490
0.6712211
```

```
## 50    0.3119598000   0.89441143   0.16910986   0.32277681   0.120734860
0.6687695
## 51    0.3110137500   0.89441143   0.16737981   0.32198032   0.113311000
0.6709169
## 52    0.6191207200  -0.28910234   0.78650142   0.57843842   0.368618560 -
0.9535798
## 53    0.5765647100  -0.19419584   0.78712383   0.57843842   0.440459930 -
0.9356506
## 54    0.5767372100  -0.16510276   0.78665169   0.58983598   0.450064320 -
0.9350424
## 55    0.5767372100  -0.16510276   0.78619681   0.59186563   0.447276670 -
0.9354373
## 56    0.5765698400  -0.16347696   0.78619681   0.59097868   0.446838440 -
0.9350401
## 57    0.5763689500  -0.16308855   0.78638623   0.59097868   0.447376250 -
0.9350249
## 58    0.5763689500  -0.16325144   0.78655448   0.59155497   0.448501840 -
0.9349840
## 59    0.5773375900  -0.16325144   0.78504206   0.59170357   0.448027960 -
0.9349481
## 60    0.5773375900  -0.16324532   0.78503566   0.59236945   0.448776250 -
0.9344805
## 61    0.5792444600  -0.16163737   0.78402049   0.59239306   0.451752340 -
0.9338694
## 62    0.5792444600  -0.16166286   0.78402049   0.59331901   0.453336070 -
0.9339365
## 63    0.5798202300  -0.16166323   0.78418985   0.59385090   0.453747940 -
0.9341961
## 64    0.5801874900  -0.16166323   0.78468248   0.59385436   0.455311460 -
0.9341794
## 65    0.5312358700  -0.03426609   0.64514204   0.34610209   0.674385650 -
0.7308834
## 66    0.5312358700  -0.03426609   0.76798308   0.54146828   0.620643080 -
0.8321693
## 67    0.5937250800  -0.11339119   0.74281751   0.54146828   0.613785680 -
0.8268637
## 68    0.7636324000  -0.36104164   0.63328245   0.54264840   0.429278790 -
0.9045589
## 69    0.7636324000  -0.36185847   0.63328245   0.61363528   0.236426410 -
0.9821681
## 70    0.7632661900  -0.36185847   0.63874326   0.63683422   0.295907890 -
0.9811324
## 71    0.7484431500  -0.55514798   0.57169654   0.62982101   0.247990530 -
0.9797757
## 72    0.9704630600  -0.70993531   0.15331707   0.62982101   0.108056830 -
0.9651967
## 73    0.9923207200  -0.71024001  -0.07983153   0.77041697  -0.147171290 -
0.9332093
## 74    0.9923207200  -0.71024001  -0.08034923   0.99103257  -0.389491700 -
0.9269152
```

```
## 75   0.9839122700 -0.70250277 -0.08034923  0.99385755 -0.447832670 -
0.9272691
## 76   0.9807354100 -0.70250277 -0.03216785  0.99409287 -0.499636310 -
0.9258913
## 77   0.9808165700 -0.70197237 -0.01783071  0.99870606 -0.516116490 -
0.9270915
## 78   0.9808165700 -0.69884244 -0.01245969  0.99820036 -0.534845450 -
0.9277975
## 79  -0.0241668100  0.96074833 -0.24815121 -0.04772735 -0.317103540
0.8519749
## 80  -0.0314515630  0.95340699 -0.24372211 -0.04772735 -0.306691430
0.8410625
## 81  -0.0274236110  0.95340699 -0.24412591 -0.03159370 -0.282875910
0.8547949
## 82  -0.0274236110  0.96273657 -0.24412591 -0.03328399 -0.281754200
0.8706566
## 83  -0.0270335390  0.96076124 -0.23065832 -0.03328399 -0.293295290
0.8567440
## 84  -0.0270335390  0.96076124 -0.22854594 -0.03324623 -0.307329130
0.8531366
## 85  -0.0236319450  0.96667248 -0.22668294 -0.02796058 -0.333493140
0.8647956
## 86  -0.0236319450  0.96117913 -0.21371480 -0.02675544 -0.360906290
0.8619782
## 87   0.0089126250  0.95787983 -0.26532810 -0.06607300 -0.293183660
0.8561871
## 88  -0.0110110140  0.96270813 -0.23106739 -0.05049092 -0.278062470
0.8560571
## 89  -0.0257612100  0.96171457 -0.22684894 -0.05042195 -0.293468590
0.8522717
## 90  -0.0257612100  0.95376412 -0.22702946 -0.03627081 -0.311161550
0.8432004
## 91  -0.0281378310  0.95275431 -0.23571488 -0.04261881 -0.291116720
0.8315939
## 92  -0.0329131320  0.95275431 -0.24326033 -0.04261881 -0.271611620
0.8308903
## 93  -0.0329131320  0.95564078 -0.24326033 -0.03367986 -0.263636690
0.8586205
## 94  -0.0329298090  0.96774916 -0.23973123 -0.03424494 -0.263865210
0.8835772
## 95  -0.0273542920  0.96367366 -0.22947635 -0.03424494 -0.288659430
0.8766617
## 96  -0.0263817520  0.95769745 -0.22707415 -0.02829453 -0.323756210
0.8512781
## 97  -0.0188053820  0.95769745 -0.22282497 -0.02829453 -0.356703290
0.8468743
## 98  -0.0188053820  0.96157546 -0.21638974 -0.02364588 -0.378299910
0.8607057
## 99   0.0203602470  0.96883594 -0.23404071 -0.04293996 -0.283605720
0.8810812
```

```
## 100 -0.0236152610  0.95310541 -0.24161521 -0.04870947 -0.238116270
0.8682353
## 101 -0.0338068670  0.94866336 -0.24278362 -0.04870947 -0.257963380
0.8343874
## 102 -0.0338068670  0.94866336 -0.24278362 -0.03472419 -0.278351350
0.8238350
## 103 -0.0318022350  0.95110648 -0.24202413 -0.03293287 -0.277069340
0.8323586
## 104 -0.0280084610  0.95110648 -0.24202413 -0.03112326 -0.283667420
0.8345776
## 105 -0.0208428180  0.95466474 -0.24165835 -0.02878729 -0.315429390
0.8401486
## 106 -0.0193959700  0.95547642 -0.22698277 -0.02600387 -0.335686350
0.8648921
## 107 -0.0193959700  0.97340828 -0.21821923 -0.02596699 -0.328947320
0.8821714
## 108 -0.0264243350  0.96862127 -0.22241450 -0.02596699 -0.334621270
0.8738723
## 109 -0.0264243350  0.96570391 -0.23696276 -0.03550549 -0.301417770
0.8701678
## 110 -0.0314522590  0.95842022 -0.23766547 -0.04404664 -0.254351990
0.8568400
## 111 -0.0319476240  0.95842022 -0.23766547 -0.04404664 -0.263067410
0.8476661
## 112 -0.0297718170  0.94045396 -0.24337952 -0.04927861 -0.258319560
0.8439884
## 113 -0.0381627410  0.94045396 -0.24337952 -0.04927861 -0.251049190
0.8164238
## 114 -0.0342689720  0.95062198 -0.24132339 -0.04594362 -0.255636100
0.8413158
## 115 -0.0270835050  0.96137323 -0.24132339 -0.03275904 -0.271047670
0.8545873
## 116 -0.0205092960  0.96082418 -0.23752323 -0.03275904 -0.316259120
0.8534800
## 117 -0.0205092960  0.95752574 -0.22685839 -0.02250144 -0.343850490
0.8448654
## 118 -0.0166348040  0.95752574 -0.22685839 -0.02250144 -0.355081120
0.8445647
## 119 -0.0166348040  0.95958635 -0.22029619 -0.02275465 -0.360591820
0.8590058
## 120 -0.0192714310  0.96916804 -0.22241649 -0.02275465 -0.338477070
0.8690979
## 121 -0.0132320000  0.96936324 -0.22241649 -0.01877336 -0.342775180
0.8712839
## 122 -0.0124975130  0.96544132 -0.22215608 -0.02136043 -0.366641770
0.8661916
## 123 -0.0124975130  0.96535582 -0.21242216 -0.03401542 -0.353667620
0.8640137
## 124 -0.0307716910  0.96535582 -0.22004906 -0.04300677 -0.313375600
0.8714958
```

```
## 125 -0.0339014500  0.96514254 -0.22715410 -0.04684178 -0.281900330
0.8679829
## 126 -0.0206827290  0.93229428 -0.23667873 -0.04961865 -0.347811180
0.8155045
## 127 -0.0100559700  0.93663451 -0.22562726 -0.02461760 -0.400075400
0.8566813
## 128 -0.0093239301  0.97001624 -0.20040846 -0.02898619 -0.406496720
0.8886730
## 129 -0.0093239301  0.95943412 -0.20032944 -0.05193644 -0.373315710
0.8878665
## 130 -0.0189541520  0.95898424 -0.19548759 -0.05193644 -0.376173840
0.8628896
## 131 -0.0176588170  0.95898424 -0.19536675 -0.04175783 -0.417569150
0.8765785
## 132 -0.0176588170  0.96170733 -0.19356126 -0.05251642 -0.385821540
0.8860113
## 133 -0.0223858910  0.96170733 -0.19356126 -0.05251642 -0.391843060
0.8636435
## 134 -0.0041734518  0.96230190 -0.19286442 -0.01885173 -0.450526340
0.8685017
## 135 -0.0074223689  0.92900964 -0.27750930 -0.10129269 -0.254109900
0.7887684
## 136  0.0067356990  0.92900964 -0.23727880 -0.05564663 -0.367718740
0.8051578
## 137  0.0067356990  0.94470535 -0.25598900 -0.05290340 -0.312724650
0.8331705
## 138 -0.0200365740  0.94478221 -0.26016961 -0.05406701 -0.229075530
0.8461343
## 139 -0.0203937880  0.94422757 -0.26016961 -0.05406701 -0.262325780
0.8242458
## 140 -0.0222774680  0.94422757 -0.24424710 -0.06644138 -0.244804120
0.8331150
## 141 -0.0161766760  0.94463079 -0.24155342 -0.06644138 -0.254640610
0.8363604
## 142 -0.0136753780  0.94463079 -0.24017921 -0.04857929 -0.365162150
0.8260857
## 143 -0.0169573410  0.93395793 -0.26534344 -0.05648341 -0.250792170
0.7974584
## 144 -0.0129965130  0.93673335 -0.24248641 -0.04927225 -0.328584650
0.8213265
## 145 -0.0129965130  0.95216144 -0.24714395 -0.05024315 -0.314736810
0.8517621
## 146 -0.0039226425  0.90854443 -0.25723690 -0.05024315 -0.304852280
0.8081303
## 147 -0.0000691328  0.90854443 -0.25723690 -0.04352744 -0.401231530
0.7561069
## 148 -0.0000691328  0.91123680 -0.23569320 -0.06666016 -0.350842970
0.8131893
## 149 -0.0330903720  0.94962239 -0.23407471 -0.06666016 -0.255194840
0.8448965
```

```
## 150 -0.0087032560  0.94962239 -0.23407471 -0.06664010 -0.341875710
0.8320566
## 151 -0.0595787850  0.91599599 -0.28969889 -0.12476275 -0.110257420
0.8371144
## 152 -0.0595787850  0.91599599 -0.30348793 -0.07644082 -0.116827220
0.7556477
## 153 -0.0644115550  0.91617452 -0.30348793 -0.08198183 -0.072432220
0.7441088
## 154 -0.0495585700  0.91698645 -0.30234593 -0.08203439 -0.062455758
0.7684195
## 155 -0.0263938160  0.91705742 -0.30093719 -0.08203439 -0.098727022
0.7858478
## 156 -0.0065825392  0.91986778 -0.29856637 -0.05133036 -0.174891520
0.7725095
## 157 -0.0018506481  0.91986778 -0.29855774 -0.03778052 -0.216299740
0.7688982
## 158 -0.0018506481  0.92270666 -0.30968732 -0.06768606 -0.154449060
0.7665395
## 159 -0.0536281230  0.91637494 -0.32780029 -0.09548858 -0.059181774
0.8184361
## 160 -0.0536281230  0.91637494 -0.32780029 -0.07197077 -0.033401393
0.7505026
## 161 -0.0502802560  0.90041159 -0.33418356 -0.07197077 -0.038070615
0.7317974
## 162 -0.0502802560  0.90041159 -0.33418356 -0.06519523 -0.058082952
0.7236803
## 163 -0.0470436920  0.90859114 -0.32847934 -0.06689664 -0.060929073
0.7328869
## 164 -0.0334931300  0.90859114 -0.32458162 -0.06689664 -0.086543997
0.7328837
## 165 -0.0334931300  0.91063928 -0.32892376 -0.05994166 -0.085380750
0.7356059
## 166 -0.0386799460  0.90340838 -0.34011221 -0.08772858 -0.021851146
0.7246518
## 167 -0.0531615870  0.90340838 -0.34011221 -0.08772858  0.005448955
0.7131136
## 168 -0.0475694460  0.91477593 -0.31897143 -0.08551872 -0.085936061
0.8013726
## 169 -0.0493400740  0.91477593 -0.31958354 -0.07191699 -0.055642903
0.7493954
## 170 -0.0384944150  0.90310935 -0.33095090 -0.07297298 -0.051022817
0.7352143
## 171 -0.0317906720  0.90310935 -0.33095090 -0.07297298 -0.087134831
0.7302074
## 172 -0.0317906720  0.90538450 -0.32632137 -0.06967147 -0.093959605
0.7364797
## 173 -0.0307563010  0.90409427 -0.31342883 -0.07192736 -0.095641539
0.7233824
## 174 -0.0302074440  0.90283853 -0.31707983 -0.07192736 -0.113852720
0.7203734
```

```
## 175 -0.0302074440  0.90283853 -0.31933824 -0.05622790 -0.105874100
0.7340533
## 176 -0.0410128400  0.91072594 -0.31941384 -0.08065750 -0.069249768
0.7362439
## 177  0.0296267730  0.93857780 -0.31912647 -0.04626751 -0.148857910
0.8098973
##                NA          NA          NA          NA          NA
NA
## 1    -0.970905210 -0.97551037 -0.9843254 -0.98884915 -0.91774264 -
1.00000000
## 2    -0.970582750 -0.97850045 -0.9991884 -0.99002851 -0.94168540 -
1.00000000
## 3    -0.970368120 -0.98167231 -0.9996790 -0.99210440 -0.99261864 -
1.00000000
## 4    -0.969399710 -0.98241965 -0.9959764 -0.98066338 -0.97977867 -
1.00000000
## 5    -0.967051150 -0.98436258 -0.9983182 -0.99061132 -0.98041247 -
1.00000000
## 6    -0.967320600 -0.98527538 -0.9993483 -0.98656477 -0.99772789 -
1.00000000
## 7    -0.969266060 -0.98484817 -0.9994188 -0.98991228 -0.99075340 -
1.00000000
## 8    -0.968033080 -0.98531929 -0.9977317 -0.97571945 -0.98161313 -
1.00000000
## 9    -0.964123440 -0.98745868 -0.9972706 -0.97885999 -0.96899895 -
1.00000000
## 10   -0.963137380 -0.98880075 -0.9975253 -0.99127719 -0.99926747 -
1.00000000
## 11   -0.965202490 -0.98868542 -0.9976194 -0.98410463 -0.99535648 -
1.00000000
## 12   -0.966393630 -0.98817785 -0.9977609 -0.99549579 -0.99257602 -
1.00000000
## 13   -0.965203640 -0.98811148 -0.9991634 -0.98494960 -0.99361721 -
1.00000000
## 14   -0.964284730 -0.98851700 -0.9997324 -0.99408745 -0.99632492 -
1.00000000
## 15   -0.852220070 -0.99777530 -0.9677840 -0.80352373 -0.84509268 -
0.71693773
## 16   -0.884128520 -0.99979590 -0.9984548 -0.98205190 -0.97734475 -
1.00000000
## 17   -0.882290130 -0.99961135 -0.9993781 -0.99672713 -0.97109518 -
1.00000000
## 18   -0.882646010 -0.99941329 -0.9986137 -0.99150548 -0.99186770 -
1.00000000
## 19   -0.884224290 -0.99944712 -0.9987836 -0.99823449 -0.99719962 -
1.00000000
## 20   -0.883814820 -0.99942462 -0.9986621 -0.99517799 -0.99390774 -
1.00000000
## 21   -0.883864240 -0.99935397 -0.9992007 -0.99491334 -0.99723758 -
1.00000000
```

```
## 22   -0.885318210 -0.99938473 -0.9988382 -0.99575777 -0.99485478 -
1.00000000
## 23   -0.884785990 -0.99941999 -0.9982020 -0.99224966 -0.99744189 -
1.00000000
## 24   -0.882370990 -0.99933445 -0.9984686 -0.99276713 -0.99208613 -
1.00000000
## 25   -0.882335530 -0.99930451 -0.9972601 -0.99348553 -0.99545569 -
1.00000000
## 26   -0.885266680 -0.99943833 -0.9975451 -0.98828121 -0.98980171 -
1.00000000
## 27   -0.886630040 -0.99952063 -0.9990049 -0.99694562 -0.99762048 -
1.00000000
## 28   -0.954603580 -0.76875065 -0.7830231 -0.24929859 -0.44109235
0.20080203
## 29   -0.937614020 -0.69232355 -0.9739768 -0.91551494 -0.90103476 -
0.29796912
## 30   -0.944079510 -0.71309038 -0.9871195 -0.96366283 -0.98428755 -
0.61822532
## 31   -0.944948090 -0.71760866 -0.9935610 -0.97376467 -0.98253275 -
0.73487823
## 32   -0.906996280 -0.71114040 -0.8864781 -0.78685118 -0.93509600
0.11648385
## 33   -0.772231240 -0.62157169 -0.5377918 -0.49361272 -0.59421965
0.61674668
## 34   -0.645762770 -0.55218838 -0.9383677 -0.92184621 -0.91047944
0.08923813
## 35   -0.629907810 -0.57587818 -0.9594667 -0.96168867 -0.96052828 -
0.36994935
## 36   -0.638113780 -0.58403938 -0.9841800 -0.99119142 -0.98711039 -
0.69416972
## 37   -0.635687950 -0.58274265 -0.9945833 -0.99845754 -0.99314838 -
0.71220433
## 38   -0.635070090 -0.58374579 -0.9957848 -0.99857849 -0.99511687 -
0.69017917
## 39   -0.965553000 -0.79143464 -0.9306782 -0.91145653 -0.96143943 -
0.07794119
## 40   -0.959692320 -0.79800686 -0.9893641 -0.92109398 -0.99684749 -
0.55092309
## 41   -0.951743730 -0.79901352 -0.9933104 -0.99440247 -0.99505223 -
0.70764845
## 42   -0.952250080 -0.80006036 -0.9983931 -0.98646091 -0.99874747 -
0.81063715
## 43   -0.952735630 -0.80028799 -0.9980790 -0.99169886 -0.99894649 -
0.83710607
## 44   -0.950410300 -0.80014484 -0.9963674 -0.98365529 -0.99950466 -
0.69300335
## 45   -0.950194430 -0.80210172 -0.9942988 -0.98546231 -0.98746153 -
0.68885425
## 46   -0.950789080 -0.80394310 -0.9953458 -0.99210291 -0.99517352 -
0.70171731
```

```
## 47   -0.948776020 -0.80386565 -0.9983976 -0.98798835 -0.99757904 -
0.83012354
## 48   -0.948313210 -0.80405487 -0.9981838 -0.99202692 -0.99610152 -
1.00000000
## 49   -0.948232010 -0.80250101 -0.9956961 -0.99157513 -0.98850432 -
1.00000000
## 50   -0.947051910 -0.80162052 -0.9967130 -0.99132397 -0.99568307 -
1.00000000
## 51   -0.948256080 -0.80344784 -0.9944206 -0.98396336 -0.99318436 -
1.00000000
## 52    0.212332120 -0.32464753 -0.7675071 -0.98982502 -0.93827282
0.33436646
## 53    0.210026850 -0.33579838 -0.9834011 -0.98821667 -0.96414572 -
0.35760208
## 54    0.203328070 -0.32474075 -0.9918615 -0.99875288 -0.99915912 -
0.78767400
## 55    0.201453100 -0.32437767 -0.9951606 -0.99832246 -0.99898631 -
1.00000000
## 56    0.201271720 -0.32597303 -0.9996350 -0.99858592 -0.99632718 -
1.00000000
## 57    0.202045110 -0.32615618 -0.9997767 -0.99936215 -0.99685690 -
1.00000000
## 58    0.202227870 -0.32546335 -0.9993253 -0.99939533 -0.99859645 -
1.00000000
## 59    0.200394800 -0.32457967 -0.9985722 -0.99625493 -0.99640830 -
1.00000000
## 60    0.197881520 -0.32357803 -0.9953233 -0.99877935 -0.99785269 -
1.00000000
## 61    0.195976830 -0.32159574 -0.9981415 -0.99694975 -0.99274706 -
1.00000000
## 62    0.195539100 -0.31965605 -0.9973701 -0.99724162 -0.99630278 -
1.00000000
## 63    0.196986720 -0.31954210 -0.9988934 -0.99796982 -0.99652568 -
1.00000000
## 64    0.196497510 -0.31786015 -0.9994701 -0.99766362 -0.99501293 -
1.00000000
## 65    0.166873620 -0.50055744 -0.4912119 -0.87676515 -0.78068749
0.60268009
## 66    0.194572850 -0.43315051 -0.8904654 -0.90799677 -0.98845579
0.02882745
## 67    0.154649380 -0.41898295 -0.9431880 -0.97966857 -0.97205399
0.04457025
## 68    0.008826458 -0.19458953 -0.2186561 -0.64592704 -0.31959750
0.73789309
## 69   -0.123680060  0.04475053 -0.8265076 -0.83784940 -0.77202732
0.51426485
## 70   -0.010086281 -0.03640987 -0.7574630 -0.78914677 -0.68655889
0.37914352
## 71    0.046019968 -0.14336780 -0.7056960 -0.89521074 -0.84825676
0.31694287
```

```
## 72   -0.351934780   0.21741493 -0.1555981   0.07461628 -0.04493305 -
0.21910371
## 73   -0.849574960   0.77241744 -0.9351508   0.18136328 -0.62655622 -
1.00000000
## 74   -0.990154410   0.95305501 -0.9767433 -0.85203683 -0.95180713 -
1.00000000
## 75   -0.994076070   0.93316945 -0.9796368 -0.87250471 -0.98745024 -
1.00000000
## 76   -0.998464570   0.93894281 -0.9941615 -0.99433568 -0.99015949 -
1.00000000
## 77   -0.999040710   0.94500816 -0.9914040 -0.97708243 -0.99844627 -
1.00000000
## 78   -0.999464540   0.94310066 -0.9973561 -0.99006714 -0.99536208 -
1.00000000
## 79   -0.899488290 -0.99697332 -0.9941642 -0.95035595 -0.94981826 -
1.00000000
## 80   -0.893938000 -0.99695208 -0.9906877 -0.90985903 -0.97896886 -
0.81690105
## 81   -0.882935050 -0.99804028 -0.9613785 -0.95012146 -0.97934151 -
0.81690105
## 82   -0.887160230 -0.99794929 -0.9839398 -0.97757906 -0.96598783 -
1.00000000
## 83   -0.889778210 -0.99763809 -0.9781693 -0.99227458 -0.95657523 -
1.00000000
## 84   -0.891891400 -0.99790606 -0.9865620 -0.99413544 -0.96915126 -
1.00000000
## 85   -0.900668640 -0.99826854 -0.9897637 -0.94876075 -0.97597323 -
1.00000000
## 86   -0.907606690 -0.99842575 -0.9797869 -0.98493131 -0.96661056 -
1.00000000
## 87   -0.884972020 -0.99749767 -0.9902868 -0.98088501 -0.84757716 -
1.00000000
## 88   -0.890961200 -0.99631064 -0.9932530 -0.98009509 -0.94310349 -
1.00000000
## 89   -0.892011910 -0.99696455 -0.9903460 -0.98897946 -0.93426649 -
1.00000000
## 90   -0.891017830 -0.99781013 -0.9940054 -0.99422318 -0.94391561 -
0.90437265
## 91   -0.888555390 -0.99665711 -0.9833725 -0.98219383 -0.97361484 -
0.68797241
## 92   -0.881164870 -0.99675850 -0.9889514 -0.96887233 -0.97329703 -
0.69194981
## 93   -0.881904700 -0.99737562 -0.9610089 -0.96161226 -0.97114839 -
0.81063715
## 94   -0.888442980 -0.99736843 -0.9818278 -0.98583119 -0.97136178 -
1.00000000
## 95   -0.892405750 -0.99777202 -0.9792626 -0.97876609 -0.97556436 -
1.00000000
## 96   -0.894901990 -0.99820580 -0.9716255 -0.99256863 -0.97632354 -
1.00000000
```

```
## 97  -0.901389590 -0.99856109 -0.9783083 -0.94772993 -0.97546306 -
1.00000000
## 98  -0.909701000 -0.99879314 -0.9905899 -0.98485751 -0.96843086 -
1.00000000
## 99  -0.887080080 -0.99790871 -0.9912252 -0.98965484 -0.82658798 -
1.00000000
## 100 -0.883715420 -0.99586444 -0.9753129 -0.97992325 -0.96792486 -
0.80459104
## 101 -0.879073970 -0.99639833 -0.9571961 -0.98306915 -0.96456563 -
0.51701904
## 102 -0.878178060 -0.99737409 -0.9798027 -0.98992477 -0.98020168 -
0.51781317
## 103 -0.878702460 -0.99756188 -0.9796377 -0.99651194 -0.97862400 -
0.62832919
## 104 -0.879209240 -0.99789189 -0.9840188 -0.98936898 -0.97580723 -
0.66081228
## 105 -0.887992340 -0.99832605 -0.9847810 -0.94784111 -0.96992495 -
0.78767400
## 106 -0.897049900 -0.99879476 -0.9591341 -0.99290525 -0.96947083 -
0.86787699
## 107 -0.900066740 -0.99868406 -0.9942128 -0.98682088 -0.97794095 -
1.00000000
## 108 -0.902764050 -0.99835347 -0.9913243 -0.97964977 -0.97641886 -
1.00000000
## 109 -0.894415470 -0.99780893 -0.9929393 -0.93022582 -0.96645294 -
1.00000000
## 110 -0.882917170 -0.99655194 -0.9715398 -0.99108765 -0.96521963 -
1.00000000
## 111 -0.885496870 -0.99620482 -0.9865168 -0.96716387 -0.95935804 -
1.00000000
## 112 -0.883027800 -0.99606439 -0.9153489 -0.95325922 -0.92836435 -
0.43568500
## 113 -0.878100030 -0.99529683 -0.9684451 -0.98652649 -0.97494513 -
0.33834161
## 114 -0.878285930 -0.99675706 -0.9783829 -0.99178623 -0.96220006 -
0.72476632
## 115 -0.881614060 -0.99764607 -0.9924473 -0.97592003 -0.97517063 -
1.00000000
## 116 -0.891351470 -0.99833360 -0.9918598 -0.96367888 -0.96499763 -
1.00000000
## 117 -0.894726690 -0.99883600 -0.9849491 -0.98779812 -0.97287030 -
1.00000000
## 118 -0.896764200 -0.99898166 -0.9923713 -0.97236917 -0.97538394 -
1.00000000
## 119 -0.901507550 -0.99902927 -0.9785198 -0.98375476 -0.96817072 -
1.00000000
## 120 -0.898174240 -0.99890047 -0.9948337 -0.97160393 -0.97804174 -
1.00000000
## 121 -0.897161030 -0.99917977 -0.9928935 -0.98281814 -0.97284606 -
1.00000000
```

```
## 122 -0.903647710 -0.99912540 -0.9889659 -0.96906431 -0.94520087 -
1.00000000
## 123 -0.906658210 -0.99820652 -0.9898807 -0.98252293 -0.97700669 -
1.00000000
## 124 -0.904741920 -0.99680238 -0.9874365 -0.98194312 -0.95246156 -
1.00000000
## 125 -0.897587440 -0.99606776 -0.9832888 -0.95999910 -0.96363592 -
1.00000000
## 126 -0.895692270 -0.99768248 -0.9277540 -0.90063505 -0.92496463 -
0.26516749
## 127 -0.912807420 -0.99903357 -0.9586687 -0.97818751 -0.97338847 -
0.61900727
## 128 -0.920880670 -0.99902088 -0.9801343 -0.95642641 -0.95799027 -
1.00000000
## 129 -0.923818350 -0.99677988 -0.9728686 -0.96051758 -0.90579826 -
1.00000000
## 130 -0.923262100 -0.99630680 -0.9710361 -0.96944197 -0.94923347 -
1.00000000
## 131 -0.930952170 -0.99759216 -0.9474447 -0.94044939 -0.93434230 -
1.00000000
## 132 -0.930682370 -0.99607844 -0.9694106 -0.93104992 -0.91487543 -
1.00000000
## 133 -0.924371650 -0.99681463 -0.9849274 -0.97018975 -0.88969545 -
1.00000000
## 134 -0.928366960 -0.99918393 -0.9829638 -0.98174991 -0.98501002 -
1.00000000
## 135 -0.879776170 -0.99175308 -0.9588153 -0.91015171 -0.81323569 -
0.21686554
## 136 -0.889289990 -0.99871946 -0.9796805 -0.95974017 -0.90106535 -
0.30697813
## 137 -0.881783780 -0.99801177 -0.9696134 -0.97907992 -0.84715225 -
0.42127754
## 138 -0.870422890 -0.99612673 -0.9294387 -0.93536889 -0.86882145 -
0.52672882
## 139 -0.870734930 -0.99717105 -0.9711160 -0.93618950 -0.91939100 -
0.51076744
## 140 -0.880222960 -0.99446393 -0.9462261 -0.97768467 -0.83450231 -
0.48672618
## 141 -0.884657890 -0.99434709 -0.9466749 -0.96228395 -0.82993465 -
0.45805720
## 142 -0.897100500 -0.99863605 -0.9672360 -0.94690956 -0.96456082 -
0.45086431
## 143 -0.871069810 -0.99529390 -0.9655180 -0.95133708 -0.92434674 -
0.32830435
## 144 -0.884776010 -0.99838999 -0.9802400 -0.96073505 -0.92670117 -
0.39921359
## 145 -0.891612540 -0.99762420 -0.9677616 -0.97510617 -0.86642273 -
0.89458906
## 146 -0.878961630 -0.99711036 -0.8575576 -0.90061388 -0.86357722 -
0.31960888
```

```
## 147 -0.881186170 -0.99916094 -0.9211624 -0.89949643 -0.92101631 -
0.03870466
## 148 -0.896529380 -0.99635659 -0.8910100 -0.93504948 -0.78885105 -
0.25386075
## 149 -0.892660670 -0.99367018 -0.9594143 -0.95107176 -0.91156620 -
0.62270992
## 150 -0.897363550 -0.99704375 -0.9786434 -0.93832095 -0.86406430 -
0.58888593
## 151 -0.865348970 -0.98458909 -0.8751119 -0.85525934 -0.80866727 -
0.21105535
## 152 -0.827871300 -0.99070497 -0.9531238 -0.92099311 -0.96254456 -
0.23608313
## 153 -0.813742150 -0.98861492 -0.9756205 -0.98229563 -0.94294828 -
0.39907559
## 154 -0.817774050 -0.98840607 -0.9600277 -0.97325567 -0.93497122 -
0.16698265
## 155 -0.820272720 -0.99232757 -0.9613098 -0.98118902 -0.89703688 -
0.15131935
## 156 -0.824167160 -0.99675285 -0.9665342 -0.98013837 -0.92352538 -
0.18266643
## 157 -0.827921360 -0.99815134 -0.9772316 -0.96527673 -0.91336393 -
0.35457660
## 158 -0.816953910 -0.99559001 -0.9698174 -0.94905699 -0.88737171 -
0.31778380
## 159 -0.822320650 -0.98988589 -0.8441603 -0.79415420 -0.90160885 -
0.15232391
## 160 -0.783729350 -0.99183756 -0.9821118 -0.98299409 -0.96400269 -
0.31701990
## 161 -0.779415210 -0.99173032 -0.9608412 -0.97911926 -0.94279626 -
0.22413374
## 162 -0.779923750 -0.99292840 -0.9739959 -0.97485311 -0.93439061 -
0.26335661
## 163 -0.784705070 -0.99287946 -0.9787111 -0.98517178 -0.92772519 -
0.40019832
## 164 -0.790410530 -0.99385708 -0.9873574 -0.97881767 -0.92338210 -
0.45267628
## 165 -0.790347200 -0.99401205 -0.9872407 -0.97726778 -0.93130691 -
0.46680323
## 166 -0.775553570 -0.99012151 -0.9682080 -0.95546430 -0.92675746 -
0.29782505
## 167 -0.764940540 -0.98872857 -0.9903465 -0.98390724 -0.92997442 -
0.54347768
## 168 -0.820231590 -0.99220394 -0.8855128 -0.86838708 -0.94146472 -
0.11553473
## 169 -0.793714880 -0.99179667 -0.9832942 -0.98301057 -0.94269924 -
0.35229482
## 170 -0.786407590 -0.99152511 -0.9695760 -0.97467092 -0.89951484 -
0.32128724
## 171 -0.783272390 -0.99475869 -0.9745227 -0.97684679 -0.92730761 -
0.28198248
```

```
## 172 -0.795879500 -0.99360482 -0.9819489 -0.95929554 -0.91266906 -
0.31021963
## 173 -0.803046200 -0.99158851 -0.9697823 -0.99094265 -0.94087578 -
0.23600340
## 174 -0.797509650 -0.99387917 -0.9675777 -0.98454920 -0.90378735 -
0.29249040
## 175 -0.793640670 -0.99501086 -0.9853867 -0.99133188 -0.93452381 -
0.39338672
## 176 -0.792523080 -0.99210193 -0.9843616 -0.98834954 -0.90489743 -
0.44327306
## 177 -0.803722230 -0.99889042 -0.9476390 -0.92766182 -0.90113251 -
0.36108125
##                 NA          NA          NA          NA          NA
NA
## 1   -1.000000000  0.113806140 -0.590425000 0.59114630 -0.59177346
0.59246928
## 2   -1.000000000 -0.210493610 -0.410055520 0.41385634 -0.41756716
0.42132499
## 3   -1.000000000 -0.926776260  0.002234132 0.02748069 -0.05672816
0.08553324
## 4   -1.000000000 -0.596100840 -0.064934877 0.07542720 -0.08582296
0.09620771
## 5   -1.000000000 -0.616578200 -0.257266810 0.26891819 -0.28066510
0.29261602
## 6   -1.000000000 -1.000000000 -0.302224840 0.37903209 -0.45722246
0.53679840
## 7   -1.000000000 -1.000000000 -0.301410750 0.40146416 -0.50287889
0.60560442
## 8   -1.000000000 -0.590085230 -0.368427260 0.39013017 -0.41156951
0.43283287
## 9   -1.000000000 -0.456360350 -0.287902890 0.29184819 -0.29541259
0.29871189
## 10  -1.000000000 -1.000000000 -0.331392630 0.36132765 -0.39175904
0.42277310
## 11  -1.000000000 -1.000000000 -0.347249550 0.38440621 -0.42220843
0.46073208
## 12  -1.000000000 -0.693663770 -0.370415400 0.37605091 -0.38122979
0.38607061
## 13  -1.000000000 -0.692524480 -0.257626360 0.26148898 -0.26446874
0.26666447
## 14  -1.000000000 -0.905850810 -0.125757520 0.16816440 -0.21004093
0.25139520
## 15  -1.000000000 -1.000000000 -0.451156920 0.44635787 -0.44147083
0.43665655
## 16  -1.000000000 -1.000000000 -0.668010680 0.67166052 -0.67509047
0.67846138
## 17  -1.000000000 -1.000000000 -0.283175970 0.30319968 -0.32260500
0.34146445
## 18  -1.000000000 -1.000000000 -0.273751210 0.30426162 -0.33499689
0.36602841
```

```
## 19   -1.000000000 -1.000000000 -0.420627270 0.46972548 -0.51949425
0.56999098
## 20   -1.000000000 -1.000000000 -0.433655170 0.47801048 -0.52273333
0.56788474
## 21   -1.000000000 -1.000000000 -0.304252820 0.35550763 -0.40744318
0.46010008
## 22   -1.000000000 -1.000000000 -0.258874190 0.29814548 -0.33736856
0.37658596
## 23   -1.000000000 -1.000000000 -0.331669120 0.36414095 -0.39699222
0.43030029
## 24   -1.000000000 -1.000000000 -0.350987610 0.36617151 -0.38150015
0.39708530
## 25   -1.000000000 -1.000000000 -0.232491220 0.24204734 -0.25145250
0.26081044
## 26   -1.000000000 -1.000000000 -0.236854720 0.25745982 -0.27805190
0.29871416
## 27   -1.000000000 -1.000000000 -0.197826470 0.22163515 -0.24584944
0.27055286
## 28    0.122004610  0.647806520 -0.913934570 0.91331398 -0.91230496
0.91109911
## 29    0.092568022  0.043937482 -0.967754530 0.96834514 -0.96854914
0.96856111
## 30   -0.209060360 -0.345825640 -0.773262510 0.77328808 -0.77303734
0.77268879
## 31   -0.250755420 -0.351967750 -0.578453380 0.60866944 -0.63738602
0.66465920
## 32    0.333791520  0.136396110 -0.826844980 0.83111843 -0.83517288
0.83918453
## 33    0.663967430  0.356465840 -0.802409920 0.80031092 -0.79787764
0.79529481
## 34    0.109028510 -0.015957060 -0.986745470 0.98710235 -0.98705964
0.98681407
## 35   -0.365640800 -0.205642730 -0.925089430 0.92518522 -0.92491384
0.92446702
## 36   -0.724228090 -0.739583350 -0.919186490 0.92446526 -0.92942809
0.93425586
## 37   -0.826881060 -1.000000000 -0.550903470 0.54987335 -0.54856258
0.54712853
## 38   -1.000000000 -1.000000000 -0.408494610 0.40933083 -0.41000953
0.41067237
## 39    0.175161240 -0.351284140 -0.939601910 0.95036490 -0.96093440
0.97148450
## 40   -0.003009918 -0.839623990 -0.740346860 0.73839709 -0.73614716
0.73377586
## 41   -0.575830980 -1.000000000 -0.528463390 0.54212387 -0.55575604
0.56948891
## 42   -0.552190930 -1.000000000 -0.474997360 0.50269198 -0.53071067
0.55915506
## 43   -0.580574760 -1.000000000 -0.510003330 0.56064557 -0.61212863
0.66452057
```

```
## 44   -0.468387760 -0.979718640 -0.587324200 0.59610041 -0.60475073
0.61341861
## 45   -0.550023420 -0.692361880 -0.406096820 0.40703144 -0.40759922
0.40793550
## 46   -0.618063810 -1.000000000 -0.297173330 0.30093447 -0.30454438
0.30812661
## 47   -0.637745690 -1.000000000 -0.289272420 0.31540433 -0.34202382
0.36922108
## 48   -0.725713080 -1.000000000 -0.166725220 0.17984323 -0.19277661
0.20561324
## 49   -0.608021280 -0.716652920 -0.238321220 0.24958371 -0.26097663
0.27260833
## 50   -0.659022860 -0.716652920 -0.286249440 0.29321832 -0.30028301
0.30756559
## 51   -0.569866650 -1.000000000 -0.324279070 0.33456158 -0.34489949
0.35541030
## 52   -0.605803720 -0.007340266 -0.854568490 0.85469944 -0.85449568
0.85414262
## 53   -0.593231750 -0.337930930 -0.966091750 0.96717140 -0.96787663
0.96840111
## 54   -0.966824260 -0.693175260 -0.670225450 0.67030484 -0.67012313
0.66984828
## 55   -1.000000000 -0.714350130 -0.489818820 0.50388785 -0.51781959
0.53173504
## 56   -1.000000000 -0.964272280 -0.432104200 0.46109629 -0.49014427
0.51933487
## 57   -1.000000000 -1.000000000 -0.314554830 0.39091861 -0.46771931
0.54493536
## 58   -1.000000000 -1.000000000 -0.380755410 0.42820276 -0.47584310
0.52372005
## 59   -1.000000000 -0.719077170 -0.366913220 0.38887747 -0.41110633
0.43370130
## 60   -1.000000000 -0.706328000 -0.405209300 0.43914050 -0.47366337
0.50886561
## 61   -0.730810520 -0.775958700 -0.393028690 0.44573729 -0.49923111
0.55355975
## 62   -0.714738740 -1.000000000 -0.287537410 0.35036394 -0.41426665
0.47926937
## 63   -0.816017040 -1.000000000 -0.203677470 0.26572422 -0.32893297
0.39332288
## 64   -0.714336030 -1.000000000 -0.214596460 0.25862799 -0.30242409
0.34600672
## 65    0.291400040  0.256082890 -0.963251180 0.96276768 -0.96188107
0.96078764
## 66   -0.077125159 -0.739583350 -0.950994560 0.95950622 -0.96777940
0.97599331
## 67   -0.261641310 -0.335778170 -0.877099780 0.87918240 -0.88094999
0.88258649
## 68    0.305524710  0.609886940 -0.890156550 0.89047435 -0.89044929
0.89027057
```

```
## 69    0.330783810   0.531030300 -0.988121580 0.99068891 -0.99289579
0.99493808
## 70    0.414118860   0.575106750 -0.756701150 0.75909936 -0.76121314
0.76321478
## 71    0.377344450   0.389853160 -0.545465120 0.54860976 -0.55164421
0.55473779
## 72    0.840908420   0.828344510 -0.577951790 0.58105559 -0.58406354
0.58714454
## 73    0.524827850   0.494765550 -0.869452110 0.87035280 -0.87092849
0.87136499
## 74   -0.555459220  -0.247063790 -0.640931040 0.64100515 -0.64067638
0.64010568
## 75   -1.000000000  -0.584538390 -0.180659740 0.17834097 -0.17570203
0.17286321
## 76   -1.000000000  -0.587865580 -0.488575540 0.48844837 -0.48813201
0.48777782
## 77   -1.000000000  -0.701529460 -0.416202260 0.44210407 -0.46852326
0.49556468
## 78   -1.000000000  -0.710103640 -0.277629280 0.31581761 -0.35478642
0.39460570
## 79   -1.000000000  -1.000000000 -0.314796240 0.40712903 -0.49650202
0.58276324
## 80   -1.000000000  -1.000000000 -0.358047220 0.43125234 -0.50188202
0.56984258
## 81   -1.000000000  -1.000000000 -0.462728720 0.53365030 -0.60303819
0.67084382
## 82   -1.000000000  -1.000000000 -0.393350640 0.47235130 -0.54890319
0.62290681
## 83   -1.000000000  -1.000000000 -0.400750740 0.47400855 -0.54403881
0.61073404
## 84   -1.000000000  -1.000000000 -0.427516910 0.50791476 -0.58436483
0.65672637
## 85   -1.000000000  -1.000000000 -0.286943230 0.38519347 -0.47786096
0.56470456
## 86   -1.000000000  -1.000000000 -0.197558550 0.28393822 -0.36562617
0.44242333
## 87   -1.000000000  -0.698339230 -0.492371600 0.56787720 -0.64258496
0.71645958
## 88   -1.000000000  -1.000000000 -0.324075590 0.40409421 -0.47964232
0.55055461
## 89   -1.000000000  -1.000000000 -0.219678690 0.29942422 -0.37215986
0.43763930
## 90   -1.000000000  -1.000000000 -0.300846100 0.37621191 -0.44731263
0.51399667
## 91   -1.000000000  -1.000000000 -0.345099610 0.42135409 -0.49346853
0.56129748
## 92   -1.000000000  -1.000000000 -0.431832650 0.52090237 -0.60711071
0.69032810
## 93   -1.000000000  -1.000000000 -0.446843630 0.53446706 -0.62047045
0.70476356
```

```
## 94  -1.000000000 -1.000000000 -0.288064860 0.36863133 -0.44535383
0.51807946
## 95  -1.000000000 -1.000000000 -0.223278420 0.31127102 -0.39493393
0.47407723
## 96  -1.000000000 -1.000000000 -0.258999670 0.34630937 -0.43037509
0.51104240
## 97  -1.000000000 -1.000000000 -0.174508010 0.27524324 -0.37116752
0.46204374
## 98  -1.000000000 -1.000000000 -0.190814730 0.27551170 -0.35562685
0.43096726
## 99  -1.000000000 -0.590039840 -0.296809140 0.38329917 -0.46523447
0.54242999
## 100 -1.000000000 -1.000000000 -0.467569750 0.55392779 -0.63955734
0.72439801
## 101 -1.000000000 -1.000000000 -0.479845960 0.56611074 -0.65189355
0.73714237
## 102 -1.000000000 -1.000000000 -0.350750980 0.43513527 -0.51600117
0.59320284
## 103 -1.000000000 -1.000000000 -0.444878050 0.51688424 -0.58662278
0.65402037
## 104 -1.000000000 -1.000000000 -0.360619050 0.43803412 -0.51192705
0.58216862
## 105 -1.000000000 -1.000000000 -0.450328060 0.52401226 -0.59591872
0.66598455
## 106 -1.000000000 -1.000000000 -0.469610400 0.55389697 -0.63727139
0.71967304
## 107 -1.000000000 -1.000000000 -0.264288550 0.37088712 -0.47210845
0.56769592
## 108 -1.000000000 -1.000000000 -0.195324250 0.28602035 -0.36958191
0.44573196
## 109 -1.000000000 -1.000000000 -0.326252900 0.40366683 -0.47712666
0.54648756
## 110 -1.000000000 -1.000000000 -0.288459670 0.37466362 -0.45709824
0.53560006
## 111 -1.000000000 -1.000000000 -0.242599070 0.33643484 -0.42573545
0.51029413
## 112 -1.000000000 -1.000000000 -0.565771770 0.64596649 -0.72670667
0.80799156
## 113 -1.000000000 -1.000000000 -0.494425260 0.57760342 -0.66059188
0.74335521
## 114 -1.000000000 -1.000000000 -0.347735620 0.43143655 -0.51164983
0.58823168
## 115 -1.000000000 -1.000000000 -0.244432600 0.32915651 -0.40757834
0.47946287
## 116 -1.000000000 -1.000000000 -0.193239820 0.27714724 -0.35331174
0.42145449
## 117 -1.000000000 -1.000000000 -0.209098830 0.30079797 -0.38594882
0.46428990
## 118 -1.000000000 -1.000000000 -0.237772870 0.33192182 -0.42179164
0.50718148
```

```
## 119 -1.000000000 -1.000000000 -0.287543580 0.36747554 -0.44339013
0.51513100
## 120 -1.000000000 -1.000000000 -0.061520469 0.15624053 -0.24225656
0.31922480
## 121 -1.000000000 -1.000000000 -0.222126630 0.31045335 -0.39471407
0.47472535
## 122 -1.000000000 -1.000000000 -0.354440660 0.43483460 -0.51267007
0.58783730
## 123 -1.000000000 -1.000000000 -0.186149130 0.28704377 -0.38308738
0.47404260
## 124 -1.000000000 -1.000000000 -0.251865470 0.34191301 -0.42808656
0.51020726
## 125 -1.000000000 -1.000000000 -0.223774710 0.30642740 -0.38377180
0.45560283
## 126 -1.000000000 -1.000000000 -0.675026260 0.71831361 -0.76144298
0.80448855
## 127 -1.000000000 -1.000000000 -0.614261190 0.66672427 -0.71839454
0.76930150
## 128 -1.000000000 -1.000000000 -0.308639080 0.36460785 -0.41511621
0.46002377
## 129 -1.000000000 -1.000000000 -0.489454070 0.54046837 -0.58925471
0.63579281
## 130 -1.000000000 -1.000000000 -0.549086330 0.60963773 -0.66835732
0.72522062
## 131 -1.000000000 -1.000000000 -0.541002830 0.59937062 -0.65604491
0.71100915
## 132 -1.000000000 -1.000000000 -0.540435570 0.59275448 -0.64334493
0.69220294
## 133 -1.000000000 -1.000000000 -0.504081010 0.56265834 -0.61829838
0.67094561
## 134 -1.000000000 -1.000000000 -0.427755110 0.48893105 -0.54620993
0.59949567
## 135 -1.000000000 -1.000000000 -0.566434090 0.62557390 -0.68320710
0.73932326
## 136 -1.000000000 -0.680487300 -0.548262310 0.60954239 -0.66914423
0.72704590
## 137 -1.000000000 -0.680487300 -0.558411890 0.62145750 -0.68407759
0.74628220
## 138 -1.000000000 -1.000000000 -0.657404930 0.71003887 -0.76277200
0.81566281
## 139 -1.000000000 -1.000000000 -0.689685110 0.75039303 -0.81116922
0.87205650
## 140 -1.000000000 -1.000000000 -0.591398970 0.65719938 -0.72225039
0.78655027
## 141 -1.000000000 -1.000000000 -0.585723300 0.65513657 -0.72437742
0.79345148
## 142 -1.000000000 -1.000000000 -0.615728620 0.67899622 -0.74123622
0.80244741
## 143 -1.000000000 -1.000000000 -0.613232030 0.67123531 -0.72836498
0.78463570
```

```
## 144 -1.000000000 -1.000000000 -0.504852250 0.56882660 -0.63029521
0.68920250
## 145 -1.000000000 -1.000000000 -0.525307610 0.58140220 -0.63632152
0.69006690
## 146 -1.000000000 -1.000000000 -0.641709900 0.69786243 -0.75432776
0.81116079
## 147 -1.000000000 -0.839623990 -0.693767640 0.75611985 -0.81913524
0.88286995
## 148 -1.000000000 -0.839623990 -0.639953240 0.69309217 -0.74615641
0.79919661
## 149 -1.000000000 -1.000000000 -0.551518860 0.60489810 -0.65638368
0.70596580
## 150 -1.000000000 -1.000000000 -0.520249010 0.58009806 -0.63718451
0.69145652
## 151 -1.000000000 -1.000000000 -0.711590370 0.74549269 -0.77938582
0.81337304
## 152 -1.000000000 -1.000000000 -0.691696370 0.74611330 -0.80059347
0.85519390
## 153 -1.000000000 -1.000000000 -0.689673390 0.73370248 -0.77724696
0.82037178
## 154 -1.000000000 -1.000000000 -0.738713880 0.77570897 -0.81257406
0.84940495
## 155 -1.000000000 -1.000000000 -0.700752550 0.74206418 -0.78331129
0.82457777
## 156 -1.000000000 -1.000000000 -0.659493690 0.69849569 -0.73689015
0.77474670
## 157 -1.000000000 -1.000000000 -0.609309690 0.65507854 -0.69986039
0.74369386
## 158 -1.000000000 -1.000000000 -0.602285080 0.64577203 -0.68811490
0.72935231
## 159 -1.000000000 -1.000000000 -0.694007500 0.73588676 -0.77785598
0.82000141
## 160 -1.000000000 -1.000000000 -0.664365490 0.71060955 -0.75660158
0.80240536
## 161 -1.000000000 -1.000000000 -0.643316850 0.68880634 -0.73363168
0.77784467
## 162 -1.000000000 -1.000000000 -0.632753050 0.67556424 -0.71778719
0.75948070
## 163 -1.000000000 -1.000000000 -0.645463100 0.69412773 -0.74212562
0.78950158
## 164 -1.000000000 -1.000000000 -0.600769200 0.64634149 -0.69075024
0.73402869
## 165 -1.000000000 -1.000000000 -0.622991410 0.66742360 -0.71091702
0.75351606
## 166 -1.000000000 -1.000000000 -0.693345800 0.73553943 -0.77714942
0.81824246
## 167 -1.000000000 -1.000000000 -0.676952110 0.71890130 -0.75997241
0.80022278
## 168 -1.000000000 -1.000000000 -0.742757900 0.78190413 -0.82113872
0.86055913
```

```
## 169 -1.000000000 -1.000000000 -0.655916750 0.69592184 -0.73535291
0.77427790
## 170 -1.000000000 -1.000000000 -0.681362900 0.72530748 -0.76857044
0.81121055
## 171 -1.000000000 -1.000000000 -0.700092000 0.73719057 -0.77377165
0.80991595
## 172 -1.000000000 -1.000000000 -0.666719960 0.70538486 -0.74350090
0.78114088
## 173 -1.000000000 -1.000000000 -0.627128740 0.66157765 -0.69540036
0.72867284
## 174 -1.000000000 -1.000000000 -0.631892930 0.66881889 -0.70491359
0.74024225
## 175 -1.000000000 -1.000000000 -0.662510840 0.70122988 -0.73902774
0.77596631
## 176 -1.000000000 -1.000000000 -0.473455610 0.51273804 -0.54957027
0.58395054
## 177 -1.000000000 -0.091360443 -0.964135940 0.96625316 -0.96800937
0.96959603
##                 NA           NA           NA           NA           NA
## 1    -0.745448780  0.720861670 -0.712372390  0.71130003 -0.995111590
## 2    -0.196359290  0.125344640 -0.105567720  0.10909013 -0.833882110
## 3    -0.329023040  0.270500250 -0.254490190  0.25759764 -0.705039190
## 4    -0.295035970  0.228309730 -0.206281220  0.20480094 -0.385410230
## 5    -0.166693110  0.089942719 -0.066326701  0.06713110 -0.237474450
## 6    -0.198124800  0.127185220 -0.107553950  0.11136448 -0.157905880
## 7    -0.422669540  0.373926320 -0.362168750  0.36714294 -0.127792640
## 8    -0.470618290  0.421006680 -0.405063170  0.40461434 -0.142798190
## 9    -0.328686860  0.263048380 -0.239881180  0.23635870 -0.505323810
## 10   -0.362307510  0.316049520 -0.310721180  0.32333038 -0.466952030
## 11   -0.285762790  0.238915140 -0.238750740  0.25912807 -0.167370370
## 12   -0.484089070  0.441406300 -0.431859910  0.43728063  0.021171526
## 13   -0.400009460  0.346907510 -0.332099890  0.33473553  0.006302991
## 14   -0.317627660  0.255297740 -0.236385240  0.23733237 -0.106053030
## 15   -0.964053110  0.964248120 -0.966960570  0.97066809 -0.951518250
## 16   -0.964395330  0.967252180 -0.972787590  0.97927881 -0.940622460
## 17   -0.791643830  0.778380140 -0.778726720  0.78502380 -0.639266830
## 18   -0.470771380  0.428113150 -0.419318130  0.42565287 -0.301923450
## 19   -0.337546380  0.296865180 -0.299682300  0.32152828 -0.183130920
## 20   -0.244963350  0.187904870 -0.179250640  0.19196445 -0.162003400
## 21   -0.062486800 -0.021620615  0.045996210 -0.04312949 -0.123156250
## 22    0.109212830 -0.203790030  0.227295810 -0.21856636 -0.022626448
## 23    0.230447550 -0.331849670  0.354015470 -0.34030567 -0.190580670
## 24    0.183510460 -0.278260020  0.296586980 -0.28042220 -0.316714240
## 25    0.008043701 -0.096987506  0.121400070 -0.11633103 -0.388123010
## 26   -0.071545394 -0.013900581  0.040235434 -0.03945908 -0.208013600
## 27   -0.260220910  0.202896400 -0.192802610  0.20356202 -0.004289382
## 28   -0.984173670  0.984347690 -0.985637080  0.98737139 -0.998574600
## 29   -0.982632160  0.984539100 -0.987790760  0.99150586 -0.956163560
## 30   -0.929299700  0.922465910 -0.920114090  0.91983320 -0.691133420
## 31   -0.577678190  0.553527820 -0.557018220  0.57240141 -0.869051870
```

```
## 32    -0.711745000    0.685471210   -0.677575100    0.67810177   -0.910967570
## 33    -0.895152380    0.884432260   -0.880330490    0.87931971   -0.872363150
## 34    -0.961346620    0.956292800   -0.953600890    0.95205867   -0.983576080
## 35    -0.919119570    0.917192290   -0.920745880    0.92654612   -0.869395760
## 36    -0.781131310    0.765924380   -0.764869650    0.77002243   -0.777536020
## 37    -0.122240760    0.046310231   -0.026527931    0.03224862   -0.085903518
## 38     0.049578560   -0.098345762    0.077227879   -0.02626065   -0.168744750
## 39    -0.969315550    0.972266790   -0.977558880    0.98366973   -0.780856090
## 40    -0.938824820    0.933993560   -0.933121370    0.93403491   -0.449637920
## 41    -0.897377210    0.895249560   -0.900135230    0.90790599   -0.203646010
## 42     0.111910470   -0.220717980    0.259465170   -0.26595839   -0.186718130
## 43    -0.075385241   -0.016772114    0.050518082   -0.05714992   -0.109368400
## 44    -0.236466700    0.160594320   -0.132850450    0.12736900   -0.453742780
## 45    -0.348545130    0.286844520   -0.266113250    0.26403087   -0.481352030
## 46    -0.448433230    0.396281920   -0.379129610    0.37807745   -0.444010780
## 47    -0.285944590    0.219814830   -0.199123590    0.19929379   -0.398164540
## 48    -0.160870650    0.083256247   -0.058475350    0.05762611   -0.362129490
## 49    -0.092961733    0.003779329    0.028159998   -0.03366020   -0.360176730
## 50    -0.188019060    0.107825320   -0.078919954    0.07375746   -0.409933230
## 51    -0.005762273   -0.092335612    0.127868130   -0.13457628   -0.146640730
## 52    -0.187045890    0.135312860   -0.135889740    0.15887412   -0.832275950
## 53    -0.339439020    0.281036420   -0.264605460    0.26718126   -0.808631410
## 54    -0.038813065   -0.031135897    0.038848688   -0.01895077   -0.579668580
## 55    -0.221348890    0.194995840   -0.220454030    0.26721462   -0.140759880
## 56    -0.141526310    0.094176598   -0.103037510    0.13595528   -0.271012940
## 57     0.306573700   -0.387297010    0.382754840   -0.34117922   -0.206791610
## 58     0.181139060   -0.261908900    0.266809720   -0.23882878   -0.139004550
## 59    -0.061545553    0.004389387   -0.008803287    0.04008335   -0.350043960
## 60     0.184287290   -0.272260190    0.283915310   -0.26177570   -0.371639970
## 61     0.286572690   -0.395193220    0.422459420   -0.41352851   -0.253361690
## 62     0.032344474   -0.120984460    0.143777150   -0.13682310   -0.281427940
## 63    -0.292445960    0.254737280   -0.263853590    0.29319597   -0.171894740
## 64    -0.179061280    0.138426040   -0.151889580    0.18833003   -0.023755959
## 65    -0.787071170    0.765285790   -0.756920610    0.75481311   -0.922721540
## 66    -0.924224160    0.920132570   -0.921031170    0.92407441   -0.754233710
## 67    -0.706948050    0.702555850   -0.718037200    0.74146365   -0.874731860
## 68    -0.723882070    0.706616280   -0.707378130    0.71599142   -0.881467210
## 69    -0.894215070    0.884753330   -0.882036080    0.88239440   -0.966325290
## 70    -0.671358300    0.655275340   -0.661118360    0.67641868   -0.813576390
## 71    -0.738727340    0.729112720   -0.737086790    0.75248045   -0.712867330
## 72    -0.770309170    0.777454000   -0.801194810    0.83134402   -0.713060070
## 73    -0.973143740    0.972444220   -0.973573080    0.97546566   -0.676679350
## 74    -0.941330690    0.951245930   -0.965888110    0.98206590   -0.933790090
## 75    -0.949635260    0.947537680   -0.948810340    0.95151326   -0.408618480
## 76    -0.940253910    0.941027030   -0.946012820    0.95264648   -0.285963840
## 77    -0.657268500    0.629280470   -0.623367670    0.62743125   -0.021601562
## 78    -0.350607430    0.303475580   -0.298647880    0.31272694   -0.051659786
## 79    -0.099754742    0.129245620   -0.223488660    0.34239367   -0.606712110
## 80    -0.068161568    0.113535600   -0.226374290    0.36396983   -0.492684780
## 81    -0.118568010    0.144400020   -0.232804180    0.34475926   -0.329476750
```

```
## 82   -0.106952400  0.153137890 -0.263108120  0.39569255 -0.380618660
## 83    0.047689646  0.028930751 -0.176860540  0.34588348 -0.378532500
## 84   -0.046807442  0.131256960 -0.284854140  0.46079219 -0.286379910
## 85   -0.041294148  0.122920470 -0.275167940  0.45125373 -0.196378910
## 86    0.057596692  0.018359118 -0.169733370  0.34602164 -0.212726510
## 87   -0.232992740  0.248712940 -0.318730910  0.40964336 -0.687341680
## 88    0.038672294  0.020473143 -0.151332040  0.30552225 -0.590711950
## 89    0.082676450 -0.010890732 -0.133331220  0.29867665 -0.453531020
## 90    0.191663630 -0.130978680 -0.008113428  0.17061121 -0.468941590
## 91    0.056898401  0.031283414 -0.194174910  0.38028323 -0.328284740
## 92    0.066346150  0.011601381 -0.164395770  0.34097754 -0.173692890
## 93    0.040677083  0.029603085 -0.174811330  0.34563261 -0.069104361
## 94    0.019268084  0.051523262 -0.195928250  0.36549046 -0.117631080
## 95   -0.008634217  0.070779344 -0.202519510  0.35723299 -0.179457720
## 96   -0.047982991  0.100615250 -0.219619910  0.36079441 -0.258654190
## 97   -0.078947975  0.159265960 -0.307564810  0.47874628 -0.347740870
## 98    0.053353790  0.020551892 -0.170924830  0.34763526 -0.307421080
## 99    0.087965479 -0.026423634 -0.109138230  0.26805240 -0.615837730
## 100   0.036057375  0.042628683 -0.194944860  0.37105876 -0.576484920
## 101   0.021924036  0.046105738 -0.186409030  0.35061240 -0.445075170
## 102   0.315564410 -0.254688450  0.108726010  0.06207405 -0.102513960
## 103   0.461632640 -0.416612720  0.283110620 -0.12633581 -0.100278190
## 104   0.151848070 -0.081305520 -0.070218144  0.24869322 -0.209490240
## 105   0.105184800 -0.023129792 -0.139317320  0.32919298 -0.312038090
## 106   0.002143357  0.069924373 -0.212377770  0.37732983 -0.436273250
## 107   0.223262160 -0.149179100 -0.007058513  0.18805830 -0.290295850
## 108   0.026574291  0.035516382 -0.171066670  0.33201456 -0.301419900
## 109  -0.044242162  0.101364340 -0.227132840  0.37686275 -0.295551900
## 110  -0.002453801  0.065772307 -0.198759090  0.35442966 -0.350112840
## 111   0.006303383  0.053256821 -0.183539150  0.33751013 -0.450447980
## 112   0.008839420  0.038701805 -0.158557190  0.30460422 -0.330617380
## 113  -0.028187781  0.087414329 -0.216093360  0.36868764 -0.474762880
## 114   0.098810188 -0.043192637 -0.085027304  0.23516800 -0.396928360
## 115  -0.117287060  0.184314770 -0.315127890  0.46729285 -0.358182110
## 116  -0.026230655  0.092896102 -0.229496040  0.38980803 -0.384262170
## 117   0.093353524 -0.042780514 -0.081838560  0.23050332 -0.313060750
## 118   0.054313332  0.001472635 -0.130767200  0.28482365 -0.358832620
## 119   0.014168497  0.051578740 -0.189532380  0.35184135 -0.355720290
## 120  -0.016158582  0.071039062 -0.194085410  0.33956825 -0.360476390
## 121   0.004049538  0.067381677 -0.211282790  0.37978048 -0.432463430
## 122   0.062633726  0.002303114 -0.143747020  0.31190275 -0.523320830
## 123   0.064485903 -0.002643077 -0.134032530  0.29588387 -0.529365850
## 124  -0.018115955  0.077219865 -0.206718420  0.36066776 -0.416740200
## 125  -0.055949142  0.109888850 -0.231115910  0.37568530 -0.554374750
## 126  -0.239431420  0.252144460 -0.318367270  0.40520519 -0.428667270
## 127  -0.241560110  0.247717160 -0.306522580  0.38569402  0.175934300
## 128  -0.177332430  0.185051360 -0.249192070  0.33463838 -0.130982920
## 129  -0.190714880  0.215902380 -0.298063020  0.40123905 -0.139526090
## 130  -0.132669220  0.185587930 -0.301243710  0.43900665 -0.044616092
## 131  -0.123046980  0.131700460 -0.200712440  0.29261960  0.034258273
```

```
## 132 -0.116312890  0.109293220 -0.162375010  0.23908412  0.093149074
## 133  0.052097774 -0.050635040 -0.023399090  0.12579405  0.042772249
## 134  0.100348170 -0.087986796  0.000424771  0.11519548  0.065077598
## 135 -0.252398140  0.293727750 -0.389846090  0.50609966 -0.253795890
## 136 -0.098365136  0.149467970 -0.265746380  0.40528316 -0.277572790
## 137 -0.208108640  0.216393840 -0.279282960  0.36290976 -0.117815560
## 138 -0.219652060  0.223576460 -0.281024230  0.35896475 -0.098600452
## 139 -0.344726220  0.406524600 -0.517414640  0.64494451 -0.258659260
## 140 -0.215138440  0.258673210 -0.358172060  0.47720802 -0.310501680
## 141 -0.170697310  0.174565190 -0.235850880  0.31948747 -0.211134260
## 142 -0.331851690  0.358675120 -0.433563610  0.52635679 -0.246142380
## 143 -0.107886730  0.159722110 -0.276344050  0.41617972 -0.491137950
## 144 -0.063413715  0.107095180 -0.216146530  0.34774784 -0.461048850
## 145 -0.269236530  0.264203640 -0.309005480  0.37341923 -0.105659110
## 146 -0.186713110  0.170621550 -0.209425980  0.27033994 -0.297103480
## 147 -0.333020320  0.341825930 -0.397261370  0.47066592 -0.439999330
## 148 -0.404590630  0.410926810 -0.458836430  0.52285831 -0.317468760
## 149 -0.359451860  0.369963230 -0.425467700  0.49827599 -0.348755470
## 150 -0.017718450  0.030087636 -0.110719170  0.21744334 -0.284768590
## 151 -0.675263230  0.695023900 -0.738623760  0.79086252 -0.747379540
## 152 -0.653510640  0.695237350 -0.763810620  0.84134660 -0.607567520
## 153 -0.525950800  0.539059640 -0.584278230  0.64065122 -0.585009400
## 154 -0.483135180  0.497218550 -0.546627480  0.60853797 -0.738409440
## 155 -0.403206140  0.419332580 -0.476012430  0.54689832 -0.710298550
## 156 -0.533047210  0.545892380 -0.590870990  0.64735761 -0.792386000
## 157 -0.525518750  0.554254810 -0.617456790  0.69291780 -0.747801050
## 158 -0.455740000  0.504439030 -0.593696740  0.69677013 -0.750576900
## 159 -0.674239410  0.686755180 -0.722821900  0.76778397 -0.739902760
## 160 -0.639490050  0.684405090 -0.757229210  0.83923108 -0.650495130
## 161 -0.496573400  0.513107610 -0.563931240  0.62657990 -0.605945900
## 162 -0.548078650  0.563487090 -0.609977030  0.66734220 -0.614542430
## 163 -0.477202130  0.478616980 -0.514356870  0.56235920 -0.681659030
## 164 -0.456337560  0.470627970 -0.521222540  0.58413879 -0.710690210
## 165 -0.577843260  0.615866150 -0.685090150  0.76474586 -0.818643290
## 166 -0.633427220  0.666494550 -0.726824500  0.79638158 -0.823510440
## 167 -0.525991140  0.548281460 -0.603181980  0.66899591 -0.712496360
## 168 -0.680887250  0.703767930 -0.750338170  0.80538208 -0.783673880
## 169 -0.493417480  0.532944210 -0.609394920  0.69833662 -0.694970760
## 170 -0.400648430  0.412985810 -0.465091670  0.53080213 -0.794528820
## 171 -0.540357640  0.562191680 -0.616037790  0.68084709 -0.782401720
## 172 -0.444868560  0.461486600 -0.516306780  0.58469836 -0.740308280
## 173 -0.327843230  0.331439730 -0.378604860  0.44081543 -0.838665140
## 174 -0.188826480  0.195864490 -0.254203380  0.32917246 -0.805874290
## 175 -0.292753650  0.304753830 -0.363575470  0.43855257 -0.716840380
## 176 -0.195520760  0.188603880 -0.233526390  0.29706475 -0.748958660
## 177 -0.911654730  0.919289360 -0.933570130  0.95017889 -0.915596860
##                NA           NA           NA          NA          NA
## 1    0.995674910 -0.995667590  0.9916526800  0.57022164  0.439027350
## 2    0.834271100 -0.834184380  0.8304639000 -0.83128389 -0.865711080
## 3    0.714392000 -0.723298850  0.7287554200 -0.18108991  0.337935870
```

```
## 4      0.386372720 -0.387119880  0.3852630600 -0.99130869 -0.968821390
## 5      0.239267970 -0.241012110  0.2405685100 -0.40833042 -0.184840070
## 6      0.175374770 -0.192767980  0.2079647400 -0.56395092  0.466470700
## 7      0.137692160 -0.146926820  0.1534755700  0.72642714  0.939338110
## 8      0.139172630 -0.135434780  0.1296487800 -0.93336652 -0.859225700
## 9      0.503643180 -0.501648760  0.4967645400  0.34379322  0.552759260
## 10     0.484212970 -0.501090170  0.5149291700  0.64495215 -0.029064172
## 11     0.218620190 -0.270372270  0.3202432100  0.72373488  0.215376830
## 12    -0.001330397 -0.018672222  0.0370087210 -0.35521247 -0.911459530
## 13     0.011595614 -0.029685494  0.0461286670 -0.52808146 -0.222183700
## 14     0.133064460 -0.160370660  0.1858735000  0.39554996  0.960944310
## 15     0.957372130 -0.962738430  0.9642205500  0.98203830  0.920221580
## 16     0.952431630 -0.963825770  0.9714000900  0.58269297  0.640566720
## 17     0.647699600 -0.655915240  0.6610358300 -0.58100374 -0.410601570
## 18     0.300862110 -0.299503650  0.2956171300  0.95408754  0.427760150
## 19     0.198061610 -0.212952260  0.2256588800  0.89428322  0.919807630
## 20     0.195086090 -0.228459250  0.2598830000  0.95136401  0.995251970
## 21     0.157221090 -0.191608250  0.2241376000 -0.35804548  0.877964080
## 22     0.073367805 -0.124665370  0.1743890600  0.79214304  0.957080720
## 23     0.225558840 -0.260831410  0.2940952200  0.97753979  0.775922980
## 24     0.342540240 -0.368328600  0.3916236100  0.36635015  0.150877600
## 25     0.413357490 -0.438679290  0.4615166700  0.69162658  0.570248940
## 26     0.219069060 -0.230046320  0.2387873800  0.89179034  0.959901960
## 27     0.010519388 -0.016319652  0.0199127150  0.62263572  0.258733200
## 28     0.999175350 -0.999206610  0.9952252400 -0.98517456 -0.945233300
## 29     0.964683370 -0.972761390  0.9769686900 -0.95834322 -0.278069980
## 30     0.688682950 -0.685776250  0.6795219400 -0.99885647 -0.936168000
## 31     0.889991130 -0.910690350  0.9277793600  0.02585089 -0.728764920
## 32     0.917271440 -0.923119170  0.9251761100 -0.96909418 -0.866791920
## 33     0.871945870 -0.870981160  0.8662498100 -0.99852677 -0.996976970
## 34     0.984725700 -0.985315760  0.9819241300 -0.89581954 -0.671243120
## 35     0.868714960 -0.867524820  0.8626137700 -0.97138089 -0.990379070
## 36     0.788711090 -0.799348890  0.8063054500 -0.86852325 -0.944639600
## 37     0.087409964 -0.088387918  0.0869538170 -0.53069350 -0.767875990
## 38     0.174520780 -0.180013280  0.1831680500 -0.94810473 -0.952270690
## 39     0.790717570 -0.800250910  0.8063196500 -0.30719120  0.799268600
## 40     0.451366990 -0.452747410  0.4512724100 -0.89131478  0.918474940
## 41     0.224183710 -0.244435100  0.2621744000  0.61938879 -0.760497080
## 42     0.207723600 -0.228229380  0.2460318600 -0.76603311 -0.946097870
## 43     0.141139310 -0.171557230  0.1984566200 -0.90959587 -0.791576230
## 44     0.500719930 -0.547100760  0.5900254500 -0.97755058 -0.311321020
## 45     0.487015640 -0.492218710  0.4943685200 -0.99001829 -0.904479640
## 46     0.446600500 -0.448742530  0.4479316900 -0.92829374 -0.377198760
## 47     0.416847700 -0.435317050  0.4510280600 -0.93743229 -0.677298440
## 48     0.376358590 -0.390435820  0.4019131800 -0.87399669 -0.554137560
## 49     0.369608370 -0.378707420  0.3850626600 -0.95427973 -0.835273220
## 50     0.421752860 -0.433298640  0.4420568200 -0.98835405 -0.264882550
## 51     0.147497000 -0.148001090  0.1461728500 -0.99700436 -0.861551320
## 52     0.831068260 -0.829360330  0.8240084300  0.71344010 -0.833204750
## 53     0.812373780 -0.815582320  0.8151159500 -0.62610554  0.679239450
```

```
## 54    0.596652930 -0.613329700  0.6268542300   0.91064228 -0.914827150
## 55    0.197272460 -0.253829690  0.3080469100  -0.97220071 -0.695651880
## 56    0.295550510 -0.319717660  0.3411414200  -0.35166469  0.092731035
## 57    0.226133220 -0.244962900  0.2610549900   0.27118998  0.377904520
## 58    0.163357160 -0.187325510  0.2087644300   0.29181903 -0.555117510
## 59    0.379471320 -0.408234240  0.4337825500  -0.48241492  0.414333670
## 60    0.389767000 -0.407229220  0.4215248100  -0.64717130  0.051824751
## 61    0.264468310 -0.275233880  0.2834177500  -0.47441130  0.629329100
## 62    0.304816590 -0.328216120  0.3492503300  -0.69568082  0.310742600
## 63    0.200948920 -0.230231640  0.2575152500  -0.92878609  0.873693690
## 64    0.034896525 -0.045917474  0.0549754570  -0.70337247  0.819300640
## 65    0.922525040 -0.921796880  0.9172301700  -0.96295314 -0.993694420
## 66    0.795276590 -0.836111260  0.8734130600  -0.88146847 -0.836711230
## 67    0.885410200 -0.895682390  0.9022435700   0.51011115 -0.967858160
## 68    0.883813320 -0.885667480  0.8837750000   0.98876634 -0.997552910
## 69    0.966452210 -0.966020610  0.9616457300   0.71191550 -0.970028810
## 70    0.821186720 -0.828452470  0.8321978500   0.99127114 -0.993942020
## 71    0.721670240 -0.730132850  0.7352435700   0.89506685 -0.728421370
## 72    0.718537400 -0.723689000  0.7255284800   0.94547065 -0.962165970
## 73    0.672932780 -0.668780380  0.6613662000   0.75185900 -0.926334000
## 74    0.944639830 -0.955078670  0.9616988900  -0.93818175 -0.361188150
## 75    0.405888090 -0.402799530  0.3969500200  -0.97701425  0.113494580
## 76    0.297196390 -0.308424340  0.3173553600   0.08318704  0.235487630
## 77    0.066588285 -0.111901860  0.1554537100   0.97611743  0.494528610
## 78    0.090316481 -0.128986390  0.1655723000  -0.20880065  0.281598180
## 79    0.622532570 -0.637410590  0.6484640600  -0.87349292  0.239456570
## 80    0.523359330 -0.552376140  0.5769215500   0.44531729 -0.600650870
## 81    0.353549930 -0.375452750  0.3926931800   0.41248045  0.320266980
## 82    0.410371510 -0.438228360  0.4615731700   0.66525584  0.255814490
## 83    0.408581420 -0.436513360  0.4597097400   0.31343582 -0.057588718
## 84    0.313574730 -0.338306470  0.3581308000   0.66276173  0.023355027
## 85    0.221719880 -0.244104770  0.2612491000   0.73906445  0.116705590
## 86    0.236869720 -0.258241770  0.2745430800   0.43451894  0.171703860
## 87    0.699412040 -0.710891760  0.7188364300   0.71172858  0.727250570
## 88    0.621435120 -0.651822260  0.6789276800   0.32183430  0.033600534
## 89    0.479009740 -0.503153730  0.5232626900   0.44108521 -0.863327770
## 90    0.493811040 -0.517253810  0.5365476600   0.17348556  0.289327590
## 91    0.354566650 -0.378828500  0.3985654000   0.69239516  0.297806810
## 92    0.200315390 -0.224235230  0.2431990300  -0.67805898  0.435077410
## 93    0.097009331 -0.121154500  0.1394392400   0.83920104 -0.004006592
## 94    0.142179830 -0.163425810  0.1792176900   0.88510266  0.062120950
## 95    0.203614540 -0.225199570  0.2419723200  -0.55384003 -0.495752520
## 96    0.285879260 -0.310771040  0.3309361600   0.04022618 -0.130761620
## 97    0.377825130 -0.405520390  0.4282589300   0.93883707  0.604117640
## 98    0.332752830 -0.355764380  0.3739956300   0.80691160 -0.298653240
## 99    0.639045540 -0.661636520  0.6806838700  -0.84847859 -0.525171250
## 100   0.600471680 -0.623768430  0.6434869900   0.89779553 -0.151142620
## 101   0.471328320 -0.495864500  0.5159817900   0.90084112 -0.927033950
## 102   0.129675480 -0.153653180  0.1723037600   0.59841340  0.080005908
## 103   0.125489930 -0.147644430  0.1646196700  -0.45287074 -0.161664620
```

```
## 104   0.241799230 -0.270851420  0.2942812800 -0.53239076 -0.480918580
## 105   0.340206120 -0.365763610  0.3862122900  0.35216295  0.512658810
## 106   0.458281860 -0.478536450  0.4943892200  0.75683291  0.606897730
## 107   0.319601980 -0.346186740  0.3675805300 -0.73264336  0.520436380
## 108   0.336046630 -0.368014660  0.3947950500 -0.72015327 -0.199947980
## 109   0.322975940 -0.348205680  0.3687827900 -0.09442878 -0.127943620
## 110   0.374755040 -0.397356880  0.4153870600  0.72059285  0.659739100
## 111   0.473441050 -0.494779050  0.5117767000  0.83727363  0.635741710
## 112   0.366039030 -0.399772260  0.4292457700  0.87494398  0.902083700
## 113   0.504596260 -0.532905590  0.5569133300  0.75452628  0.620291710
## 114   0.423096740 -0.447578010  0.4677548900 -0.38226714  0.721941400
## 115   0.386163640 -0.411755950  0.4323838300 -0.14600036 -0.465935210
## 116   0.408815090 -0.431418620  0.4494892900 -0.42798921 -0.705118080
## 117   0.340738020 -0.366107650  0.3866819300  0.68729290 -0.399465090
## 118   0.388129390 -0.415033160  0.4369640300  0.84484609 -0.075888355
## 119   0.378647930 -0.399538270  0.4158725500  0.56627034 -0.517643810
## 120   0.382774870 -0.403194380  0.4192135500 -0.44440783 -0.370949200
## 121   0.459023120 -0.483846940  0.5042659300  0.54330432 -0.205541080
## 122   0.552047150 -0.579394210  0.6025320800 -0.17878686  0.428122070
## 123   0.556836560 -0.582841040  0.6045343600  0.49664501 -0.142182270
## 124   0.440611700 -0.462875130  0.4808997300  0.44906327 -0.259309540
## 125   0.580970180 -0.606709800  0.6287190600  0.88543089 -0.352648320
## 126   0.443319770 -0.456962040  0.4670266500  0.71524040 -0.091057486
## 127  -0.163759170  0.154714730 -0.1503460400  0.87050378  0.187198350
## 128   0.148854710 -0.165080020  0.1775832700  0.39342479 -0.186650520
## 129   0.155075740 -0.169673290  0.1812426600  0.42504082  0.629553250
## 130   0.063631082 -0.081530003  0.0963706790  0.55000463 -0.188316560
## 131  -0.013638855 -0.005635923  0.0217528000  0.94437565 -0.047818796
## 132  -0.079275363  0.066341130 -0.0560056730  0.91198261  0.202728440
## 133  -0.028934846  0.016402542 -0.0069305298  0.53169324 -0.604102660
## 134  -0.039585949  0.017099742  0.0005580002  0.81986039  0.411259660
## 135   0.278787530 -0.303333860  0.3251063200 -0.03677365  0.336244410
## 136   0.299676590 -0.320642960  0.3381734300 -0.23882202  0.849711940
## 137   0.136060400 -0.153267330  0.1673980900 -0.68978444 -0.770697170
## 138   0.109674810 -0.119870190  0.1272198200 -0.32629363 -0.928492690
## 139   0.273793330 -0.287847140  0.2985497500 -0.65797078 -0.897171080
## 140   0.331896350 -0.352831050  0.3709028600 -0.38613342 -0.922121840
## 141   0.239470160 -0.267664120  0.2934450200 -0.78373962 -0.918658850
## 142   0.274117050 -0.300988540  0.3244371500  0.24988127 -0.191714220
## 143   0.514621630 -0.537463080  0.5569256100  0.22725026  0.714952030
## 144   0.484346610 -0.506763450  0.5256260400  0.87173358  0.837799090
## 145   0.123771100 -0.140616960  0.1541618300 -0.07839806 -0.942720700
## 146   0.319270570 -0.341029010  0.3600236500  0.64025948 -0.885901970
## 147   0.458115650 -0.475356430  0.4891963800  0.31579481 -0.705501730
## 148   0.336138470 -0.354449210  0.3700180400  0.24110468 -0.912397980
## 149   0.372810560 -0.396527180  0.4174181300  0.15866611 -0.547409670
## 150   0.303655040 -0.321820780  0.3369271700  0.11076980  0.084307029
## 151   0.758377300 -0.768719430  0.7753169900  0.98651233 -0.862856940
## 152   0.629121000 -0.649276050  0.6650901600  0.93183045  0.354264290
## 153   0.596472430 -0.606724480  0.6129403600  0.43183190 -0.713109960
```

```
## 154    0.749239100 -0.759332080   0.7656135200   0.89569747   0.124088250
## 155    0.723114840 -0.735118950   0.7432700100   0.84115587  -0.041473117
## 156    0.804854500 -0.816661560   0.8246365800   0.06010632  -0.658902840
## 157    0.761888770 -0.775255140   0.7848079100   0.26464963   0.086925372
## 158    0.765626900 -0.779992490   0.7905554400   0.70677488   0.530102670
## 159    0.753497510 -0.766319990   0.7752719100   0.99209148  -0.901002160
## 160    0.667315350 -0.683074190   0.6947971700   0.84790318  -0.384687140
## 161    0.622374980 -0.637560820   0.6486052500   0.80064701  -0.842538160
## 162    0.629120390 -0.642500220   0.6517838500   0.90625510  -0.407668600
## 163    0.695156190 -0.707593120   0.7159662000   0.61816113  -0.524591540
## 164    0.723892700 -0.736135420   0.7443694700   0.44915050  -0.531252010
## 165    0.833893560 -0.848512370   0.8592572600   0.60537139   0.056029641
## 166    0.835762060 -0.847399400   0.8551929300   0.90642551   0.349217640
## 167    0.723309070 -0.733234880   0.7392402100   0.68870615  -0.443331740
## 168    0.797803170 -0.811248760   0.8208357200   0.98684675  -0.768665820
## 169    0.710344420 -0.724745060   0.7351338300   0.83130464  -0.352632930
## 170    0.810154990 -0.825099100   0.8361552700   0.86715669  -0.953762220
## 171    0.797821360 -0.812505720   0.8232727400   0.76504049  -0.402676860
## 172    0.752327780 -0.763554160   0.7709008200   0.01354760   0.131007640
## 173    0.850564300 -0.861947090   0.8695660500   0.51487177  -0.362473390
## 174    0.818561020 -0.830638270   0.8389079900  -0.35165731  -0.349386420
## 175    0.730506590 -0.743232840   0.7519571300  -0.05925671  -0.841905640
## 176    0.760235280 -0.770698650   0.7772508800   0.67969938  -0.463183230
## 177    0.937703380 -0.959486460   0.9776346300   0.80565264  -0.672227670
##                  NA          NA             NA           NA            NA
## 1      0.986913120  0.077996345   0.0050008031  -0.0678308080  -0.993519060
## 2      0.974385620  0.074006709   0.0057711041   0.0293766330  -0.995548140
## 3      0.643416990  0.073635962   0.0031040366  -0.0090456308  -0.990742810
## 4      0.984255520  0.077320614   0.0200576420  -0.0098647722  -0.992697370
## 5      0.964796510  0.073444363   0.0191215740   0.0167799790  -0.996420170
## 6      0.443097110  0.077932436   0.0186840460   0.0093444336  -0.994813600
## 7      0.879101780  0.082170765  -0.0170146700  -0.0157981660  -0.995205610
## 8      0.982184820  0.072364228   0.0087478559  -0.0044681354  -0.995272810
## 9      0.968300300  0.075284365   0.0307627040   0.0112119500  -0.996478920
## 10    -0.536138930  0.076369318   0.0125189060   0.0030843751  -0.991155610
## 11     0.821874820  0.071396860   0.0168424410   0.0010303821  -0.991233560
## 12     0.245477790  0.076084514  -0.0023115579  -0.0076736296  -0.998179330
## 13     0.882135060  0.077102002   0.0170271670  -0.0009852394  -0.999191610
## 14     0.384975110  0.077612380   0.0194892230   0.0152076830  -0.996985350
## 15     0.974533900  0.066656163  -0.0683670840  -0.0336076010  -0.990271120
## 16     0.961074840  0.074659313  -0.0012810862  -0.0266366720  -0.995055280
## 17     0.830744770  0.076711586   0.0122518650   0.0100573250  -0.994814890
## 18     0.167302200  0.075254470   0.0154195350   0.0166259460  -0.994978810
## 19     0.990297720  0.075021356   0.0042103143  -0.0051048322  -0.995768510
## 20     0.962633710  0.076113384   0.0184277100  -0.0060482131  -0.996673670
## 21     0.102623770  0.075342269   0.0180557180  -0.0049718288  -0.996116980
## 22     0.852433970  0.073413536   0.0045245992  -0.0058944060  -0.995506170
## 23     0.681226220  0.076943687   0.0054829780   0.0016020823  -0.995691600
## 24     0.968837730  0.078642693   0.0165033420  -0.0000485152  -0.996716670
## 25     0.973541910  0.074924981   0.0099539071   0.0006878857  -0.996835710
```

```
## 26    0.979830540  0.074219489  0.0044872377   0.0069293456 -0.996053380
## 27    0.466436050  0.073460968  0.0183722900   0.0014363240 -0.996564060
## 28    0.987133020  0.138057620 -0.3477709900  -0.3352723300 -0.981223570
## 29    0.540735820  0.089548399 -0.0343179740   0.0030597368 -0.992434530
## 30    0.950806810  0.071215441  0.0442441190   0.0203581570 -0.994612200
## 31   -0.639333980 -0.013591322  0.1206858500   0.2287041500 -0.883830410
## 32    0.717182600  0.050456562  0.0908303650   0.0053317431 -0.858030370
## 33    0.990836480  0.178438080 -0.1196644300  -0.2591403400 -0.922428320
## 34    0.271506460  0.098998778 -0.0746125650  -0.0073366086 -0.989699990
## 35    0.929377380  0.062975489  0.0341588900   0.0331706110 -0.993580120
## 36    0.666802380  0.075591498  0.0116948920  -0.0072211967 -0.997407150
## 37   -0.128923090  0.072773826  0.0035293806  -0.0006003336 -0.996468410
## 38    0.973579370  0.076218027  0.0094053857  -0.0080907158 -0.994884130
## 39    0.268684510  0.075301588  0.0826503270  -0.0089599647 -0.984343970
## 40   -0.646515620  0.084520112 -0.0189467350   0.0076682065 -0.990514610
## 41   -0.024223901  0.082081964 -0.0058534975   0.0032024153 -0.994473930
## 42    0.812565330  0.072683070  0.0197391120   0.0040143460 -0.992640490
## 43    0.874763930  0.072130253  0.0199205290  -0.0014860567 -0.993879160
## 44    0.242171380  0.076807626 -0.0042927307  -0.0069884353 -0.995206100
## 45    0.945952940  0.077934405  0.0148880200   0.0120860990 -0.993581830
## 46    0.569817180  0.071543556  0.0196472980  -0.0037668634 -0.992373120
## 47    0.392944760  0.074515662  0.0092694454  -0.0102917220 -0.992774130
## 48    0.086551571  0.078187780  0.0090189325   0.0128729720 -0.992763620
## 49    0.654329420  0.078228258  0.0054201733   0.0013550663 -0.992651140
## 50    0.153320440  0.073647802  0.0083841697  -0.0050818355 -0.993966930
## 51    0.877167310  0.068868220  0.0202240210   0.0069050846 -0.993094440
## 52   -0.898543550  0.023446864  0.0008133385   0.0528113250 -0.947453380
## 53   -0.996068180  0.067178002  0.0156378930  -0.0161861860 -0.992880800
## 54   -0.955034480  0.082498475  0.0083569472   0.0002341825 -0.994888470
## 55    0.775027790  0.073995503  0.0137821200  -0.0073714967 -0.994390370
## 56   -0.746061530  0.077122435  0.0113804070   0.0034761282 -0.994839380
## 57   -0.180067970  0.075608951  0.0123352010   0.0013993239 -0.992366820
## 58   -0.721079260  0.075657984  0.0050748365  -0.0012262263 -0.991940150
## 59   -0.988800920  0.073531787  0.0108241420  -0.0019587455 -0.994697720
## 60   -0.648336420  0.073964485  0.0149245390  -0.0019185204 -0.994359080
## 61   -0.970849660  0.078027424  0.0085359751  -0.0052980182 -0.992207760
## 62   -0.897687630  0.079217587  0.0138712920   0.0020966176 -0.992520960
## 63   -0.720809110  0.074492793  0.0154218820   0.0049166674 -0.993315350
## 64   -0.936930860  0.072594696  0.0102755190  -0.0026395340 -0.991304410
## 65    0.981097850  0.334817790 -0.0873422420  -0.2407832200 -0.919918000
## 66    0.906745080  0.071098045  0.0268274720   0.0401078460 -0.982586510
## 67   -0.548424810 -0.043507411 -0.0537663920   0.1950341900 -0.877628090
## 68   -0.994614660  0.113142680  0.0748063110  -0.1038263700 -0.872571160
## 69   -0.859921620  0.208875360  0.1137279700  -0.2230381700 -0.964188900
## 70   -0.996457210 -0.048777316  0.1454851700   0.1047531500 -0.838929220
## 71   -0.943775260  0.020624221 -0.2687057200   0.2369391400 -0.648242810
## 72   -0.994245840  0.170611230 -0.3848919000  -0.0286405250 -0.673699350
## 73   -0.939956150  0.111612640  0.3056408000  -0.2212343400 -0.905100280
## 74    0.048449226  0.067194990  0.2242566400  -0.0003273832 -0.974636590
## 75   -0.310577430  0.077417432 -0.0373598080   0.0074256146 -0.975668680
```

```
## 76    0.904180110  0.080899203 -0.0004153396 -0.0171794540 -0.992719750
## 77    0.312249470  0.067279115  0.0083881751  0.0005915270 -0.991557230
## 78   -0.941668150  0.071901676  0.0187174500  0.0076429677 -0.987959580
## 79   -0.534151790 -0.156485650 -0.1428529600 -0.1130786900 -0.183759390
## 80   -0.627843410 -0.207554100  0.3578428400 -0.4524009300 -0.108350280
## 81    0.252241800  0.201604470  0.4170822900  0.1390781700 -0.177694590
## 82   -0.133809850  0.336084530 -0.4641435800 -0.0050257445 -0.120486230
## 83    0.645216400 -0.235623390 -0.1117772300  0.1726546000 -0.192433450
## 84    0.382390370  0.115929910  0.2346673100  0.3615051800 -0.245777010
## 85    0.509550280  0.304833180 -0.0949930430 -0.3623950100 -0.101732920
## 86    0.351213560 -0.209168400  0.1750054800 -0.4204220700 -0.015193506
## 87    0.645322810 -0.094394668  0.0130173540 -0.3057948900 -0.306508850
## 88   -0.054385473 -0.174053690 -0.0443091430 -0.3165089400 -0.203232890
## 89   -0.574076020  0.314329000 -0.0372607860 -0.1085885700 -0.172193860
## 90   -0.045858428  0.467070360 -0.3792151900 -0.1268068900 -0.100570230
## 91    0.256652900 -0.233325630  0.0265853330  0.3406615700 -0.155911050
## 92   -0.851399720  0.019032962  0.0742491220  0.2957863500 -0.166518850
## 93   -0.191256020  0.165116690 -0.2504743500 -0.2625337800 -0.116757960
## 94    0.082660132 -0.241610750  0.4464715300 -0.0948297600 -0.043791913
## 95    0.602097130  0.407987300  0.3678247900 -0.1230161700  0.006994980
## 96    0.275045700  0.398623910 -0.3450005200 -0.1626956300 -0.052666233
## 97    0.696189220 -0.168554860  0.0119773580  0.0863083980 -0.080002637
## 98    0.161180140 -0.343985330  0.1807708000  0.3183324700 -0.165296320
## 99    0.481707640 -0.190761150 -0.1583020400  0.2725886000 -0.067573384
## 100  -0.361134430  0.339357550  0.4257825400  0.6341734700  0.015954634
## 101  -0.778051520  0.211715740 -0.2848952700 -0.1670799700 -0.028529194
## 102   0.113480380 -0.190437770 -0.1273733200 -0.4591333100 -0.029343053
## 103  -0.086856164  0.188408430 -0.0879396530 -0.3554996400 -0.138967400
## 104   0.491346450 -0.084283367  0.1847861400  0.1706285300 -0.132180330
## 105   0.663215600  0.010782856  0.4406822900  0.4735210900 -0.154281980
## 106   0.644840960  0.417746730 -0.3286508400  0.0480783450 -0.154156990
## 107  -0.601808030 -0.003779975 -0.1876454800 -0.2286138700 -0.048773463
## 108   0.168341230 -0.075184253  0.2401121600 -0.2585320000 -0.081203975
## 109   0.804548380  0.214735190  0.0021294310 -0.1875924800 -0.149044530
## 110   0.752382030  0.258650270  0.1510203900  0.1489838700 -0.134061310
## 111   0.641621310 -0.052428623  0.1236930500  0.4027455800 -0.132332080
## 112   0.712506880  0.118254500 -0.0594443710 -0.2554362700 -0.099484175
## 113   0.405014100 -0.016628142  0.5689210800  0.1096554600 -0.077463994
## 114  -0.142386980  0.548094300 -0.3875254600 -0.2793576300 -0.107695090
## 115   0.596167480 -0.219411530  0.0067696189  0.3014996000 -0.161299810
## 116   0.805479120 -0.137826910  0.4212174900  0.5068525800 -0.136236910
## 117   0.055347045  0.103059910 -0.0848261910 -0.1039181400 -0.050928555
## 118   0.310775340 -0.107255220 -0.1873341500 -0.1942098500 -0.075799301
## 119   0.092635442  0.214080770  0.3603799200 -0.0535014130 -0.279295880
## 120   0.226054650  0.217744060  0.2127059300 -0.0285857280 -0.206294530
## 121   0.453672010  0.209887130 -0.1347085800 -0.2499206800 -0.194930900
## 122  -0.201568730  0.286666310 -0.3148356000 -0.1748524100 -0.298516860
## 123   0.545848530 -0.122078530 -0.0434879800  0.1870542800 -0.165196810
## 124   0.596735810 -0.211966890  0.4013102700  0.3730073200 -0.175027750
## 125  -0.005902113  0.363110680  0.1096555800  0.2532334300 -0.224437300
```

```
## 126   0.547209130   0.235245310  -0.0872843120  -0.2325005900  -0.200001900
## 127  -0.044879171   0.064722433   0.0191436880  -0.0376538540  -0.102357440
## 128  -0.894905430  -0.050868561   0.1660133700   0.0862155460  -0.108034870
## 129  -0.176293750   0.050938870  -0.1113879200  -0.0045744093  -0.146832720
## 130   0.548787320   0.040674030   0.1021472600  -0.0359838610  -0.020238208
## 131   0.011255252   0.080449991   0.0184962280  -0.0373983150   0.076303518
## 132   0.363778400   0.061859802  -0.2050451900   0.0576146700  -0.018679711
## 133   0.077000456   0.095443820   0.1689441200  -0.0010016119  -0.158220380
## 134   0.433582350   0.151735920   0.1446437700   0.0303200370  -0.150928110
## 135   0.906917770   0.687953240  -0.4419585300  -0.5896136700   0.143107700
## 136  -0.423227280  -0.256898380   0.5372408400  -0.0714068540   0.099840220
## 137   0.545577710  -0.559407300   0.4256903500   0.5381009000   0.118392000
## 138   0.387152240   0.980744870  -0.2800604600   0.0131591090   0.028711668
## 139   0.527258700  -0.034196065   0.0597933390  -0.2308162200   0.006773371
## 140   0.052119243  -0.704677250   0.0864354670   0.1433560800  -0.032614521
## 141   0.780254940   0.428841110  -0.1376142400   0.1692343900   0.089649652
## 142   0.834842200   0.118043190   0.1139529100  -0.3050968000   0.067093081
## 143   0.659360170   0.089117723  -0.0845591730  -0.2150997600  -0.038407463
## 144   0.847371130  -0.362161060   0.3708422100   0.2295983000  -0.024438340
## 145   0.089188313   0.685996950   0.2129494100   0.4817403800  -0.020320637
## 146  -0.313314120   0.015294316  -0.0498282800   0.1198283400   0.034117539
## 147   0.407317270  -0.590869370  -0.3249653700  -0.1579199300  -0.066281915
## 148   0.136803510  -0.044109007  -0.0635900920   0.1629078500  -0.078617141
## 149   0.667920020   0.357621140   0.0197793620  -0.2232394100  -0.064489453
## 150   0.966676110   0.403938740  -0.1718263000  -0.3988958200  -0.117084990
## 151  -0.906091640   0.258792030   0.1193859600  -0.2051499200  -0.445288550
## 152   0.415180250   0.148659380   0.0586346650  -0.1544199200  -0.477078070
## 153  -0.710356770   0.089970801  -0.2916739600  -0.1479336700  -0.538209660
## 154  -0.048501791   0.176722150  -0.3540711200  -0.2084566700  -0.537405680
## 155  -0.278620680   0.044047372   0.0344983470   0.0775574880  -0.441187420
## 156   0.259165960   0.086751502   0.5604675500   0.0915130980  -0.464719770
## 157   0.506763160   0.194654920   0.2603176700  -0.0287421350  -0.441904390
## 158   0.906318440   0.070654620   0.0705395350  -0.0064084210  -0.409538290
## 159  -0.911449270   0.267437420  -0.0705667480   0.0759125570  -0.313530450
## 160  -0.057737008   0.086863388  -0.0267594190   0.0999811450  -0.434754270
## 161  -0.701384190   0.008066030   0.1379564000  -0.0633075700  -0.463561400
## 162  -0.456865870   0.039049000   0.0284653910  -0.0362518220  -0.427609330
## 163  -0.359810660   0.274269550  -0.1399973400  -0.2442736300  -0.493825960
## 164   0.220448990   0.325674940  -0.1275652100  -0.3141268800  -0.467301110
## 165   0.594359980   0.110696690   0.0317080250  -0.0341938690  -0.473883900
## 166   0.624397820   0.101271960   0.0457763380   0.0126269120  -0.581873170
## 167  -0.247222870   0.052027741  -0.1042386200  -0.0909498880  -0.617957660
## 168  -0.768951830   0.010085806   0.1191370700  -0.0111471950  -0.500078590
## 169  -0.233242460   0.016190236  -0.0161323150   0.0782427890  -0.448210670
## 170  -0.852560540   0.108216930   0.0416162090  -0.1501772800  -0.494364750
## 171  -0.108168090   0.147267310  -0.1237184300  -0.2547978100  -0.545926780
## 172  -0.680209530   0.229583240  -0.1810039400  -0.2078768100  -0.519578220
## 173  -0.743767540   0.574636930   0.0801532080  -0.2826905500  -0.541822780
## 174  -0.655597380   0.488786420  -0.0399668480  -0.2226502800  -0.472035930
## 175  -0.208683570  -0.160199340   0.0569312770   0.0339323830  -0.475631460
```

```
## 176 -0.472478830 -0.425138080  0.2854096400  0.1578803100 -0.380841480
## 177 -0.105152830  0.091262612  0.0324653990 -0.0673580840 -0.994961900
##                 NA           NA           NA           NA           NA
NA
## 1    -0.988359990 -0.99357497 -0.994487630 -0.986206640 -0.9928183 -
0.98518010
## 2    -0.981063630 -0.99184570 -0.995632010 -0.978938010 -0.9912766 -
0.99454467
## 3    -0.980955610 -0.98968664 -0.990932910 -0.979300230 -0.9872381 -
0.98707696
## 4    -0.987552750 -0.99349757 -0.994265990 -0.985717040 -0.9914832 -
0.98707696
## 5    -0.988358710 -0.99245490 -0.996597350 -0.986536990 -0.9906864 -
0.99699333
## 6    -0.988714460 -0.99226635 -0.995241850 -0.986846750 -0.9910667 -
0.99410538
## 7    -0.984830790 -0.98842507 -0.995813340 -0.982681080 -0.9890392 -
0.99410538
## 8    -0.981291220 -0.99033964 -0.994898670 -0.978238620 -0.9921423 -
0.99592693
## 9    -0.980051270 -0.99666607 -0.996198130 -0.977607080 -0.9972827 -
0.99624001
## 10   -0.969200300 -0.98861504 -0.991767830 -0.965863980 -0.9897454 -
0.98597618
## 11   -0.973264340 -0.98501751 -0.991621520 -0.972164390 -0.9833564 -
0.98597618
## 12   -0.989788340 -0.98953173 -0.998262250 -0.988061460 -0.9866765 -
0.99852895
## 13   -0.990138390 -0.99282486 -0.999504750 -0.988476800 -0.9905351 -
0.99923672
## 14   -0.992369560 -0.99303630 -0.997119630 -0.991140270 -0.9920527 -
0.99749900
## 15   -0.984291370 -0.99104766 -0.990696350 -0.984265140 -0.9916588 -
0.99062812
## 16   -0.995274560 -0.99513244 -0.995218180 -0.993546800 -0.9939791 -
0.99700681
## 17   -0.992430020 -0.99605297 -0.994166340 -0.990707000 -0.9951498 -
0.99515424
## 18   -0.991455080 -0.99562514 -0.994772090 -0.990169370 -0.9957341 -
0.99515424
## 19   -0.992451390 -0.99513475 -0.995752520 -0.990875480 -0.9937237 -
0.99595150
## 20   -0.992759960 -0.99654064 -0.997025640 -0.991220920 -0.9943137 -
0.99574132
## 21   -0.993432650 -0.99397220 -0.996078400 -0.992271780 -0.9921394 -
0.99574132
## 22   -0.986806620 -0.99249984 -0.995108390 -0.986438510 -0.9909111 -
0.99618842
## 23   -0.982921260 -0.99269663 -0.995384950 -0.981648650 -0.9915791 -
0.99654598
```

```
## 24   -0.985917240 -0.99281698 -0.996893860 -0.983301900 -0.9919086 -
0.99654598
## 25   -0.986723190 -0.99262375 -0.997165240 -0.983652920 -0.9920911 -
0.99555399
## 26   -0.986718160 -0.99156012 -0.995611660 -0.984208310 -0.9903089 -
0.99555399
## 27   -0.989278050 -0.99108795 -0.996426660 -0.987922070 -0.9898596 -
0.99771185
## 28   -0.966142280 -0.98349118 -0.984479970 -0.964888940 -0.9798738 -
0.96486615
## 29   -0.988256470 -0.99383772 -0.992234200 -0.986365880 -0.9923553 -
0.99266528
## 30   -0.992919650 -0.99189025 -0.995024940 -0.991945740 -0.9903775 -
0.99328446
## 31   -0.854606770 -0.91135086 -0.915010570 -0.890018190 -0.9258826 -
0.88057608
## 32   -0.840024830 -0.89622040 -0.858601540 -0.844970700 -0.8957187 -
0.88057608
## 33   -0.936468880 -0.95518789 -0.935239300 -0.937649230 -0.9605942 -
0.88539175
## 34   -0.981159620 -0.99574605 -0.988909530 -0.978540760 -0.9965631 -
0.98903533
## 35   -0.991023010 -0.99890280 -0.993496170 -0.991060790 -0.9989160 -
0.99535089
## 36   -0.992114490 -0.99739047 -0.997983060 -0.990702780 -0.9974220 -
0.99797454
## 37   -0.991192520 -0.99673754 -0.997027120 -0.988084560 -0.9970939 -
0.99694780
## 38   -0.990503540 -0.99724301 -0.995505310 -0.988194610 -0.9968794 -
0.99694780
## 39   -0.971826610 -0.98618311 -0.985628930 -0.971620010 -0.9855704 -
0.98520702
## 40   -0.990763450 -0.99205386 -0.991993220 -0.989459320 -0.9907162 -
0.98579014
## 41   -0.992275590 -0.99127045 -0.994524140 -0.990021030 -0.9897306 -
0.99586930
## 42   -0.990641980 -0.99159452 -0.993058150 -0.988808600 -0.9904440 -
0.99586930
## 43   -0.990245100 -0.99233342 -0.994537510 -0.988538410 -0.9916062 -
0.99627631
## 44   -0.990595580 -0.99252449 -0.996152090 -0.988637560 -0.9915250 -
0.99338939
## 45   -0.990723860 -0.99559271 -0.993941700 -0.989928320 -0.9951304 -
0.99338939
## 46   -0.993282680 -0.99748080 -0.991837970 -0.993061620 -0.9966788 -
0.99321621
## 47   -0.990433650 -0.99643207 -0.992091420 -0.989484290 -0.9951338 -
0.99321621
## 48   -0.989421000 -0.99458711 -0.992979030 -0.988253990 -0.9934146 -
0.99114555
```

```
## 49   -0.993655240 -0.99346867 -0.993299360 -0.992327800 -0.9940206 -
0.99114555
## 50   -0.991964580 -0.99592536 -0.994017680 -0.990282480 -0.9958651 -
0.99622679
## 51   -0.990784420 -0.99439585 -0.993186000 -0.988619620 -0.9927711 -
0.99360989
## 52   -0.897225970 -0.97816837 -0.962701190 -0.930825130 -0.9786286 -
0.92793835
## 53   -0.989433830 -0.99164836 -0.992300990 -0.988141450 -0.9914639 -
0.99439487
## 54   -0.991402080 -0.99377178 -0.994836790 -0.990255760 -0.9940901 -
0.99508617
## 55   -0.993177630 -0.99618103 -0.994058710 -0.992352430 -0.9960705 -
0.99508617
## 56   -0.993519150 -0.99515973 -0.994996010 -0.992629490 -0.9946978 -
0.99414483
## 57   -0.992718160 -0.99163610 -0.993368910 -0.992091750 -0.9909842 -
0.99414483
## 58   -0.990565450 -0.99262026 -0.992651540 -0.989068960 -0.9919948 -
0.99432830
## 59   -0.991532210 -0.99342673 -0.995380510 -0.989653810 -0.9930119 -
0.99432830
## 60   -0.987818700 -0.99296768 -0.994749720 -0.985410220 -0.9924540 -
0.99494744
## 61   -0.986267070 -0.99270232 -0.993032860 -0.982919210 -0.9906796 -
0.98892227
## 62   -0.992573030 -0.99280008 -0.992398350 -0.990845380 -0.9916914 -
0.98892227
## 63   -0.994462850 -0.99278437 -0.992605820 -0.993243220 -0.9911691 -
0.99566268
## 64   -0.993924680 -0.99287189 -0.991366850 -0.992398460 -0.9915107 -
0.99072111
## 65   -0.867413190 -0.92903150 -0.924648990 -0.893316190 -0.9349375 -
0.88801132
## 66   -0.984591270 -0.98081566 -0.983024860 -0.982169410 -0.9814285 -
0.97690074
## 67   -0.650658420 -0.83940869 -0.906737460 -0.759941000 -0.8756858 -
0.84159466
## 68   -0.642571010 -0.83199907 -0.889415560 -0.719047230 -0.8465634 -
0.84159466
## 69   -0.915076730 -0.95496396 -0.961634200 -0.908623440 -0.9505957 -
0.96690184
## 70   -0.795810290 -0.88210340 -0.857365800 -0.794778400 -0.8857757 -
0.86106539
## 71   -0.250329280 -0.61258935 -0.667578850 -0.329090810 -0.6495969 -
0.66929362
## 72   -0.269855940 -0.62029149 -0.734769490 -0.412905870 -0.6911595 -
0.66929362
## 73   -0.886016310 -0.91145828 -0.931430880 -0.909094390 -0.9331421 -
0.92222385
```

```
## 74   -0.965322160 -0.98959311 -0.976988530 -0.959784710 -0.9867401 -
0.96556434
## 75   -0.980063760 -0.99261290 -0.979368280 -0.976929880 -0.9918730 -
0.96556434
## 76   -0.989945920 -0.99590479 -0.992661180 -0.987690500 -0.9955515 -
0.99031500
## 77   -0.992394840 -0.99242860 -0.991050180 -0.990320850 -0.9915630 -
0.99470645
## 78   -0.989340570 -0.99198477 -0.987589530 -0.987666290 -0.9906788 -
0.99037114
## 79   -0.170461310 -0.61382990 -0.210307030 -0.140387990 -0.5930221 -
0.36942707
## 80   -0.018692846 -0.54755884 -0.028263575  0.067002906 -0.5062342 -
0.36942707
## 81   -0.029600637 -0.57950713 -0.109807680  0.027306274 -0.5520512 -
0.35544828
## 82    0.028659631 -0.52146493 -0.085775674  0.086727546 -0.4734107 -
0.30559988
## 83    0.053981333 -0.46932414 -0.175104660  0.070314520 -0.4589901 -
0.30559988
## 84   -0.020566631 -0.46593017 -0.216902080  0.009841188 -0.4785015 -
0.43529213
## 85   -0.053477323 -0.49861984 -0.092333612  0.027063423 -0.4651603 -
0.24240676
## 86    0.005125592 -0.49424157 -0.032079098  0.083122529 -0.4391614 -
0.11290963
## 87   -0.068948743 -0.60594792 -0.261808460 -0.082266065 -0.5743908 -
0.62345012
## 88    0.071281747 -0.50076699 -0.142046750  0.115225310 -0.4967143 -
0.52404551
## 89   -0.068312343 -0.50717565 -0.139199730 -0.020810076 -0.5133030 -
0.34526510
## 90   -0.033826936 -0.54400891 -0.063270788  0.021558874 -0.4958203 -
0.34526510
## 91    0.058591159 -0.49444866 -0.100083210  0.158869290 -0.4484949 -
0.40023668
## 92    0.170015210 -0.43981611 -0.119598430  0.210993800 -0.4223988 -
0.39831349
## 93    0.223707060 -0.44241294 -0.056804705  0.263229590 -0.4154722 -
0.39831349
## 94    0.099639636 -0.48190249  0.004834371  0.185081850 -0.4340930 -
0.26190126
## 95    0.002761854 -0.48606746  0.007994826  0.067161517 -0.4335454 -
0.18499101
## 96   -0.011569978 -0.49488470 -0.041386603  0.023957332 -0.4490594 -
0.18499101
## 97    0.080883395 -0.51619977 -0.031631855  0.093398478 -0.4701055 -
0.29116458
## 98    0.072032833 -0.51618121 -0.121145810  0.087680933 -0.4767985 -
0.29116458
```

```
## 99    0.066278536 -0.50920898 -0.046028354  0.145247710 -0.4596072 -
0.12863334
## 100   0.020949223 -0.53052568  0.045263130  0.088010808 -0.5086781 -
0.12863334
## 101  -0.010069102 -0.56488149  0.004443893  0.060694892 -0.5467552 -
0.18320623
## 102   0.256243460 -0.48275693 -0.006687361  0.242692050 -0.4714673 -
0.27825185
## 103   0.283866530 -0.49038004 -0.139726820  0.249189320 -0.4736757 -
0.37196862
## 104   0.293927460 -0.49133816 -0.107356910  0.255018350 -0.4533508 -
0.37196862
## 105   0.162978860 -0.53678301 -0.122246110  0.128700540 -0.5060369 -
0.41085207
## 106  -0.062067882 -0.58732491 -0.128482720 -0.028028728 -0.5648508 -
0.32055015
## 107   0.096493976 -0.50771295 -0.019430534  0.103183960 -0.4883339 -
0.27173296
## 108   0.242974760 -0.49183255 -0.048788521  0.258926600 -0.4381693 -
0.27173296
## 109   0.224881110 -0.51857424 -0.098467900  0.231704530 -0.4471358 -
0.33005817
## 110   0.148574720 -0.53567953 -0.063142638  0.144263350 -0.4890712 -
0.44106024
## 111   0.068705955 -0.58462858 -0.080700358  0.070686311 -0.5493058 -
0.40835779
## 112   0.272819950 -0.37464338 -0.024724477  0.320860570 -0.3710055 -
0.35008075
## 113  -0.003454965 -0.55959575 -0.032556338  0.068762742 -0.5122473 -
0.34275649
## 114  -0.059884818 -0.54949635 -0.093026711 -0.007918729 -0.5104075 -
0.34275649
## 115  -0.021850877 -0.53413411 -0.135373740  0.039675265 -0.4941730 -
0.40537118
## 116   0.042694630 -0.54598717 -0.128128010  0.050047872 -0.5202040 -
0.42356597
## 117   0.070493893 -0.54737849 -0.042932413  0.052536661 -0.5322122 -
0.38845101
## 118   0.026487096 -0.57327388 -0.063908371  0.068170812 -0.5527739 -
0.32701207
## 119  -0.044155705 -0.58815964 -0.263472450 -0.008256284 -0.5687547 -
0.32701207
## 120  -0.135876080 -0.61827201 -0.196203750 -0.138696300 -0.6003559 -
0.38089258
## 121  -0.119798090 -0.60673040 -0.162736080 -0.147524480 -0.5916750 -
0.38089258
## 122   0.023000125 -0.58388360 -0.258769040  0.037347321 -0.5558728 -
0.47447891
## 123   0.052213118 -0.57211026 -0.132248070  0.140611550 -0.5194774 -
0.32486730
```

```
## 124 -0.023292222 -0.55023608 -0.119917490  0.044841528 -0.4827715 -
0.32486730
## 125 -0.052707475 -0.58204080 -0.212890240 -0.052250791 -0.5336260 -
0.42564908
## 126 -0.217835180 -0.59780538 -0.278961400 -0.163577080 -0.5850775 -
0.26159043
## 127 -0.180603160 -0.48336229 -0.108617890 -0.081458692 -0.4939178 -
0.26159043
## 128 -0.084011354 -0.40100535 -0.106795840 -0.067835546 -0.3954582 -
0.26787509
## 129  0.018746928 -0.38680172 -0.136660930  0.001568853 -0.3664351 -
0.34279405
## 130 -0.020301028 -0.30083795  0.006406241 -0.021173524 -0.2673108 -
0.23386025
## 131  0.037586901 -0.24993359  0.020247530 -0.004080599 -0.1735573 -
0.23281895
## 132 -0.039541143 -0.23603003 -0.146964180 -0.065257368 -0.1830403 -
0.23281895
## 133 -0.165005660 -0.31362105 -0.251186590 -0.141065370 -0.3051025 -
0.36839257
## 134 -0.173251580 -0.32058878 -0.221034910 -0.148321140 -0.3171377 -
0.35974377
## 135 -0.012389883 -0.05245568  0.172752430 -0.057141298 -0.1237127
0.17834918
## 136 -0.030123287 -0.15075135  0.154755230 -0.054384164 -0.1665892 -
0.01963152
## 137  0.152576520 -0.23769347  0.141085020  0.117468410 -0.2398596 -
0.12204693
## 138  0.105997820 -0.31807909  0.051313934  0.045760124 -0.3133644 -
0.09181548
## 139 -0.202491160 -0.32937355  0.038870135 -0.214958710 -0.3023049 -
0.09181548
## 140 -0.115825330 -0.39736850 -0.057898862 -0.108330190 -0.3628504 -
0.33274189
## 141 -0.134942280 -0.26459042  0.096611754 -0.104175340 -0.2150903
0.04058993
## 142 -0.252803890 -0.22037240  0.126411900 -0.257349010 -0.1731104
0.04058993
## 143 -0.112307600 -0.48921284  0.052083080 -0.061863966 -0.4322852 -
0.33515996
## 144 -0.140536010 -0.49049092 -0.001147162 -0.064982735 -0.4492545 -
0.33515996
## 145  0.049889701 -0.36701435  0.029681870  0.077642816 -0.3940612 -
0.17127700
## 146  0.114344220 -0.35888549  0.104118840  0.187140370 -0.3792830 -
0.17127700
## 147 -0.174801490 -0.49563741 -0.048111731 -0.106363010 -0.4667090 -
0.23084151
## 148 -0.323372130 -0.45925625 -0.015210065 -0.286592880 -0.4352706 -
0.27938224
```

```
## 149 -0.290836610 -0.38337756  0.018260090 -0.232976080 -0.3430935 -
0.35448004
## 150 -0.171491800 -0.39895514 -0.075613532 -0.106165410 -0.3510571 -
0.40778880
## 151 -0.479707450 -0.65229315 -0.389809130 -0.428488580 -0.6289048 -
0.61574060
## 152 -0.505366460 -0.69549777 -0.421027220 -0.467235510 -0.6613004 -
0.68827705
## 153 -0.426985980 -0.75399115 -0.510632650 -0.410405880 -0.7113611 -
0.68827705
## 154 -0.314792730 -0.71535870 -0.509496050 -0.253117760 -0.6872192 -
0.66031559
## 155 -0.313745790 -0.65736773 -0.403185800 -0.267189980 -0.6413824 -
0.61121108
## 156 -0.415281870 -0.69791685 -0.457811350 -0.411238960 -0.6780854 -
0.61121108
## 157 -0.430465180 -0.67021100 -0.438269870 -0.400464810 -0.6329123 -
0.60421481
## 158 -0.397628100 -0.65350225 -0.384182270 -0.376240430 -0.6115673 -
0.60421481
## 159 -0.467405040 -0.68928686 -0.274589450 -0.372813550 -0.6563646 -
0.54248098
## 160 -0.493728490 -0.69842959 -0.408448030 -0.414854320 -0.6741640 -
0.65089155
## 161 -0.372646890 -0.68390242 -0.462931990 -0.311295190 -0.6770433 -
0.61234216
## 162 -0.407591020 -0.69528985 -0.416306610 -0.352243090 -0.6744152 -
0.61234216
## 163 -0.502411100 -0.76895618 -0.467725600 -0.476179300 -0.7399919 -
0.67004089
## 164 -0.391271110 -0.76661941 -0.447009940 -0.400240940 -0.7364113 -
0.67444656
## 165 -0.439507770 -0.76052263 -0.450472750 -0.441410790 -0.7236182 -
0.67444656
## 166 -0.570266590 -0.76587901 -0.537046400 -0.523903530 -0.7308760 -
0.71665746
## 167 -0.557041940 -0.74675934 -0.574557460 -0.486473940 -0.7249840 -
0.75301971
## 168 -0.436610550 -0.72843333 -0.476333940 -0.398194270 -0.7074920 -
0.62273421
## 169 -0.279975790 -0.72638370 -0.441587960 -0.252875150 -0.7113382 -
0.62203931
## 170 -0.246542850 -0.72074498 -0.496445370 -0.197747180 -0.7057432 -
0.62203931
## 171 -0.351948320 -0.71381645 -0.518746270 -0.309239370 -0.6966326 -
0.59632315
## 172 -0.328317670 -0.72560212 -0.494558470 -0.288490880 -0.7021313 -
0.58269188
## 173 -0.322292590 -0.74292567 -0.556766690 -0.292088980 -0.7137773 -
0.58269188
```

```
## 174 -0.321175540 -0.71282978 -0.479276100 -0.277938170 -0.6774659 -
0.65879336
## 175 -0.414979980 -0.74125818 -0.462799070 -0.369143790 -0.7181236 -
0.70042297
## 176 -0.352354670 -0.75247374 -0.436050740 -0.394719110 -0.7318741 -
0.55287733
## 177 -0.982251970 -0.98352771 -0.994317440 -0.979000090 -0.9836292 -
0.99698682
##              NA          NA           NA           NA          NA
NA
## 1    -0.99199423 -0.9931189  0.989834710  0.991956860  0.9905192 -
0.993522010
## 2    -0.97906823 -0.9922574  0.992577100  0.991808360  0.9885391 -
0.991393740
## 3    -0.97906823 -0.9922574  0.988390200  0.991808360  0.9885391 -
0.988147670
## 4    -0.99178619 -0.9897689  0.988390200  0.992543780  0.9932176 -
0.992868350
## 5    -0.99181776 -0.9897689  0.994303220  0.992543780  0.9856091 -
0.993831980
## 6    -0.99181776 -0.9926493  0.994303220  0.993346310  0.9856091 -
0.993473030
## 7    -0.98750149 -0.9815525  0.993886060  0.990807750  0.9890016 -
0.991759810
## 8    -0.98750149 -0.9815525  0.993886060  0.990653180  0.9890016 -
0.991268510
## 9    -0.98811393 -0.9909583  0.996722830  0.979198700  0.9888335 -
0.993453350
## 10   -0.97600716 -0.9849359  0.991509330  0.979198700  0.9872201 -
0.985589420
## 11   -0.97600716 -0.9849359  0.991509330  0.983485070  0.9872201 -
0.985010030
## 12   -0.99570941 -0.9932593  0.996883750  0.993560660  0.9900018 -
0.993499830
## 13   -0.99449156 -0.9952027  0.998195760  0.994153720  0.9904475 -
0.995525690
## 14   -0.99449156 -0.9920750  0.991827310  0.995803040  0.9937316 -
0.995795580
## 15   -0.98847153 -0.9846937  0.990677640  0.983445260  0.9811695 -
0.990798150
## 16   -0.99887852 -0.9940144  0.990677640  0.996146420  0.9886633 -
0.996362260
## 17   -0.99465312 -0.9940144  0.994913890  0.993859380  0.9991108 -
0.995614330
## 18   -0.99465312 -0.9930734  0.995082110  0.993859380  0.9915035 -
0.995904840
## 19   -0.99706993 -0.9930734  0.995781560  0.995866370  0.9915035 -
0.995779160
## 20   -0.99706993 -0.9982634  0.996090180  0.993448770  0.9959881 -
0.996620620
```

```
## 21   -0.99688325 -0.9927162  0.996553410  0.993448770  0.9950578 -
0.995739270
## 22   -0.98848973 -0.9923386  0.993943990  0.987837690  0.9918249 -
0.993222560
## 23   -0.98848973 -0.9916744  0.993943990  0.987837690  0.9918249 -
0.992248840
## 24   -0.99565038 -0.9916744  0.996993990  0.988582680  0.9943356 -
0.993474500
## 25   -0.99542934 -0.9933306  0.996393850  0.991440580  0.9927062 -
0.993743940
## 26   -0.99432467 -0.9923292  0.996393850  0.991440580  0.9927062 -
0.992606640
## 27   -0.99432467 -0.9904165  0.994908000  0.988008210  0.9912408 -
0.993827830
## 28   -0.97899074 -0.9977644  0.982700970  0.963037900  0.9762039 -
0.974423620
## 29   -0.99463732 -0.9971887  0.993937350  0.990169410  0.9909137 -
0.992597390
## 30   -0.99463732 -0.9920298  0.991520570  0.994654580  0.9909137 -
0.994486370
## 31   -0.88031969 -0.9181798  0.880506830  0.852422790  0.9116812 -
0.910478260
## 32   -0.88031969 -0.9181798  0.880506830  0.852422790  0.9116812 -
0.861857590
## 33   -0.95271078 -0.9681588  0.911754310  0.958461720  0.9241798 -
0.941830270
## 34   -0.99236978 -0.9931429  0.992172870  0.980339180  0.9878790 -
0.990594270
## 35   -0.99522069 -0.9983304  0.992172870  0.991768010  0.9928848 -
0.996594210
## 36   -0.99575798 -0.9955290  0.995489520  0.991882960  0.9952404 -
0.998002290
## 37   -0.99755194 -0.9955290  0.991895270  0.993172820  0.9948379 -
0.996755440
## 38   -0.99566199 -0.9966170  0.991493150  0.993172820  0.9948379 -
0.996063050
## 39   -0.97409355 -0.9767455  0.981772810  0.978824240  0.9870027 -
0.983354410
## 40   -0.99335062 -0.9936586  0.986377220  0.989177140  0.9923017 -
0.992584890
## 41   -0.99554609 -0.9934565  0.987996700  0.994265030  0.9923017 -
0.993539500
## 42   -0.99531609 -0.9908065  0.987996700  0.991085240  0.9871500 -
0.992887790
## 43   -0.99531609 -0.9908065  0.989094330  0.991085240  0.9871500 -
0.993858750
## 44   -0.99457955 -0.9922712  0.991578700  0.994202220  0.9879407 -
0.994499120
## 45   -0.99214797 -0.9922712  0.991578700  0.992276420  0.9879407 -
0.995253090
```

```
## 46   -0.99214797 -0.9964354   0.993219080  0.992276420  0.9947800 -
0.995848900
## 47   -0.99684083 -0.9964354   0.993219080  0.990932490  0.9947800 -
0.994355860
## 48   -0.99684083 -0.9925797   0.988665180  0.990932490  0.9883325 -
0.993776440
## 49   -0.99845599 -0.9925797   0.988665180  0.994495010  0.9848264 -
0.995280420
## 50   -0.99648172 -0.9962931   0.988917950  0.994495010  0.9848264 -
0.995661470
## 51   -0.99648172 -0.9952754   0.988917950  0.995973630  0.9924620 -
0.993735600
## 52   -0.89053807 -0.9733705   0.939670450  0.876768360  0.9638570 -
0.959366430
## 53   -0.99153420 -0.9900909   0.989444340  0.993228450  0.9859442 -
0.992749640
## 54   -0.99323419 -0.9900909   0.993662090  0.993010290  0.9887806 -
0.995325510
## 55   -0.99551349 -0.9930148   0.993662090  0.993010290  0.9917189 -
0.996367000
## 56   -0.99551349 -0.9908069   0.996316340  0.996756420  0.9917189 -
0.996319020
## 57   -0.99227743 -0.9873928   0.988164770  0.992920080  0.9870507 -
0.994146010
## 58   -0.99227743 -0.9873928   0.988164770  0.992920080  0.9870507 -
0.993340760
## 59   -0.99492728 -0.9902091   0.993782670  0.993141260  0.9845794 -
0.995031110
## 60   -0.99067529 -0.9902091   0.993782670  0.993046900  0.9845794 -
0.993347660
## 61   -0.99067529 -0.9939441   0.990884610  0.993046900  0.9958647 -
0.991308010
## 62   -0.99388064 -0.9939441   0.990884610  0.994427640  0.9939539 -
0.993646930
## 63   -0.99684376 -0.9958350   0.988845210  0.998296930  0.9918649 -
0.994209220
## 64   -0.99684376 -0.9930139   0.988845210  0.998014610  0.9918649 -
0.993598040
## 65   -0.88791962 -0.9577032   0.947743640  0.820450850  0.8712981 -
0.919267480
## 66   -0.99005462 -0.9765204   0.978011040  0.987204210  0.9710811 -
0.983417040
## 67   -0.79501407 -0.8443538   0.847475680  0.512480740  0.8220639 -
0.851082660
## 68   -0.79501407 -0.8443538   0.847475680  0.512480740  0.8220639 -
0.819797940
## 69   -0.93453910 -0.9603982   0.975661250  0.948966620  0.9473619 -
0.942328930
## 70   -0.87841449 -0.9146230   0.818604400  0.823172060  0.8718629 -
0.843215360
```

```
## 71   -0.37863254 -0.6698371  0.572901710  0.420049540  0.3291330 -
0.546747910
## 72   -0.37863254 -0.6698371  0.572901710  0.420049540  0.3291330 -
0.615133030
## 73   -0.92730188 -0.9331028  0.786579060  0.830481980  0.8473340 -
0.920799220
## 74   -0.97737192 -0.9895909  0.974123130  0.980854710  0.9938027 -
0.975665120
## 75   -0.98943184 -0.9895909  0.974123130  0.980854710  0.9926461 -
0.984228710
## 76   -0.99454408 -0.9983898  0.993386410  0.990216410  0.9914669 -
0.994272130
## 77   -0.99454408 -0.9874598  0.993962610  0.996171880  0.9914669 -
0.992873770
## 78   -0.99276695 -0.9874598  0.983239260  0.992332940  0.9943446 -
0.990318350
## 79   -0.54692564 -0.8098964  0.096337359  0.398050950  0.4727954 -
0.281595220
## 80   -0.47296914 -0.7639037  0.124865190  0.304754220  0.4667948 -
0.115729590
## 81   -0.47296914 -0.7636397  0.081418339  0.304754220  0.4667948 -
0.175159690
## 82   -0.39198964 -0.6938932  0.062456876  0.266562080  0.5270715 -
0.121713560
## 83   -0.39198964 -0.6910975  0.062456876  0.092174750  0.2329761 -
0.158003010
## 84   -0.40735193 -0.6910975  0.370515880  0.092174750  0.2329761 -
0.198276610
## 85   -0.52792200 -0.7129575  0.074248764  0.188919570  0.2982924 -
0.136851850
## 86   -0.36166517 -0.7079357  0.069695877  0.079619592  0.5345167 -
0.088147124
## 87   -0.43528672 -0.8142413  0.164330010  0.085692605  0.4372565 -
0.280199750
## 88   -0.43528672 -0.7066775  0.164330010  0.085692605  0.3079328 -
0.145669420
## 89   -0.48539756 -0.7066775  0.110651110  0.321823830  0.3079328 -
0.187820090
## 90   -0.43520700 -0.7481007  0.095275567  0.325888110  0.3782765 -
0.138600030
## 91   -0.42883980 -0.6642370  0.095275567  0.303156510  0.2802467 -
0.097015159
## 92   -0.24891621 -0.6641712  0.064712335 -0.004468803  0.2802467 -
0.081086087
## 93   -0.24891621 -0.6641712  0.064712335 -0.004468803  0.4300675 -
0.038241793
## 94   -0.30388982 -0.7352587 -0.094900524  0.042888223  0.4300675 -
0.041615115
## 95   -0.30388982 -0.5866489 -0.094900524  0.286614450  0.6028893 -
0.070429007
```

```
## 96  -0.34558649 -0.5866489 -0.077936638  0.337360910  0.6028893 -
0.110395510
## 97  -0.23285281 -0.6694737  0.215940490  0.181445260  0.5129640 -
0.095701990
## 98  -0.23285281 -0.6727138  0.118948140  0.181445260  0.4911101 -
0.137224550
## 99  -0.35357852 -0.6778359 -0.126011190  0.128075500  0.4985373 -
0.082204732
## 100 -0.35357852 -0.6778359 -0.126011190  0.128075500  0.4374668 -
0.076810858
## 101 -0.43596469 -0.7215711  0.113549200  0.314574400  0.4374668 -
0.116246250
## 102 -0.04141125 -0.6434292  0.032274507 -0.334516860  0.2899028 -
0.043864789
## 103 -0.04141125 -0.6434292  0.032274507 -0.334516860  0.2899028 -
0.097127516
## 104 -0.06862053 -0.6991135  0.049784047 -0.212533140  0.4221319 -
0.075072587
## 105 -0.06862053 -0.7251758  0.049784047 -0.212533140  0.4221319 -
0.134558000
## 106 -0.37040879 -0.7782788  0.125017160  0.246110050  0.5778952 -
0.203558650
## 107 -0.30960336 -0.7720667  0.107225100  0.188924670  0.4161830 -
0.093679905
## 108 -0.30960336 -0.7574420  0.107225100 -0.040435590  0.4161830 -
0.044348953
## 109 -0.36812392 -0.7504179  0.187054700 -0.040435590  0.4690392 -
0.074793666
## 110 -0.36812392 -0.7069740  0.167368470 -0.035283393  0.4475343 -
0.100891280
## 111 -0.37404040 -0.7069740  0.114239690 -0.035283393  0.4475343 -
0.150482740
## 112 -0.25415063 -0.5866414  0.262831450 -0.147941300  0.1982914
0.008038110
## 113 -0.41999057 -0.6110585  0.003402648  0.244187080  0.6394747 -
0.117413410
## 114 -0.52703583 -0.7445811  0.003402648  0.148593220  0.4787569 -
0.160371540
## 115 -0.45230143 -0.7724406  0.110405310  0.148593220  0.4787569 -
0.162907920
## 116 -0.37855848 -0.6932089  0.066287380  0.182206370  0.3581562 -
0.166056370
## 117 -0.37855848 -0.6932089  0.050792608  0.182206370  0.3581562 -
0.133710020
## 118 -0.39259101 -0.7804221  0.050792608  0.238905560  0.4611959 -
0.146116440
## 119 -0.40305336 -0.7804221  0.127899940  0.378980440  0.4611959 -
0.256155060
## 120 -0.44272582 -0.8007668 -0.103987180  0.378980440  0.6265161 -
0.275170510
```

```
## 121 -0.27900840 -0.8031446 -0.103987180  0.492857550  0.5417297 -
0.261719880
## 122 -0.27900840 -0.8021040  0.063661411  0.190461770  0.5417297 -
0.235719580
## 123 -0.32194558 -0.7180731  0.063661411  0.190461770  0.5544455 -
0.141746540
## 124 -0.36325319 -0.7180731  0.348428840  0.363877110  0.5456500 -
0.149790720
## 125 -0.34493891 -0.7515991 -0.104306260  0.380531360  0.5456500 -
0.234793420
## 126 -0.62823204 -0.6391775 -0.088961570  0.249131160  0.5347397 -
0.312080180
## 127 -0.64487583 -0.5601865 -0.035760022  0.249131160  0.4800786 -
0.185474740
## 128 -0.23488483 -0.5601865 -0.045803030  0.267758880  0.4355961 -
0.144926450
## 129 -0.23488483 -0.5507054 -0.045803030  0.171168490  0.3564094 -
0.127756170
## 130 -0.31755471 -0.4664555 -0.187452810  0.171168490  0.3564094 -
0.038049035
## 131 -0.02505667 -0.4664555 -0.311054920  0.248135100  0.4074474
0.006382802
## 132 -0.02505667 -0.3763638 -0.311054920  0.331432060  0.2818612 -
0.084331024
## 133 -0.50111415 -0.3763638 -0.129812710  0.294535390  0.2818612 -
0.193477800
## 134 -0.49560662 -0.4445106 -0.014211190  0.294535390  0.2178388 -
0.187241350
## 135 -0.32076725 -0.1069466 -0.239635940  0.225979740 -0.2721582
0.072678122
## 136 -0.32076725 -0.3161443  0.064521813  0.282600050  0.2163107
0.050761336
## 137 -0.01482018 -0.3533375  0.064521813  0.184507280  0.3182481
0.068267742
## 138 -0.01482018 -0.3851646  0.035023783  0.184507280  0.3182481 -
0.014823773
## 139 -0.54204811 -0.4198520 -0.100480670  0.435253320  0.3965959 -
0.091850563
## 140 -0.54204811 -0.4974162 -0.100480670  0.307115150  0.3965959 -
0.122077670
## 141 -0.56033587 -0.4795338 -0.096468129  0.307115150  0.2366838 -
0.006365281
## 142 -0.49936927 -0.4737933 -0.013496325  0.174324230  0.2366838 -
0.021201241
## 143 -0.42328946 -0.6544326  0.094730255  0.287785700  0.4471754 -
0.089758305
## 144 -0.42328946 -0.6400989 -0.007871244  0.456041550  0.5318820 -
0.118573620
## 145 -0.15003887 -0.3632093 -0.007871244  0.167597590  0.2832166 -
0.044396425
```

```
## 146 -0.15003887 -0.3632093  0.116639820  0.167597590  0.2832166
0.021157296
## 147 -0.62201923 -0.6024191  0.116639820  0.414589410  0.5809535 -
0.157723840
## 148 -0.62201923 -0.6024191  0.159973830  0.513983250  0.5103255 -
0.182571130
## 149 -0.59480577 -0.6216436  0.159973830  0.288305630  0.4772456 -
0.120261060
## 150 -0.48408555 -0.6216436  0.224083560  0.288305630  0.4772456 -
0.126243940
## 151 -0.68917327 -0.7571216  0.411556690  0.492501150  0.6813350 -
0.449711540
## 152 -0.68917327 -0.7571216  0.474549170  0.631651420  0.7079163 -
0.485570060
## 153 -0.69192763 -0.8676494  0.474549170  0.587817400  0.8033545 -
0.526811360
## 154 -0.58334046 -0.8311574  0.463901500  0.587817400  0.6181391 -
0.471717540
## 155 -0.53436071 -0.6709607  0.448387730  0.609967530  0.6181391 -
0.415229980
## 156 -0.53436071 -0.6709607  0.448387730  0.609967530  0.7273195 -
0.490371850
## 157 -0.59653857 -0.7915389  0.238939540  0.573236910  0.6823264 -
0.463935650
## 158 -0.71351149 -0.7915389  0.238939540  0.460174860  0.6823264 -
0.426829840
## 159 -0.73026797 -0.8167085  0.212301580  0.674960420  0.7617454 -
0.394665150
## 160 -0.76074724 -0.8204676  0.234950780  0.686001140  0.7057009 -
0.470585880
## 161 -0.56504386 -0.7282862  0.298816990  0.577122540  0.7057009 -
0.464848960
## 162 -0.56504386 -0.7282862  0.277694580  0.577122540  0.7306103 -
0.456322570
## 163 -0.69261621 -0.8816753  0.277694580  0.539804730  0.7853666 -
0.536717470
## 164 -0.69261621 -0.8561981  0.174209280  0.358645700  0.7853666 -
0.505087270
## 165 -0.76651817 -0.8561981  0.174209280  0.358645700  0.8071924 -
0.513746750
## 166 -0.80839658 -0.8440265  0.650818760  0.697300190  0.8212713 -
0.576093300
## 167 -0.75050762 -0.8440265  0.655094690  0.746369170  0.6400504 -
0.579001540
## 168 -0.76532503 -0.8123364  0.424923440  0.483723460  0.7112812 -
0.506169670
## 169 -0.50059527 -0.8594833  0.210963670  0.337388450  0.6629527 -
0.452310740
## 170 -0.50059527 -0.8355221  0.210963670  0.337388450  0.6629527 -
0.457573580
```

```
## 171 -0.59471059 -0.8254868   0.566829820   0.600969990   0.7303792 -
0.495165270
## 172 -0.59471059 -0.8254868   0.549826410   0.433374810   0.7317167 -
0.481577640
## 173 -0.60607052 -0.8529871   0.320812520   0.433374810   0.7079265 -
0.510839720
## 174 -0.60607052 -0.8552891   0.320812520   0.451937930   0.7079265 -
0.461607550
## 175 -0.65988337 -0.8557550   0.394231460   0.515291940   0.7269184 -
0.497539630
## 176 -0.40047736 -0.8553088   0.122538900   0.379889080   0.7749072 -
0.497776650
## 177 -0.98904775 -0.9893276   0.995562340   0.988395060   0.9792203 -
0.988164730
##               NA          NA          NA            NA           NA          NA
## 1    -0.9999349 -0.9998204 -0.9998785 -0.9943640400 -0.986024870 -0.9892336
## 2    -0.9999597 -0.9996396 -0.9998454 -0.9938627300 -0.979435110 -0.9933838
## 3    -0.9998942 -0.9996364 -0.9997950 -0.9878456800 -0.980144510 -0.9819108
## 4    -0.9999236 -0.9998029 -0.9998829 -0.9946779500 -0.987033010 -0.9888963
## 5    -0.9999692 -0.9998203 -0.9998599 -0.9958878300 -0.986524210 -0.9905717
## 6    -0.9999512 -0.9998278 -0.9998560 -0.9952809400 -0.987358980 -0.9895520
## 7    -0.9999557 -0.9997372 -0.9997625 -0.9959603300 -0.979707420 -0.9902130
## 8    -0.9999566 -0.9996461 -0.9998111 -0.9934888000 -0.976835830 -0.9952906
## 9    -0.9999698 -0.9996092 -0.9999450 -0.9942019800 -0.977064740 -0.9981546
## 10   -0.9999008 -0.9992329 -0.9997678 -0.9903384700 -0.964503480 -0.9949798
## 11   -0.9999019 -0.9993879 -0.9996679 -0.9878492400 -0.973440590 -0.9812038
## 12   -0.9999859 -0.9998493 -0.9997911 -0.9963219300 -0.986840920 -0.9856134
## 13   -0.9999942 -0.9998565 -0.9998685 -0.9979348500 -0.987164520 -0.9879483
## 14   -0.9999749 -0.9998973 -0.9998728 -0.9962868500 -0.991175250 -0.9892929
## 15   -0.9998863 -0.9997069 -0.9998267 -0.9930590300 -0.984644480 -0.9909446
## 16   -0.9999541 -0.9999429 -0.9999154 -0.9923619300 -0.991925590 -0.9888419
## 17   -0.9999512 -0.9998986 -0.9999338 -0.9907223100 -0.988750920 -0.9933563
## 18   -0.9999532 -0.9998813 -0.9999254 -0.9927337900 -0.989202620 -0.9966979
## 19   -0.9999622 -0.9998988 -0.9999164 -0.9932023400 -0.989906550 -0.9908350
## 20   -0.9999718 -0.9999040 -0.9999429 -0.9958594300 -0.989373880 -0.9897415
## 21   -0.9999660 -0.9999151 -0.9998929 -0.9943085300 -0.991920150 -0.9886658
## 22   -0.9999593 -0.9997863 -0.9998613 -0.9933498600 -0.987496150 -0.9909253
## 23   -0.9999613 -0.9996906 -0.9998657 -0.9941872700 -0.981441610 -0.9903909
## 24   -0.9999722 -0.9997658 -0.9998684 -0.9961840200 -0.981627100 -0.9888523
## 25   -0.9999734 -0.9997846 -0.9998641 -0.9969550400 -0.982403800 -0.9908891
## 26   -0.9999653 -0.9997843 -0.9998400 -0.9928139200 -0.983621720 -0.9881759
## 27   -0.9999706 -0.9998394 -0.9998291 -0.9932958000 -0.985360120 -0.9885966
## 28   -0.9996843 -0.9987119 -0.9994670 -0.9866816900 -0.968297490 -0.9717790
## 29   -0.9999193 -0.9998121 -0.9998901 -0.9902726400 -0.985136770 -0.9904396
## 30   -0.9999487 -0.9999035 -0.9998470 -0.9957934400 -0.991204410 -0.9890615
## 31   -0.9924909 -0.9880922 -0.9947449 -0.9873545300 -0.974964850 -0.9698971
## 32   -0.9890376 -0.9857638 -0.9931599 -0.8501731600 -0.889862960 -0.9139562
## 33   -0.9964529 -0.9973359 -0.9982559 -0.9603949300 -0.955896500 -0.9652282
## 34   -0.9998753 -0.9996200 -0.9999281 -0.9856946300 -0.979035640 -0.9981122
## 35   -0.9999351 -0.9998718 -0.9999816 -0.9921068000 -0.991208920 -0.9977376
```

```
## 36   -0.9999790 -0.9998931 -0.9999580 -0.9984294100 -0.988622420 -0.9973464
## 37   -0.9999697 -0.9998764 -0.9999465 -0.9971231200 -0.983763240 -0.9962947
## 38   -0.9999521 -0.9998637 -0.9999554 -0.9953069400 -0.984680280 -0.9949855
## 39   -0.9997715 -0.9993193 -0.9997015 -0.9879695200 -0.976902640 -0.9862095
## 40   -0.9998903 -0.9998659 -0.9998513 -0.9930383300 -0.986358690 -0.9896821
## 41   -0.9999470 -0.9998950 -0.9998333 -0.9930348700 -0.988040210 -0.9869139
## 42   -0.9999228 -0.9998661 -0.9998409 -0.9930955900 -0.987782530 -0.9890633
## 43   -0.9999396 -0.9998585 -0.9998577 -0.9949593500 -0.987893870 -0.9924132
## 44   -0.9999558 -0.9998647 -0.9998619 -0.9972143300 -0.986881990 -0.9916148
## 45   -0.9999357 -0.9998678 -0.9999250 -0.9935754500 -0.989096680 -0.9939463
## 46   -0.9999190 -0.9999126 -0.9999596 -0.9886669900 -0.993008100 -0.9959367
## 47   -0.9999247 -0.9998623 -0.9999408 -0.9890825700 -0.990467610 -0.9944921
## 48   -0.9999246 -0.9998425 -0.9999052 -0.9908887800 -0.990197480 -0.9921547
## 49   -0.9999230 -0.9999187 -0.9998824 -0.9922483000 -0.992541690 -0.9962549
## 50   -0.9999407 -0.9998904 -0.9999315 -0.9927488500 -0.987744470 -0.9964016
## 51   -0.9999290 -0.9998687 -0.9999016 -0.9920806400 -0.987822560 -0.9922347
## 52   -0.9982633 -0.9937773 -0.9994384 -0.9780988000 -0.972932240 -0.9801919
## 53   -0.9999260 -0.9998427 -0.9998418 -0.9887344500 -0.988276510 -0.9917732
## 54   -0.9999520 -0.9998804 -0.9998888 -0.9922520000 -0.988994790 -0.9931173
## 55   -0.9999461 -0.9999111 -0.9999363 -0.9928449200 -0.992911990 -0.9944774
## 56   -0.9999515 -0.9999167 -0.9999168 -0.9943485700 -0.993679060 -0.9923653
## 57   -0.9999189 -0.9999035 -0.9998418 -0.9950379600 -0.992838550 -0.9875071
## 58   -0.9999127 -0.9998648 -0.9998640 -0.9947393400 -0.988352000 -0.9905412
## 59   -0.9999498 -0.9998828 -0.9998815 -0.9972870900 -0.988286660 -0.9925122
## 60   -0.9999457 -0.9998089 -0.9998716 -0.9954296800 -0.983184390 -0.9915236
## 61   -0.9999166 -0.9997740 -0.9998658 -0.9925729600 -0.980032280 -0.9883479
## 62   -0.9999211 -0.9999010 -0.9998680 -0.9889072700 -0.988493860 -0.9897101
## 63   -0.9999322 -0.9999313 -0.9998676 -0.9882919000 -0.992941340 -0.9868493
## 64   -0.9999031 -0.9999231 -0.9998695 -0.9903489800 -0.990325510 -0.9906311
## 65   -0.9960550 -0.9899858 -0.9963899 -0.9292073900 -0.955559550 -0.9501303
## 66   -0.9997306 -0.9997329 -0.9995327 -0.9809745800 -0.982547960 -0.9810842
## 67   -0.9916948 -0.9361853 -0.9848683 -0.9566193300 -0.919442030 -0.9622691
## 68   -0.9910761 -0.9332772 -0.9835979 -0.9059791000 -0.848481110 -0.8927498
## 69   -0.9990618 -0.9955768 -0.9982666 -0.9569483600 -0.912656020 -0.9456895
## 70   -0.9859894 -0.9773284 -0.9913942 -0.9071561600 -0.849415280 -0.9120258
## 71   -0.9362585 -0.7142397 -0.9202614 -0.6996074700 -0.553859800 -0.6981088
## 72   -0.9449684 -0.7284963 -0.9233630 -0.8152614400 -0.752793570 -0.7933370
## 73   -0.9948834 -0.9922008 -0.9947617 -0.9612468200 -0.944791500 -0.9631345
## 74   -0.9995075 -0.9989307 -0.9997928 -0.9779508900 -0.957311620 -0.9789426
## 75   -0.9995402 -0.9996036 -0.9998638 -0.9821972200 -0.976272630 -0.9903151
## 76   -0.9999239 -0.9998525 -0.9999308 -0.9904596900 -0.986348650 -0.9962864
## 77   -0.9999067 -0.9998979 -0.9998598 -0.9901890500 -0.988818390 -0.9915344
## 78   -0.9998458 -0.9998407 -0.9998497 -0.9851124600 -0.988617290 -0.9891963
## 79   -0.6640259 -0.6511818 -0.9208134 -0.3122830800 -0.320830340 -0.6220923
## 80   -0.5995911 -0.5133363 -0.8921929  0.0524683560 -0.024443752 -0.4881153
## 81   -0.6591837 -0.5238466 -0.9066578 -0.0392742240 -0.120219730 -0.5325208
## 82   -0.6103688 -0.4654289 -0.8801226 -0.0282946110 -0.014748012 -0.4172572
## 83   -0.6709258 -0.4397159 -0.8533894 -0.2168830900 -0.081383682 -0.4429625
## 84   -0.7128942 -0.5153885 -0.8514190 -0.1688998700 -0.156374540 -0.5281909
## 85   -0.5937663 -0.5472105 -0.8685769 -0.1424716700 -0.147678240 -0.4513831
```

```
## 86   -0.5123116 -0.4899641 -0.8662773 -0.2233019100 -0.013872485 -0.4652255
## 87   -0.7567976 -0.5617780 -0.9175564 -0.1967048100 -0.330953670 -0.5089988
## 88   -0.6796998 -0.4213795 -0.8697099  0.0197156880 -0.077154229 -0.5178260
## 89   -0.6545133 -0.5611777 -0.8730582 -0.0775482680 -0.208945410 -0.4540741
## 90   -0.5923939 -0.5279788 -0.8908119 -0.0916345500 -0.208494400 -0.4036016
## 91   -0.6407827 -0.4348945 -0.8664655 -0.0162128910 -0.017397354 -0.3896883
## 92   -0.6499768 -0.3108488 -0.8370169  0.0722799670  0.029653189 -0.4541257
## 93   -0.6072810 -0.2464939 -0.8385123  0.1703051000  0.005671277 -0.4629586
## 94   -0.5399561 -0.3900517 -0.8601031  0.1692642400  0.105656260 -0.4072933
## 95   -0.4901602 -0.4920299 -0.8622736  0.0002663345 -0.004367996 -0.3569925
## 96   -0.5483782 -0.5063007 -0.8668144 -0.0336471450 -0.077313042 -0.4023619
## 97   -0.5740106 -0.4110640 -0.8775384 -0.0088470562 -0.082205803 -0.4508332
## 98   -0.6483927 -0.4204964 -0.8773987 -0.0918411550 -0.055785998 -0.4807557
## 99   -0.5624769 -0.4266451 -0.8739859 -0.0206773840  0.035557437 -0.4425090
## 100  -0.4812491 -0.4734926 -0.8839295  0.1533154900 -0.071740361 -0.5260149
## 101  -0.5255380 -0.5049358 -0.9002663  0.0421234680 -0.122708270 -0.6087183
## 102  -0.5261558 -0.2063765 -0.8602732 -0.0257164150 -0.071306372 -0.5319047
## 103  -0.6266182 -0.1713952 -0.8643584 -0.1262235700 -0.123797470 -0.4431641
## 104  -0.6207137 -0.1583936 -0.8649863 -0.0446351140 -0.058420561 -0.4226178
## 105  -0.6397055 -0.3184928 -0.8871436 -0.1209848800 -0.160396170 -0.5387630
## 106  -0.6392320 -0.5549909 -0.9100058 -0.1400622800 -0.205782610 -0.5895159
## 107  -0.5450080 -0.3939621 -0.8732712  0.0187394680 -0.184694580 -0.5671598
## 108  -0.5752342 -0.2228228 -0.8651902 -0.0008565236 -0.042996424 -0.4013749
## 109  -0.6352161 -0.2452679 -0.8786648 -0.0547163810 -0.052686408 -0.3580983
## 110  -0.6223175 -0.3356234 -0.8869036  0.0729893560 -0.190702900 -0.3886434
## 111  -0.6208753 -0.4241043 -0.9086439  0.0439757920 -0.151331390 -0.4607205
## 112  -0.5919114 -0.1855012 -0.7980257  0.0438466040  0.172181350 -0.3991189
## 113  -0.5718420 -0.4976818 -0.8979298  0.1140676200  0.014293502 -0.5140662
## 114  -0.5985414 -0.5528068 -0.8932581 -0.0886255930 -0.127363820 -0.5371728
## 115  -0.6453416 -0.5167987 -0.8860771 -0.0929876070 -0.191732600 -0.5020693
## 116  -0.6241576 -0.4510740 -0.8913930 -0.0895612970 -0.220784640 -0.4836714
## 117  -0.5470708 -0.4222040 -0.8923771 -0.0668733940 -0.227147700 -0.4976626
## 118  -0.5702253 -0.4682307 -0.9039398 -0.0246573170 -0.113859350 -0.5055295
## 119  -0.7375694 -0.5380007 -0.9103566 -0.1227824400 -0.187573110 -0.5333772
## 120  -0.6822724 -0.6217914 -0.9225757 -0.0945472600 -0.336531820 -0.6274123
## 121  -0.6731971 -0.6078088 -0.9179143 -0.0186124350 -0.366870560 -0.6416287
## 122  -0.7511668 -0.4715987 -0.9085114 -0.0787577880 -0.126090260 -0.5551234
## 123  -0.6487573 -0.4416140 -0.9034355  0.0578163260  0.038020501 -0.4868077
## 124  -0.6567693 -0.5177419 -0.8935107 -0.0268988860 -0.150862340 -0.4190914
## 125  -0.6963040 -0.5464857 -0.9076795 -0.1826793900 -0.306642550 -0.5003610
## 126  -0.6772416 -0.6894888 -0.9142967 -0.3642814100 -0.285428520 -0.6008290
## 127  -0.5944972 -0.6596325 -0.8608790 -0.0920467860 -0.077254159 -0.5905126
## 128  -0.5995199 -0.5756259 -0.8143935 -0.1928000600 -0.147726120 -0.4690620
## 129  -0.6333938 -0.4762186 -0.8057128 -0.1016847200 -0.122279450 -0.4094265
## 130  -0.5175194 -0.5152559 -0.7488684  0.1455141000 -0.307738010 -0.3152496
## 131  -0.4184813 -0.4568991 -0.7117763  0.0705903050 -0.321957320 -0.1116007
## 132  -0.5159973 -0.5338081 -0.7011986 -0.4049878300 -0.302690690 -0.1489574
## 133  -0.6430390 -0.6466285 -0.7577836 -0.4703652900 -0.276595670 -0.3368729
## 134  -0.6368603 -0.6535148 -0.7625730 -0.3897745200 -0.263129920 -0.3705685
## 135  -0.3433153 -0.5068710 -0.5432430  0.1934304300 -0.331329040 -0.3032914
```

```
## 136 -0.3925728 -0.5240111 -0.6321686  0.3098687900 -0.340578510 -0.3361808
## 137 -0.3710934 -0.3305590 -0.7020764  0.1547760800 -0.132944580 -0.3556450
## 138 -0.4657870 -0.3833672 -0.7608540  0.0760015550 -0.306487420 -0.3475695
## 139 -0.4907036 -0.6773609 -0.7684731  0.1279943900 -0.427911220 -0.3220186
## 140 -0.5275631 -0.6043471 -0.8121687 -0.0872904230 -0.316791670 -0.3682194
## 141 -0.4036559 -0.6210398 -0.7226796  0.1534733400 -0.250392370 -0.2137464
## 142 -0.4283232 -0.7163046 -0.6889384  0.2852518100 -0.370257240 -0.1894109
## 143 -0.5351296 -0.6012164 -0.8638649  0.3291868500 -0.208212650 -0.3575760
## 144 -0.5209962 -0.6255418 -0.8645160  0.1377696600 -0.145107950 -0.4278202
## 145 -0.5163885 -0.4439392 -0.7929512  0.1923806800 -0.087139099 -0.4497149
## 146 -0.4628845 -0.3743581 -0.7880315  0.2398771200  0.043712284 -0.4140038
## 147 -0.5600544 -0.6545071 -0.8672019 -0.0017541881 -0.179111440 -0.4667454
## 148 -0.5728847 -0.7667534 -0.8479315  0.2375788400 -0.386766940 -0.5171033
## 149 -0.5595735 -0.7441305 -0.8035195  0.2263514500 -0.235500730 -0.4173987
## 150 -0.6072441 -0.6520079 -0.8129427  0.0077704512 -0.224423960 -0.3945074
## 151 -0.8435885 -0.8608988 -0.9352463 -0.2540570100 -0.483789280 -0.6448909
## 152 -0.8608771 -0.8740704 -0.9497907 -0.2395781500 -0.506050090 -0.6559480
## 153 -0.8911475 -0.8316041 -0.9665204 -0.4386672900 -0.499375470 -0.6645073
## 154 -0.8907411 -0.7604947 -0.9558212 -0.4563066800 -0.328525190 -0.6329542
## 155 -0.8414030 -0.7601795 -0.9370962 -0.3227081100 -0.360741620 -0.6110065
## 156 -0.8543278 -0.8241384 -0.9505701 -0.4727307200 -0.534904620 -0.6348508
## 157 -0.8417620 -0.8336961 -0.9415476 -0.3909154500 -0.495476970 -0.6136761
## 158 -0.8231618 -0.8145036 -0.9357353 -0.3629763400 -0.525076750 -0.5851409
## 159 -0.7616228 -0.8543817 -0.9478411 -0.1786224200 -0.327050870 -0.6174600
## 160 -0.8377779 -0.8681928 -0.9507278 -0.3527551100 -0.404466070 -0.6426826
## 161 -0.8536899 -0.7990126 -0.9461017 -0.4681397600 -0.381684920 -0.6929946
## 162 -0.8336963 -0.8205038 -0.9497561 -0.3008614200 -0.425901200 -0.6644474
## 163 -0.8694227 -0.8725272 -0.9702063 -0.3864003600 -0.539020640 -0.7250324
## 164 -0.8555084 -0.8105821 -0.9695834 -0.4430497600 -0.592305640 -0.7121474
## 165 -0.8592078 -0.8390319 -0.9682073 -0.4190036200 -0.596099060 -0.6885775
## 166 -0.9104871 -0.9044057 -0.9695374 -0.4534642500 -0.572945750 -0.6953860
## 167 -0.9250449 -0.8985265 -0.9646536 -0.4628706600 -0.488237540 -0.7153209
## 168 -0.8726978 -0.8373572 -0.9596562 -0.3896719600 -0.456798280 -0.6711167
## 169 -0.8453087 -0.7363377 -0.9590669 -0.3979309500 -0.354902910 -0.6898739
## 170 -0.8698217 -0.7116213 -0.9574257 -0.4578523200 -0.279508650 -0.6800016
## 171 -0.8946874 -0.7857348 -0.9553351 -0.4404772900 -0.465241550 -0.7118531
## 172 -0.8822429 -0.7700073 -0.9587938 -0.4108384000 -0.466000890 -0.6872936
## 173 -0.8920081 -0.7660214 -0.9635346 -0.5672108200 -0.421829200 -0.6651396
## 174 -0.8576769 -0.7652670 -0.9550630 -0.4865897500 -0.373253960 -0.6231283
## 175 -0.8599517 -0.8248775 -0.9631944 -0.3593693500 -0.445202240 -0.7041059
## 176 -0.8049416 -0.7858246 -0.9661240 -0.5011878100 -0.540495280 -0.7261402
## 177 -0.9999522 -0.9996713 -0.9996166 -0.9924215800 -0.976723900 -0.9879596
##            NA          NA          NA          NA          NA
## 1   -0.81994925 -0.793046450 -8.888529e-01  1.00000000 -0.220747030
## 2   -0.87509640 -0.655362100 -7.673809e-01  0.48966215  0.070997076
## 3   -0.75362867 -0.673273630 -7.471068e-01  0.26522482  0.188394740
## 4   -0.82080419 -0.754968190 -8.252786e-01  0.12289300  0.276418810
## 5   -0.85074390 -0.746257780 -7.969596e-01  0.24090421  0.134911520
## 6   -0.77871779 -0.754968190 -7.908859e-01  0.28068582  0.100449720
## 7   -0.78792545 -0.726265920 -7.489310e-01  0.31820612  0.031070108
```

```
## 8    -0.80735107 -0.671549710 -7.779456e-01  0.38761715 -0.017295796
## 9    -0.87509640 -0.660921410 -8.680572e-01  0.37568929  0.077238687
## 10   -0.75395906 -0.529134930 -7.672079e-01  0.13656340  0.121551860
## 11   -0.75395906 -0.576344100 -6.614924e-01  0.25135646 -0.011399238
## 12   -0.93067589 -0.806635980 -7.349045e-01  0.40660511 -0.105320690
## 13   -0.93067589 -0.797235060 -7.837896e-01  0.18494272  0.250791390
## 14   -0.87509640 -0.826455640 -7.901516e-01  0.28605309  0.192590410
## 15   -0.73942203 -0.900225450 -8.042210e-01  0.32987626  0.141028980
## 16   -0.85074390 -0.982791790 -7.983270e-01  0.27269113  0.125584620
## 17   -0.83927424 -0.858955890 -8.247193e-01  0.20843697  0.185921950
## 18   -0.80735107 -0.836902840 -8.581997e-01  0.32960071  0.142957870
## 19   -0.82823515 -0.870601650 -8.178386e-01  0.22243176  0.146688950
## 20   -0.86267325 -0.858955890 -8.202944e-01  0.11503435  0.128064650
## 21   -0.83927424 -0.870601650 -7.603533e-01  0.29231577  0.033009318
## 22   -0.85074390 -0.767836030 -7.939587e-01  0.47310922  0.117653650
## 23   -0.86267325 -0.704918580 -8.138585e-01  0.29263203  0.201671120
## 24   -0.86267325 -0.713080210 -7.489599e-01  0.22207718  0.250442850
## 25   -0.83927424 -0.732818060 -7.305823e-01  0.16728476  0.256291640
## 26   -0.82823515 -0.762750800 -7.608953e-01  0.28151143  0.134461740
## 27   -0.87509640 -0.762750800 -8.030115e-01  0.47546995  0.246442050
## 28   -0.50173008 -0.872837650 -9.531813e-01  0.13984431  0.220942860
## 29   -0.70518010 -0.895252580 -8.330005e-01  0.20832809  0.125500770
## 30   -0.83183196 -0.847730010 -7.704034e-01  0.45378160  0.086481100
## 31   -0.40869810 -0.279221960 -1.911947e-01 -0.22693323  0.270137750
## 32    0.05852908 -0.043095302 -9.454345e-02 -0.24475288  0.301776750
## 33   -0.12590409 -0.460453240 -5.978266e-01 -0.01166749  0.168512780
## 34   -0.66445600 -0.803439760 -8.856721e-01  0.04783362  0.033933030
## 35   -0.87509640 -0.847730010 -8.855542e-01  0.32676143  0.370193020
## 36   -0.91577638 -0.836902840 -8.486859e-01  0.23080426  0.271096250
## 37   -0.87509640 -0.816371680 -8.322179e-01  0.42181304  0.047356788
## 38   -0.81760141 -0.847730010 -8.486859e-01  0.24027601  0.067697725
## 39   -0.64881272 -0.522597540 -7.049338e-01  0.16409700  0.369907980
## 40   -0.73336629 -0.849017480 -7.461393e-01  0.14291566  0.261702970
## 41   -0.76982813 -0.882691350 -7.412171e-01 -0.03942129  0.241313470
## 42   -0.78792545 -0.816371680 -7.570015e-01 -0.01555493  0.348859090
## 43   -0.81760141 -0.797235060 -7.653496e-01  0.09166863  0.209577120
## 44   -0.83927424 -0.826455640 -7.687061e-01  0.18900936  0.198603560
## 45   -0.80735107 -0.849017480 -8.138585e-01  0.23274162  0.228807720
## 46   -0.75741954 -0.849017480 -8.581997e-01  0.20247320  0.243115530
## 47   -0.74826155 -0.788156700 -8.306457e-01  0.18416223  0.318656600
## 48   -0.75741954 -0.770924250 -8.068076e-01  0.20606245  0.363009360
## 49   -0.74826155 -0.836902840 -8.541157e-01  0.35371245  0.202914090
## 50   -0.79746479 -0.836902840 -8.760955e-01  0.34234855  0.129256410
## 51   -0.82823515 -0.806635980 -8.138585e-01  0.36005328  0.083654036
## 52   -0.50158699 -0.433233580 -5.431313e-01 -0.25032767  0.370212550
## 53   -0.72975660 -0.811554720 -7.859931e-01  0.09843280  0.117311280
## 54   -0.78792545 -0.836979770 -7.978693e-01  0.02706632  0.247886520
## 55   -0.81760141 -0.858955890 -8.856721e-01  0.07322028  0.124921470
## 56   -0.81760141 -0.836902840 -8.306457e-01  0.11374099  0.078508991
## 57   -0.79746479 -0.825386470 -7.507977e-01  0.05782089  0.090396116
```

```
## 58   -0.76982813 -0.849017480 -8.220998e-01 -0.02657310  0.154298710
## 59   -0.80735107 -0.847730010 -8.220998e-01  0.07919528  0.156917990
## 60   -0.81760141 -0.748236010 -8.059139e-01  0.06411437  0.210498400
## 61   -0.75362867 -0.721327180 -7.901516e-01 -0.03226922  0.326172230
## 62   -0.70802088 -0.858955890 -7.939587e-01  0.04505224  0.185197190
## 63   -0.75295471 -0.858955890 -7.746855e-01  0.18853161  0.043464264
## 64   -0.71423735 -0.806635980 -7.852296e-01  0.23004034  0.119058930
## 65   -0.04873947 -0.263092220 -3.700052e-01  0.13561675 -0.155729830
## 66   -0.57438326 -0.691235470 -5.982315e-01 -0.11409845  0.380900770
## 67   -0.23270115  0.040662221 -1.427880e-01 -0.36947082  0.240297740
## 68    0.03754299  0.288804040 -9.706434e-02 -0.35889114  0.218148480
## 69   -0.22885871 -0.104688830 -4.640838e-01 -0.25310342  0.154686070
## 70   -0.03037977  0.170213400  1.045365e-05 -0.12830808  0.437278580
## 71    0.37065781  0.450001590  3.356324e-01 -0.12336882  0.302167400
## 72    0.35508381  0.336770660  5.635064e-02 -0.12517206  0.246153600
## 73   -0.17393158  0.007538485 -4.542578e-01 -0.33327761  0.278939490
## 74   -0.52742279 -0.302419140 -6.428556e-01  0.23009544  0.237816350
## 75   -0.55021616 -0.704918580 -7.054469e-01  0.20967179  0.331003090
## 76   -0.74826155 -0.806635980 -8.613194e-01  0.17574389  0.227232540
## 77   -0.73721977 -0.847730010 -7.491888e-01  0.13417627  0.137973240
## 78   -0.65005204 -0.793046450 -7.408407e-01  0.12382956  0.235455450
## 79    0.59459227  0.649670630  5.906189e-01 -0.62136295  0.649783760
## 80    0.71457854  0.674097860  5.153513e-01 -0.50795355  0.456202560
## 81    0.71300832  0.695782110  5.624351e-01 -0.34473334  0.304562510
## 82    0.63148382  0.682742910  6.532389e-01 -0.51251799  0.526725070
## 83    0.50554816  0.807173390  5.787783e-01 -0.62054184  0.624369110
## 84    0.68266575  0.756441700  6.037296e-01 -0.48902245  0.353173610
## 85    0.75325446  0.681835550  5.393220e-01 -0.54821462  0.485626530
## 86    0.66779251  0.751961540  5.571775e-01 -0.58769764  0.631509410
## 87    0.72431662  0.650908470  4.161386e-01 -0.32362457  0.071082293
## 88    0.69615574  0.692546650  4.763583e-01 -0.28509558  0.141596670
## 89    0.61015806  0.622570150  4.991540e-01 -0.37880684  0.363031890
## 90    0.62471008  0.608536230  6.151628e-01 -0.54778622  0.638663520
## 91    0.61362785  0.743371410  6.635034e-01 -0.60420969  0.651602420
## 92    0.61333629  0.681577030  6.273094e-01 -0.47074031  0.299070750
## 93    0.67297340  0.724454390  6.250113e-01 -0.22833927  0.043950072
## 94    0.67942592  0.743568370  5.423647e-01 -0.21098856  0.075372491
## 95    0.72371922  0.689985810  4.616875e-01 -0.39605372  0.338151110
## 96    0.72861307  0.628630870  5.148171e-01 -0.49409218  0.431677750
## 97    0.64415754  0.601863080  5.275982e-01 -0.29870833  0.165743230
## 98    0.56484580  0.563322730  5.679797e-01 -0.24919919  0.152509370
## 99    0.57298668  0.616076330  5.815472e-01 -0.20375479  0.024970876
## 100   0.64088325  0.668502460  6.342197e-01 -0.08915598 -0.091949777
## 101   0.67129156  0.526427870  5.242484e-01 -0.18713538  0.015597376
## 102   0.69013268  0.565686100  4.835649e-01 -0.09728192  0.031054843
## 103   0.71082888  0.632365070  5.242185e-01 -0.20637510  0.127467400
## 104   0.69652707  0.705091600  6.274968e-01 -0.47215709  0.466600540
## 105   0.65066355  0.784981320  5.894134e-01 -0.44087889  0.389450820
## 106   0.67884693  0.617093160  5.221107e-01 -0.44283780  0.397090920
## 107   0.57249015  0.631385610  4.644280e-01 -0.32394049  0.251961560
```

```
## 108    0.68790823    0.722563290    5.899528e-01 -0.11975438   0.039015076
## 109    0.77819576    0.660901880    5.461915e-01 -0.07640778  -0.009333354
## 110    0.59711934    0.631503630    4.880578e-01 -0.07532157   0.061817361
## 111    0.52348459    0.570630430    5.071446e-01 -0.14477973   0.097104805
## 112    0.59980105    0.722557400    5.814457e-01 -0.32608125   0.249148650
## 113    0.69716766    0.726608550    5.092426e-01 -0.21029984   0.198444900
## 114    0.78936224    0.523760500    4.456432e-01 -0.34218042   0.359143800
## 115    0.66918240    0.601757890    6.016505e-01 -0.55118787   0.560942910
## 116    0.65477239    0.595596200    6.475300e-01 -0.43133747   0.376344240
## 117    0.68041002    0.489221250    5.213729e-01 -0.46164112   0.407457240
## 118    0.62320311    0.534978910    5.821679e-01 -0.51132504   0.570582720
## 119    0.65154717    0.629776900    5.564185e-01 -0.27183881   0.300297140
## 120    0.77850595    0.690257720    4.025710e-01 -0.41966327   0.414501140
## 121    0.77556431    0.522706070    4.101839e-01 -0.29594115   0.280937290
## 122    0.65970928    0.514061030    4.491521e-01 -0.14566771   0.069032621
## 123    0.54601796    0.534096690    5.370359e-01 -0.32415563   0.278855050
## 124    0.49191531    0.613002290    6.032760e-01 -0.40297926   0.332508640
## 125    0.61441106    0.660889040    5.516153e-01 -0.40271571   0.385802520
## 126    0.73465619    0.671800090    3.550257e-01 -0.23863861   0.140648540
## 127    0.73418881    0.736304800    4.622767e-01 -0.35851586   0.242696980
## 128    0.61221692    0.713973170    5.547449e-01 -0.40169522   0.362721250
## 129    0.52640654    0.666729760    5.797943e-01 -0.54821488   0.460447030
## 130    0.61930400    0.651755050    5.772930e-01 -0.38340509   0.220993120
## 131    0.56176682    0.565279430    6.093182e-01 -0.40057327   0.324345360
## 132    0.63330662    0.538178950    6.284645e-01 -0.53389214   0.629911130
## 133    0.67178164    0.643103360    5.428212e-01 -0.45247932   0.435049760
## 134    0.59990916    0.678518610    5.508718e-01 -0.56719725   0.493128490
## 135    0.65747119    0.404650770    6.301387e-01 -0.06889370   0.061288855
## 136    0.57834783    0.502190300    6.267654e-01 -0.40302138   0.275888350
## 137    0.54116473    0.641539100    6.692261e-01 -0.30298379   0.176200990
## 138    0.76579616    0.600273460    5.781816e-01 -0.13144956   0.003908885
## 139    0.61467429    0.558033910    5.128936e-01 -0.37434482   0.167947730
## 140    0.42866287    0.624035490    4.932375e-01 -0.79616432   0.696934260
## 141    0.48957578    0.620679060    6.799215e-01 -0.38132035   0.241065240
## 142    0.44353611    0.597153310    6.612818e-01 -0.32253406   0.082809180
## 143    0.49738373    0.588529590    4.860247e-01 -0.42135381   0.105236730
## 144    0.52993711    0.658873670    5.769638e-01 -0.47760026   0.339036780
## 145    0.69195549    0.624220700    7.036563e-01 -0.44864539   0.414509140
## 146    0.70271988    0.616076330    5.820084e-01 -0.36824573   0.307254180
## 147    0.53847287    0.586160180    5.198917e-01 -0.26649480   0.032093250
## 148    0.59614301    0.588014210    6.168740e-01 -0.14785331  -0.011490829
## 149    0.70599001    0.437758340    5.668453e-01 -0.16229753   0.100444900
## 150    0.59033389    0.562244980    4.556012e-01 -0.40413522   0.299139210
## 151    0.62996883    0.487276010    3.398308e-01 -0.15380550  -0.117654600
## 152    0.62903251    0.564110780    3.804603e-01 -0.34559168   0.005666779
## 153    0.52879658    0.550712300    3.406199e-01 -0.47020895   0.049068803
## 154    0.60200709    0.526834540    3.697083e-01 -0.51954915   0.202578150
## 155    0.74308448    0.530526760    4.243278e-01 -0.59394920   0.347862830
## 156    0.65285338    0.566666360    4.393421e-01 -0.61718983   0.453379540
## 157    0.59527944    0.560017360    5.641219e-01 -0.35036635   0.142937640
```

```
## 158   0.69905145   0.644340430   5.631876e-01 -0.17124085 -0.040781127
## 159   0.73070800   0.518295800   4.324225e-01 -0.39656574  0.105040670
## 160   0.60749531   0.507716550   4.733523e-01 -0.61710694  0.387968050
## 161   0.40073920   0.557157430   2.654301e-01 -0.49064545  0.212389380
## 162   0.47336611   0.516234310   2.569230e-01 -0.48147272  0.258104100
## 163   0.53663058   0.475818930   2.750294e-01 -0.43615920  0.236371810
## 164   0.56324693   0.562645650   2.720873e-01 -0.32099066  0.194309940
## 165   0.50701206   0.520620720   3.081204e-01 -0.38289081  0.185543300
## 166   0.42757251   0.495638680   3.004786e-01 -0.54318830  0.170086240
## 167   0.38847335   0.463920660   3.124378e-01 -0.80853637  0.465843570
## 168   0.53462552   0.676882380   2.813342e-01 -0.52445816  0.219970170
## 169   0.54042158   0.627835340   3.794873e-01 -0.58901508  0.509112120
## 170   0.56912045   0.545851050   3.064594e-01 -0.61804119  0.568376030
## 171   0.55461252   0.512923990   2.756287e-01 -0.50142896  0.225314200
## 172   0.50717566   0.549288650   3.077885e-01 -0.45805393  0.252647400
## 173   0.60961917   0.557896790   2.855223e-01 -0.56425979  0.462984640
## 174   0.66157946   0.480090600   3.721435e-01 -0.71816450  0.640154320
## 175   0.56803428   0.643498280   4.001509e-01 -0.41143533  0.191291180
## 176   0.50027599   0.684366120   4.417321e-01 -0.01552825 -0.211962680
## 177  -0.76124416  -0.640983670  -7.314433e-01  0.53667609 -0.213353530
##               NA            NA            NA          NA          NA
## 1     0.6368307500   0.3876435600   0.241401460 -0.052252848  0.264177200
## 2     0.3627145000   0.5273034200   0.149395650  0.062925097  0.370493430
## 3     0.4645834600   0.3717178800   0.082664878 -0.004621675  0.327470230
## 4     0.4574450400   0.1934143400   0.102404660 -0.099103220  0.194678850
## 5     0.2969029200   0.2871847000   0.318970470 -0.143364120  0.477454490
## 6     0.2597405100   0.2019467600   0.350577430 -0.077269461  0.562664630
## 7     0.3075537500   0.2398078600   0.078529161 -0.003967417  0.170514180
## 8     0.3868415700   0.3938711700   0.163174080  0.025849130  0.122561430
## 9     0.3778990000   0.3264202600   0.221569260  0.059024589  0.177102180
## 10    0.2874711200  -0.0410566920  -0.029588552  0.225281100  0.063532105
## 11    0.3553933000  -0.0263765460  -0.118344030  0.324212490 -0.078466281
## 12    0.4536623700   0.3021264000   0.206131030  0.138315030  0.094012813
## 13    0.1925204700   0.3030984300   0.345095610  0.084757574  0.365988540
## 14    0.4131011900   0.2663655900   0.312518210 -0.084436666  0.401130710
## 15    0.4191842700   0.2137465400  -0.328382950  0.307775510 -0.306064130
## 16    0.2624911400   0.2556551500   0.161936910 -0.153452580  0.025143376
## 17    0.3709259400   0.0925224680   0.358362260 -0.321456560  0.321205190
## 18    0.4489232600   0.1368102500   0.231516970 -0.133470190  0.348308620
## 19    0.0760574450   0.1800706100   0.165810790 -0.016961690  0.380940510
## 20   -0.0851846990   0.3094016800   0.226249940 -0.089899440  0.390967250
## 21    0.2524917800   0.2138521300   0.257431750 -0.064085740  0.235572140
## 22    0.5068819500   0.2716051700   0.286837420  0.186661860  0.128128150
## 23    0.2883479700   0.2753508100   0.245150000  0.285326160  0.127656490
## 24    0.1318131400   0.2365885900   0.220965570  0.168206030  0.253968820
## 25    0.1226478700   0.3477145800   0.161469250  0.248112730  0.109234160
## 26    0.4267007900   0.2465956900   0.337995330  0.150662810  0.336286560
## 27    0.5154723000   0.3388826300   0.440567070 -0.003316526  0.523132290
## 28    0.3388770500   0.0897615260  -0.198949600 -0.507492740  0.255790880
## 29    0.3086440400  -0.0288059010   0.085944987 -0.362223200  0.073697878
```

```
## 30    0.3734040300   0.1166641500   0.117375350   0.050277191   0.119841670
## 31   -0.1742742600   0.4425313500  -0.309518240   0.186053310   0.002515317
## 32   -0.0118170700   0.2210037100  -0.329126790   0.220969840  -0.018027448
## 33    0.5320310500  -0.2944957900  -0.325674350   0.208573460   0.039548081
## 34    0.0436900510  -0.0550871240  -0.019749876  -0.164158680   0.161349530
## 35    0.2534965700   0.2287725600   0.243782040   0.242229580   0.208305390
## 36    0.0454901990   0.3360114400   0.429364440   0.055447773   0.434531500
## 37    0.5911247800   0.0112112360   0.446524200   0.006127840   0.517677820
## 38    0.4814131400   0.0427159390   0.206383930   0.077654537   0.249185150
## 39    0.2752184200   0.2226867200   0.038968665  -0.225066250   0.142134140
## 40    0.4178460700   0.0332446000   0.237350430   0.042105723   0.103389480
## 41   -0.0490547650   0.3159595200   0.084875061   0.332940100  -0.013547524
## 42   -0.1570708300   0.3160765500   0.258944220   0.290219070   0.349213680
## 43   -0.0540793650   0.1657360300   0.207382150   0.305820820   0.295967890
## 44   -0.0324816330   0.1363163700   0.196834170   0.185070560   0.241547880
## 45    0.1100551500   0.1134100300   0.202601610   0.109460490   0.220016260
## 46    0.2834623800  -0.0493282160   0.072676512   0.248209360   0.011517831
## 47    0.2042978400  -0.0038976727   0.205066350   0.146681380   0.404491230
## 48    0.2488027900   0.0796377670   0.184327590   0.153712250   0.406200010
## 49    0.5159953400   0.2127099900   0.053420561   0.300586450   0.110128690
## 50    0.3832411100   0.2477260700   0.170068880   0.234325200   0.307594670
## 51    0.3876845200   0.0432060230   0.399597580   0.120196790   0.558709190
## 52   -0.0837859120   0.0907945170  -0.184274330   0.358529580   0.013519784
## 53    0.1773690200   0.0382331470   0.236109730   0.019613715   0.261846490
## 54   -0.2228036800   0.3686109500   0.197024050   0.167965390   0.186458020
## 55    0.0399028610   0.1946455700   0.374830000   0.062844185   0.316140290
## 56    0.1139044900   0.1916982400   0.459198930   0.124804250   0.356784250
## 57    0.0748770480   0.0070728761   0.354059960   0.202442680   0.353180710
## 58    0.0103701970   0.0568996080   0.281516420   0.010214388   0.450614160
## 59    0.0589082280   0.2618039500   0.287044080  -0.005824570   0.429230020
## 60    0.0006850445   0.2821787100   0.316827260   0.168817100   0.229579280
## 61   -0.2319261600   0.4838833900   0.255960830   0.253903900   0.171952370
## 62   -0.1385761000   0.4770801500   0.223182400   0.206454500   0.248748280
## 63    0.1770801900   0.4380306600   0.116758620   0.179467980   0.049019432
## 64    0.1947616600   0.3683922700   0.234184340  -0.021003262   0.320540610
## 65    0.2898407400  -0.4186177700   0.403206880  -0.013086799   0.714477700
## 66   -0.1393791400   0.1918205800   0.102569100  -0.054936179   0.307972530
## 67   -0.2066142100   0.0897760370  -0.470674970   0.022751067  -0.244171430
## 68   -0.1675541400   0.0363189470  -0.486786980   0.056245454  -0.248508510
## 69    0.1068004500  -0.3558524000  -0.511887320   0.279168880   0.118277190
## 70   -0.0003802128  -0.1995181900  -0.107877520   0.044223966   0.323140800
## 71    0.1072777100  -0.0295758590   0.117324140  -0.351300410   0.050962263
## 72    0.1535966800   0.0164979800   0.132622780  -0.379256850   0.008112599
## 73    0.2169462700  -0.0947344900  -0.336288040  -0.139099170  -0.533991210
## 74    0.4498609700   0.1345516300  -0.267423520  -0.088636745  -0.069830164
## 75    0.3741423100   0.2693922600   0.089581547  -0.005826052   0.182164350
## 76    0.0945136680   0.3180784200   0.375877020  -0.084441899   0.522096530
## 77    0.2259050000   0.1830539800   0.270941280  -0.077471070   0.382114330
## 78    0.1449930700   0.1337493900   0.194804450   0.076653390   0.215983270
## 79   -0.2701345200   0.0693237610  -0.440670140   0.347768660   0.052838987
```

```
## 80   -0.0134092710  -0.0541877160  -0.391608190   0.353942160   0.010456336
## 81    0.0092629302  -0.0871090320  -0.386635090   0.381152160  -0.107648180
## 82   -0.1729227900  -0.0854016280  -0.352896560   0.205226520   0.053152622
## 83   -0.3175713600  -0.0953275810  -0.256008390   0.087072352   0.079688871
## 84   -0.1399797000  -0.2560091300  -0.155056240  -0.007437817   0.253048210
## 85   -0.0267525900  -0.2939990900  -0.432218920   0.226976750   0.172951690
## 86   -0.1256046500  -0.0752099330  -0.458840930   0.448830930  -0.284087910
## 87    0.3070157900  -0.0792269970  -0.412718680   0.377455590  -0.075324418
## 88    0.1577205100  -0.0282269920  -0.346841520   0.286512400   0.068581978
## 89   -0.1151895500   0.0636361680  -0.427591410   0.336143120  -0.074949745
## 90   -0.4004866400   0.1916363500  -0.325069240   0.231015350  -0.016453487
## 91   -0.4953709100   0.2194376400  -0.323562930   0.215601350  -0.153233880
## 92   -0.0343058900  -0.1422962400  -0.327395270   0.224020430   0.022084421
## 93    0.3097484900  -0.2016398900  -0.273797180   0.168899240   0.247510980
## 94    0.4583068400  -0.1635309100  -0.266375400   0.161391530   0.178210430
## 95    0.2064957100  -0.0993482010  -0.269441810   0.024480417   0.190756160
## 96    0.0939890800  -0.0875575870  -0.249549050   0.037436611   0.074680105
## 97    0.4353635000  -0.1502634200  -0.411429830   0.322652720  -0.024621510
## 98    0.3433742800  -0.0814428170  -0.093902565  -0.033498865   0.511400200
## 99    0.3313707400  -0.1464630000  -0.233861550   0.057988709   0.206040390
## 100   0.3835098400  -0.1464024000  -0.305144690   0.194583360   0.057467365
## 101   0.2606511200  -0.0971497480  -0.222079730   0.193832110   0.009361732
## 102   0.2984216900  -0.0530336390  -0.104497520   0.133708550   0.190367320
## 103   0.3409066300  -0.4098060800  -0.307827790   0.312086010   0.024310556
## 104  -0.0763713160  -0.1454724600  -0.427978090   0.440865170  -0.085333025
## 105  -0.0547638450  -0.0672833120  -0.276696100   0.198616970   0.204210530
## 106  -0.1574575100   0.0653275690  -0.456864090   0.447657300  -0.204492190
## 107   0.0529141990  -0.0780719490  -0.663381120   0.804934880  -0.610244720
## 108   0.3157471200  -0.0989606470  -0.240256550   0.088162965   0.309449590
## 109   0.3127901800   0.0139026880  -0.186850590   0.075246625   0.303870840
## 110   0.2516966500   0.0937764860  -0.385243840   0.369809750  -0.122567360
## 111   0.2612250700  -0.0293549420  -0.343594000   0.354985920  -0.103543640
## 112  -0.1211593500  -0.0183671540  -0.071088994  -0.023550783   0.390569490
## 113   0.0336517270   0.0094750445  -0.232815530   0.025872634   0.229161460
## 114  -0.0686247930  -0.0009385069  -0.424012210   0.445010500  -0.341929890
## 115  -0.2892424900   0.0653438980  -0.494297950   0.422927390  -0.238989650
## 116  -0.0227406480  -0.0970976410  -0.541181700   0.399999210   0.042951985
## 117  -0.0152414860  -0.1056108700  -0.645448950   0.686082730  -0.303309150
## 118  -0.1926928100   0.0540440220  -0.232738720   0.204201300   0.048324847
## 119   0.0467710710   0.0354932700   0.020360455  -0.161137980   0.332077320
## 120   0.0019213023   0.1210659300  -0.065707342  -0.111250000   0.269952590
## 121   0.0686445470   0.1529265200  -0.290252860   0.189820130   0.102122360
## 122   0.2579489500  -0.0431174380   0.170780200  -0.298162690   0.481847400
## 123   0.1204215600   0.0330179540   0.160903520  -0.346278130   0.483142110
## 124   0.0717568370   0.0145404430  -0.364960960   0.183631670   0.134124750
## 125   0.0673753550  -0.1079256600  -0.486090370   0.387964580   0.016420750
## 126   0.1376407000  -0.1511527700  -0.333942150   0.474071240  -0.256295120
## 127   0.0450785440  -0.2233714000  -0.227050380   0.317501420  -0.029859174
## 128  -0.0617892450  -0.2352374900  -0.304825560   0.206273300   0.115866060
## 129  -0.0688536760  -0.2601838500  -0.495415960   0.483169310  -0.357054810
```

```
## 130 -0.0209925240 -0.2252382200 -0.423039700  0.490535800 -0.427950220
## 131 -0.1339152900 -0.1991325600 -0.344908720  0.409752080 -0.160718630
## 132 -0.5626332700  0.1004198400 -0.177035930  0.175942560  0.215039130
## 133 -0.4983785400  0.1335157300 -0.005740916 -0.040956806  0.636810860
## 134 -0.2796343900 -0.1237498600 -0.112464670 -0.012372456  0.554886180
## 135  0.0546959830 -0.0916886980 -0.224345310  0.297322750 -0.271311360
## 136 -0.0328080960 -0.0993660010 -0.186774680  0.242329030  0.033831559
## 137  0.1771691500 -0.1479953000 -0.290179150  0.051275070  0.373043080
## 138  0.0505906680 -0.0642061320 -0.380308500  0.119962450  0.349247810
## 139 -0.1609001300 -0.0972469610 -0.592211990  0.601587800 -0.386194400
## 140 -0.3133016900 -0.2078303200 -0.548637380  0.539615300 -0.263505600
## 141  0.0006119561 -0.1137971400 -0.158799430  0.213735220  0.105656800
## 142  0.0059548178 -0.1593316900 -0.020262547  0.144141230  0.130638590
## 143  0.3013196700 -0.3793565200 -0.235715170  0.238798270  0.128257160
## 144  0.0031007289 -0.2582981400 -0.070675325  0.079097642  0.277243470
## 145  0.0424009870 -0.2458876600 -0.180080470  0.044885075  0.232367330
## 146 -0.1255758500  0.0100051480 -0.240876010  0.197353850  0.175982320
## 147 -0.1580625900  0.1404411700 -0.110459570 -0.075870562  0.251911340
## 148  0.3281983300 -0.1150013800 -0.362169040  0.183177610  0.028288065
## 149  0.1598383700 -0.0950691810 -0.092953961  0.017603879  0.314187480
## 150 -0.1326198400 -0.1259669200 -0.042388252  0.141170030  0.374506640
## 151  0.2668999500  0.0678286520 -0.193595500 -0.163371590 -0.002442738
## 152  0.1801007700 -0.0448739700 -0.081602462 -0.348138020 -0.054573395
## 153  0.0967238480 -0.0624486680 -0.375867320  0.092753004 -0.112035170
## 154  0.0640996210 -0.1778441800 -0.307966160  0.088210120 -0.067520101
## 155  0.1085483200 -0.2967958600 -0.380809210  0.098897016  0.185756910
## 156 -0.1278178700 -0.0930582920 -0.602377150  0.301592620  0.039912308
## 157  0.2025849700 -0.1758092600 -0.566390030  0.350292740 -0.161370260
## 158  0.3753878500 -0.1548287500 -0.376075790  0.183028520 -0.020979194
## 159  0.3588287300 -0.3817174600 -0.413559210  0.106498720  0.039436209
## 160 -0.0255171540 -0.2196429300 -0.405041190  0.135252580 -0.027884770
## 161 -0.0456794520  0.0261950350 -0.251888380 -0.142254600  0.396355980
## 162 -0.0952232130  0.0437843320 -0.208529730 -0.212856290  0.414487050
## 163  0.0727073940 -0.1514687100 -0.482965480  0.285580020 -0.066880698
## 164  0.0927574720 -0.0527575840 -0.223157960 -0.036827961  0.268496790
## 165  0.0569734000 -0.1143251900 -0.184504800 -0.120284840  0.410844150
## 166  0.1300933000 -0.2787317400 -0.422591400  0.034581290  0.379935320
## 167 -0.0257770880 -0.2852343800 -0.290051500 -0.098533294  0.238781800
## 168  0.1552234700 -0.3029350900 -0.501261350  0.361067750 -0.308771900
## 169 -0.2399116900 -0.1367516400 -0.499464940  0.385580770 -0.204746240
## 170 -0.4742873800 -0.0202033970 -0.513063920  0.348333440 -0.192948280
## 171  0.0589593940 -0.1685111800 -0.491598570  0.128378750  0.035091153
## 172  0.2420350300 -0.3585305400 -0.498077110  0.285477090  0.074810302
## 173 -0.0804182170 -0.2108796100 -0.518326380  0.256883760  0.279344010
## 174 -0.3910388700 -0.0310670780 -0.508794480  0.152916050  0.305879840
## 175  0.0553585130 -0.2210542100 -0.448287120  0.179942980  0.124288990
## 176  0.4188277800  0.1454781200 -0.198783740  0.022195846  0.432502790
## 177  0.5126463800 -0.0690345540  0.392786620 -0.431960510  0.626171320
##              NA            NA            NA            NA            NA
## 1     0.37343945  0.341777520 -0.569791190  0.265398820 -0.477874890
```

```
## 2      0.41354814  0.122215680  0.180613040  0.047423999  0.166572680
## 3      0.43762317  0.257890870  0.070029640  0.186972990  0.246799660
## 4      0.48424363  0.357657140 -0.187032480  0.298068720  0.451869550
## 5      0.41796623  0.389537120 -0.030309087  0.163261250  0.180188860
## 6      0.35197600  0.368688950  0.043385337  0.147311490  0.299171950
## 7      0.17978786  0.292929790  0.155419740  0.243546920  0.611886550
## 8      0.27401695  0.290997430  0.169373530  0.331684350  0.530159430
## 9      0.48265016  0.279285520 -0.018772526  0.200535100  0.171020520
## 10     0.38970210 -0.027805781  0.184722390 -0.224846040  0.213398800
## 11     0.32016688  0.108127000  0.053048033  0.019117653  0.222991870
## 12     0.35596286  0.379700910  0.011049791  0.342493500  0.324147080
## 13     0.22053782  0.120245250  0.251561920  0.019340305  0.188900140
## 14     0.35107044  0.053632484  0.276308850 -0.034907489  0.315414730
## 15     0.15318688 -0.063728765  0.123007330 -0.202965690  0.300392270
## 16     0.07363486  0.358838870 -0.058505796  0.172559460  0.167273770
## 17     0.44336005  0.221146300 -0.043595976 -0.075016918  0.362965970
## 18     0.45729766  0.071740053  0.194483230  0.001854289  0.378439300
## 19     0.34605810  0.316234350 -0.056543124  0.226576370  0.608030450
## 20     0.50693909  0.345484110 -0.148923330  0.164761800  0.564865090
## 21     0.73832650  0.223935870  0.132405630  0.057648496  0.236142420
## 22     0.59065141  0.337353970  0.183389420  0.193148100  0.166368680
## 23     0.84921665  0.438246470  0.074144120  0.340347630  0.287029100
## 24     0.63930153  0.258648430  0.015136761  0.119021970  0.172278280
## 25     0.55601852  0.382405140  0.121737560  0.149600960 -0.119699130
## 26     0.62326976  0.315168050  0.256598910  0.057758330  0.144313370
## 27     0.54548582  0.376621900  0.197245610  0.181551570  0.316971150
## 28    -0.05601575 -0.136791980 -0.389470070 -0.217090790 -0.368110800
## 29    -0.19508083  0.404561570 -0.152035850  0.208434370  0.064044182
## 30     0.36294314  0.295589980 -0.024267349  0.131697930  0.261898000
## 31     0.46428771 -0.601662930  0.095366401 -0.656709250  0.244492350
## 32     0.42218320 -0.597748940  0.121848180 -0.589910080  0.085652898
## 33     0.18795733 -0.466013740  0.111892790 -0.372541440 -0.368244890
## 34     0.19301084 -0.040690532  0.001166918 -0.225457400  0.228731170
## 35     0.34083253  0.163912450 -0.118887810 -0.011818866  0.418732690
## 36     0.20861416  0.167704680  0.183135000 -0.071092449  0.345690250
## 37     0.37636100  0.158226460  0.351536160 -0.023786403  0.263300270
## 38     0.45630173  0.116361920  0.222114850  0.013048376  0.159716530
## 39     0.04502327  0.227140460 -0.037222516  0.077581665  0.088580315
## 40     0.05921153  0.297450810 -0.008035883  0.209837710  0.327291970
## 41     0.40535728  0.431633230 -0.174837080  0.298267910  0.519130760
## 42     0.50069516  0.331259990 -0.001149236  0.309074350  0.378865610
## 43     0.53811411  0.331334250  0.115178090  0.182360400  0.377971300
## 44     0.59611885  0.384246530 -0.061855240  0.209918570  0.244593140
## 45     0.49040338  0.277690880 -0.096574425  0.273471020  0.007414692
## 46     0.41140965  0.234454590 -0.061155888  0.261142490  0.310387800
## 47     0.24818433  0.353126740 -0.063430113  0.257837470  0.321496150
## 48     0.30388781  0.197176700  0.012985808  0.003283997  0.280920970
## 49     0.37916558 -0.033125360  0.174984960 -0.275327990  0.439246380
## 50     0.26656133  0.108162310  0.119425070  0.037704871  0.144589870
## 51     0.51665502  0.618408910 -0.025992448  0.527183740  0.235231260
```

```
## 52     0.32225892 -0.010499295 -0.092176186 -0.046172202 -0.210219240
## 53     0.71653632  0.166111170  0.164941100 -0.058063542  0.224156110
## 54     0.66852309  0.230790600 -0.056355264  0.099691735  0.063886900
## 55     0.20964690  0.560960930 -0.094518340  0.320587590  0.196632340
## 56     0.42905740  0.264499120  0.195171090  0.034509841  0.372380850
## 57     0.61192892  0.229480240  0.089001259  0.220033190 -0.055327553
## 58     0.38813878  0.426723310 -0.060558795  0.230288150  0.068526722
## 59     0.38796825  0.346281180 -0.097567312  0.093478652  0.157796920
## 60     0.65618972  0.266407040 -0.058316226  0.195399700 -0.195557580
## 61     0.76082060  0.430748570 -0.039583095  0.229150170  0.015283233
## 62     0.46571841  0.393163600 -0.001549568  0.190624860  0.130724300
## 63     0.57888528  0.332368750  0.072924952  0.163949420  0.162266930
## 64     0.35807227  0.325285090  0.161587950  0.219367340  0.231811580
## 65    -0.23129159  0.193873510 -0.232786760  0.147475740 -0.274497470
## 66    -0.09073992  0.202160130  0.093601545  0.114724620 -0.146075430
## 67     0.52487077 -0.567292250  0.408558910 -0.955494460  0.332696510
## 68     0.49140003 -0.545875330  0.363875150 -0.916994500  0.271343940
## 69    -0.10705541 -0.256493610 -0.122696610 -0.385066260 -0.213843150
## 70    -0.02841846 -0.239910410  0.002862870 -0.027366440 -0.260678990
## 71     0.02301193  0.149120210 -0.782782290 -0.059026150  0.499374060
## 72    -0.03756946  0.166368390 -0.799068630 -0.088951502  0.608015290
## 73     0.64749924  0.109095270  0.042768558 -0.193943610  0.642379700
## 74    -0.30226853  0.155644040 -0.034376868  0.197623980  0.150929730
## 75    -0.03870774  0.236519470 -0.054174817  0.387368710  0.157623260
## 76     0.03149619  0.144585650  0.056124257  0.074547278  0.220995850
## 77     0.28335533  0.376491920  0.048974172  0.235329520  0.444356820
## 78     0.54494466  0.404704360  0.048476494  0.260861120  0.476306060
## 79     0.35293063 -0.219078860  0.148345200 -0.044109892 -0.123718280
## 80     0.37066398 -0.298628700  0.239686140 -0.013087758 -0.148445370
## 81     0.43757424 -0.102995470  0.063646258  0.235085640 -0.279975690
## 82     0.46538243 -0.267334170  0.242754750 -0.028220360 -0.154872890
## 83     0.44932482 -0.291857170  0.237659230 -0.049578837 -0.150802140
## 84     0.41441040 -0.152788320  0.159225680 -0.013636186 -0.068493218
## 85     0.28874743 -0.293088930  0.330194530 -0.222562730 -0.033473286
## 86     0.69597703 -0.025844437  0.047515602  0.194080600 -0.255411290
## 87     0.38717181 -0.324280580  0.140679280  0.061217451 -0.237263950
## 88     0.34023065 -0.294216720  0.366464510 -0.097122929 -0.056045647
## 89     0.40571892  0.038875884  0.066204138  0.185895010 -0.118253280
## 90     0.53592508  0.068917299 -0.010508735  0.287282200 -0.231963200
## 91     0.64309390 -0.338221640  0.380483980 -0.086145746 -0.160494720
## 92     0.43448498 -0.477662530  0.547027270 -0.227211380 -0.080933778
## 93     0.28100995  0.018457498  0.145305590  0.152725730  0.054577011
## 94     0.37763997  0.212407010 -0.064375168  0.249558340  0.297513310
## 95     0.47185163  0.002574833 -0.056989411  0.367104690 -0.028478777
## 96     0.58979179 -0.072427468  0.016070451  0.110833630  0.062291063
## 97     0.35336951 -0.123483920  0.030593440  0.161452280 -0.165123970
## 98     0.23514129 -0.255169660  0.269698440 -0.042344707 -0.281744110
## 99     0.41752494 -0.054106094 -0.003825680  0.147643410 -0.198959810
## 100    0.43352545  0.168118570 -0.118563540  0.209248600 -0.049894534
## 101    0.54740297  0.053938603  0.040569052  0.130929870 -0.045264810
```

```
## 102   0.50759658 -0.153306880   0.243392460   0.057867089 -0.096017211
## 103   0.37297986 -0.262372590   0.234864090   0.127659700 -0.364748940
## 104   0.38037716 -0.370386100   0.221122920   0.196564510 -0.544616390
## 105   0.33968781 -0.260741730   0.076982268   0.270400360 -0.440378950
## 106   0.50725188 -0.095883296   0.071659717 -0.101342120   0.038186894
## 107   0.72167858 -0.290577850   0.348369140 -0.271546920 -0.075403675
## 108   0.29602253 -0.206580700   0.186435690 -0.019746938 -0.159437040
## 109   0.29604945 -0.073545406   0.047627141   0.200510360 -0.022897394
## 110   0.50325349 -0.002947852   0.019715642   0.143061690   0.036578780
## 111   0.54366044 -0.017944351 -0.079218283   0.179754690 -0.044012601
## 112   0.36068749   0.069093644   0.070368161   0.217131460 -0.098654517
## 113   0.37719138   0.322906470 -0.307555350   0.490171390 -0.189280870
## 114   0.66952249   0.041568912   0.064812051   0.122688430 -0.229509330
## 115   0.54517475   0.009329724   0.025649026   0.041526437 -0.174262890
## 116   0.26107156 -0.085272320   0.023486832   0.184824490 -0.313740620
## 117   0.43795080 -0.487112190   0.502060410 -0.242512260 -0.181002270
## 118   0.61604424 -0.433028080   0.426959620 -0.339921840 -0.035101812
## 119   0.65911154 -0.397574180   0.379164940 -0.343544360 -0.028920438
## 120   0.56456378 -0.691117130   0.689192710 -0.581113320   0.049911381
## 121   0.40809845 -0.653371460   0.583158680 -0.560252030   0.083279677
## 122   0.59282318 -0.419225370   0.368184770 -0.411492480 -0.050968284
## 123   0.67066350 -0.431140010   0.388114270 -0.219273760 -0.152186270
## 124   0.42587634 -0.427171120   0.233569540 -0.007277154 -0.233373470
## 125   0.36022508 -0.192804500   0.029483917   0.095888449 -0.176758210
## 126   0.50545192 -0.094357760   0.276481300   0.199904260 -0.090559593
## 127   0.37921140   0.062552648   0.381373850 -0.032552730   0.196617040
## 128   0.24512103   0.092101755   0.363212890   0.030227880   0.177813490
## 129   0.52318003   0.075517371   0.323840710   0.060966958 -0.024145777
## 130   0.70676361 -0.027505144   0.433782550 -0.067708584   0.223325930
## 131   0.57496295 -0.250045010   0.615391900 -0.183481020   0.364460040
## 132   0.38203730 -0.053525441   0.504901290   0.041757094   0.336853760
## 133   0.23672223   0.296395100   0.090697993   0.436771140   0.202742550
## 134   0.22747767   0.434694680   0.115027850   0.433612470   0.276334490
## 135   0.71100720   0.271708240   0.024794932   0.341329290   0.155760800
## 136   0.41421321 -0.073813857   0.333810050 -0.037230609   0.474236900
## 137   0.09976587   0.135553780   0.209244980   0.194105490   0.459677510
## 138   0.09552600 -0.234082010   0.590222330 -0.273211910   0.263305580
## 139   0.14863545 -0.296963410   0.622172670 -0.363971810   0.325461280
## 140   0.19138238 -0.095135266   0.315152450   0.065167608   0.236428070
## 141   0.19264949   0.121749340   0.223046260   0.235120290   0.205564290
## 142   0.15559415   0.125363550   0.172438680   0.233500060   0.106566370
## 143   0.36897034 -0.019334812   0.298902650   0.080182524   0.197279950
## 144   0.41965093   0.015247058   0.304817180   0.066301473   0.234095580
## 145   0.53542706 -0.336423750   0.466478250 -0.030767912   0.127296260
## 146   0.33956829 -0.279274570   0.389452010 -0.033190503   0.158247930
## 147   0.32459247 -0.211375970   0.387127870 -0.064935533   0.192310420
## 148   0.25417489   0.044728051   0.211304740   0.263591280   0.047602302
## 149   0.16054196   0.249025190   0.057415677   0.491778760 -0.022048109
## 150   0.33440217   0.189686520   0.052065784   0.472738600   0.044097734
## 151   0.29836294 -0.678289740   0.266563230   0.143305280 -0.640772640
```

```
## 152   0.42307537 -0.734217840  0.393520160 -0.236270010 -0.211716550
## 153   0.33256994 -0.549194090  0.148329090 -0.248342580 -0.152990270
## 154   0.41792301 -0.429729930  0.195809910 -0.421349810 -0.084729178
## 155   0.12523494 -0.607530830  0.367175180 -0.241508360 -0.327543450
## 156   0.03947994 -0.636118950  0.295394310 -0.102922510 -0.467725410
## 157   0.22209186 -0.172828700 -0.176481590 -0.038134311 -0.047729068
## 158   0.12024824 -0.200980430 -0.164919980 -0.035500504 -0.067001274
## 159   0.08875714 -0.200414850 -0.120364070 -0.034946868 -0.137212540
## 160   0.04383722 -0.541306150  0.111408390 -0.012827324 -0.345616850
## 161  -0.09979715 -0.719620180  0.427561030 -0.189675580 -0.399881270
## 162  -0.04442288 -0.510747130  0.250827270 -0.195848950 -0.295188970
## 163   0.14570074 -0.263571090 -0.099781607 -0.133497310 -0.193581560
## 164   0.10494152 -0.451004730  0.036601581 -0.066157572 -0.376547260
## 165  -0.04566949 -0.613706900  0.191006300 -0.203327200 -0.528722250
## 166  -0.27572003 -0.485026150  0.032244392 -0.047405960 -0.511715150
## 167   0.13644867 -0.304131020 -0.117830390 -0.040739458 -0.362549710
## 168   0.17637221 -0.308749240 -0.298065250  0.046198183 -0.176272080
## 169   0.15108311 -0.341265500 -0.039080990 -0.106541300 -0.160328550
## 170   0.18883605 -0.209148100 -0.079305006 -0.089753897 -0.310505100
## 171   0.17968393 -0.200610600 -0.166245420 -0.032232152 -0.266766720
## 172   0.16894136 -0.346175290  0.067420362 -0.227624840 -0.024186171
## 173  -0.15993388 -0.378151450  0.015951072 -0.150465820 -0.396655490
## 174  -0.03982643 -0.168009940 -0.314427610  0.114761180 -0.554547370
## 175   0.25224139 -0.130779410 -0.342894630 -0.020119451 -0.329285460
## 176   0.16227792 -0.349283050  0.064317371 -0.174702790 -0.448000450
## 177   0.12292654  0.342757310 -0.390783550  0.174989520 -0.092535098
##                NA           NA           NA            NA           NA
## 1     -0.385300500  0.033643943 -0.126510820 -0.0061008489 -0.031364791
## 2     -0.208772180  0.084103799 -0.268553900 -0.0161116200 -0.083893777
## 3     -0.120104660 -0.110025630 -0.039952746 -0.0316982940 -0.102335420
## 4     -0.127495150 -0.083278359  0.457059830 -0.0434099830 -0.091386182
## 5     -0.272883600  0.103064750  0.064729309 -0.0339604160 -0.074708034
## 6     -0.374610950  0.041825695 -0.111782090 -0.0287755080 -0.070393108
## 7      0.108143230  0.254551660  0.264624870 -0.0286002510 -0.083046734
## 8      0.209936320  0.303799460  0.191844380 -0.0242002620 -0.077892610
## 9     -0.301465540 -0.060574147  0.064353480 -0.0248310250 -0.066401639
## 10     0.106665680  0.136307120  0.440077090 -0.0234154000 -0.070925683
## 11     0.205178850  0.256964840  0.281471610 -0.0247082550 -0.068884585
## 12    -0.262583610  0.115339800 -0.303204080 -0.0311731580 -0.074666711
## 13    -0.093111521 -0.184569230 -0.166531600 -0.0291686110 -0.075944066
## 14    -0.218120130  0.030357820 -0.110299310 -0.0270870930 -0.071831343
## 15    -0.235410180 -0.038076262  0.193140370 -0.0105482010  0.157054250
## 16    -0.002551633 -0.074397453  0.116398260 -0.0158108590  0.027702205
## 17    -0.097228401  0.047331418 -0.157477700 -0.0134068160 -0.046264419
## 18    -0.098731431  0.060070412 -0.261706510 -0.0127250970 -0.077761376
## 19     0.031554035  0.159745430 -0.037604755 -0.0246423600 -0.087790863
## 20    -0.053548189  0.375932970  0.254196560 -0.0294619130 -0.084376762
## 21    -0.158677720  0.239963290  0.099502630 -0.0298149330 -0.078706495
## 22    -0.131843120  0.474658650 -0.012174827 -0.0291788900 -0.079554020
## 23    -0.209320550  0.406195270 -0.002821985 -0.0281536990 -0.076118947
```

```
## 24   -0.162668880   0.263444930   0.042514980  -0.0272209350  -0.069195151
## 25   -0.129360610   0.305137030   0.033019343  -0.0249607010  -0.071607144
## 26   -0.101277660   0.432370290  -0.026853834  -0.0273727390  -0.075304300
## 27   -0.092575488   0.369454710   0.094403698  -0.0305296170  -0.074705186
## 28    0.063643890   0.119027570   0.396556490  -0.0464896660  -0.282897940
## 29   -0.363540450  -0.240163420   0.155448030  -0.0484083800  -0.239173860
## 30   -0.437101210  -0.132440740   0.197492770  -0.0394119360  -0.166747870
## 31   -0.547728250  -0.254727620  -0.204399180  -0.0377316410   0.021333829
## 32   -0.465716320  -0.242341860  -0.126358650  -0.0038232806   0.019187316
## 33   -0.214261830  -0.154990610   0.092326309  -0.0045972195  -0.156696110
## 34   -0.498964020  -0.036378221  -0.094961035  -0.0426815420  -0.152633430
## 35   -0.508495140   0.107459460   0.079505921  -0.0415567130  -0.113257980
## 36   -0.157222170   0.373563710   0.285968130  -0.0354576770  -0.091001714
## 37   -0.235739310   0.256845460   0.215853470  -0.0309191370  -0.074625079
## 38   -0.162545820  -0.023392231  -0.113579550  -0.0282019870  -0.072296089
## 39    0.056420447   0.030212806  -0.119021570  -0.2250394600  -0.133158860
## 40   -0.259052820  -0.036388908  -0.020750148  -0.1493380800  -0.107575560
## 41   -0.355717250   0.019556596  -0.011108780  -0.0793661120  -0.094869929
## 42   -0.182918030  -0.099165656  -0.005846375  -0.0378247330  -0.076526530
## 43    0.010472500   0.232837940   0.155417990  -0.0210748000  -0.072633665
## 44   -0.049165008   0.520191020   0.157125380  -0.0174946200  -0.073362144
## 45   -0.131069230   0.255001820   0.069397459  -0.0204947850  -0.069807644
## 46   -0.304279450   0.356131670  -0.026198369  -0.0246441440  -0.070023979
## 47   -0.161880000   0.300205190  -0.170015350  -0.0263386700  -0.074526058
## 48   -0.026581153   0.123732890  -0.219040920  -0.0280214810  -0.074033170
## 49    0.023903090   0.145420180  -0.294621760  -0.0286992320  -0.075571862
## 50    0.048057130   0.071610674  -0.221873070  -0.0280060840  -0.076306270
## 51   -0.090188720   0.281259730  -0.093608608  -0.0282116640  -0.072544173
## 52    0.815406500   0.184348570   0.097213860   0.0315519540  -0.131995140
## 53    0.028894766   0.280025040  -0.220895720   0.0092571098  -0.078793121
## 54   -0.269252230   0.499018670  -0.166835580  -0.0134243890  -0.075370833
## 55   -0.487434860   0.669506610  -0.462894490  -0.0249598100  -0.076133944
## 56   -0.242978590   0.457454050  -0.469867700  -0.0295503870  -0.068085138
## 57    0.173867190   0.224301860  -0.101137030  -0.0304311470  -0.073488076
## 58    0.049467893   0.071982262  -0.136875490  -0.0297963300  -0.071422989
## 59   -0.290174370   0.113465760  -0.171019550  -0.0288541800  -0.072704386
## 60   -0.275149550   0.163374390  -0.007425133  -0.0277371350  -0.075772812
## 61   -0.204722000   0.152413390  -0.035244753  -0.0274154380  -0.076236511
## 62   -0.157766990   0.214927550  -0.077605724  -0.0275579170  -0.074717452
## 63   -0.166440740   0.188578450  -0.346804520  -0.0281896880  -0.075922288
## 64   -0.194117650  -0.020017427  -0.295073660  -0.0279483240  -0.075748823
## 65   -0.131715090  -0.547200640   0.394759450   0.2020498200   0.040694905
## 66   -0.082276665   0.189547810   0.099270797   0.1186012000  -0.018781307
## 67    0.539830510   0.364180620   0.505775480  -0.0593797790   0.088092240
## 68    0.531973990   0.301641800   0.437498370  -0.0359611920  -0.034605486
## 69    0.093499711  -0.274417700  -0.291816810   0.0821332120  -0.243235220
## 70    0.098248049  -0.329882660  -0.178498240  -0.0369361030  -0.057546422
## 71    0.485130380   0.290926460   0.712753600  -0.2378248200   0.001320819
## 72    0.536875270   0.358317940   0.759497230  -0.2298139700  -0.084139792
## 73    0.293819860  -0.161137960  -0.070798529   0.0499288140  -0.115302760
```

```
## 74   -0.063109724 -0.072455945 -0.059533315  0.1612799100 -0.130438590
## 75   -0.023996426 -0.008259743 -0.106109450  0.0865720530 -0.107677430
## 76   -0.095351327  0.125335380 -0.220228440  0.0189821970 -0.088940444
## 77    0.117638810  0.069478334 -0.233705310 -0.0223196250 -0.073791881
## 78    0.111349770  0.134363740 -0.221452890 -0.0334966340 -0.068706240
## 79   -0.367091900 -0.192283360  0.504731480 -0.4797295200  0.082034033
## 80   -0.301345110 -0.269860910  0.456118480  0.0940914810 -0.309152910
## 81   -0.221572180 -0.279838700  0.470135100  0.2112005700 -0.272905420
## 82   -0.151880510 -0.269317390  0.510220770  0.0960817380 -0.163394250
## 83   -0.203931150 -0.154448070  0.584593450  0.0087423875  0.011660578
## 84   -0.159566540 -0.053069215  0.568275260 -0.0425566000  0.097617796
## 85    0.080299512 -0.087217493  0.350714830 -0.0372465090 -0.097676458
## 86    0.025644476 -0.263396180  0.301148890 -0.0161086060 -0.224752700
## 87   -0.282677940 -0.207079370  0.666762800 -0.2392859300  0.078229978
## 88   -0.237256990 -0.243976650  0.658310500 -0.0707388470 -0.118815440
## 89   -0.103874750 -0.147424760  0.544987240  0.0127809600 -0.295050110
## 90   -0.017096531 -0.180570700  0.414512510 -0.0196917170 -0.163205240
## 91   -0.091910876 -0.175821840  0.497958290 -0.0492023810  0.088514793
## 92   -0.165264550 -0.195871240  0.589804220 -0.0179271180  0.105327810
## 93   -0.030151665 -0.225084380  0.560669280 -0.0114817050 -0.153322760
## 94   -0.049771890 -0.297461940  0.437571490  0.0129971230 -0.227591540
## 95   -0.121584490 -0.409550890  0.259923020  0.0146516100 -0.190636540
## 96    0.025660366 -0.240842690  0.236881430 -0.0455323790 -0.146006390
## 97   -0.048464463 -0.253305750  0.294606070 -0.0683534970  0.023946895
## 98   -0.162549300 -0.255019990  0.325321870 -0.0658244830  0.104709540
## 99   -0.021996143 -0.143448640  0.409982020  0.1916016200 -0.075822649
## 100  -0.174122330 -0.272164330  0.426782220  0.0214834250  0.064451419
## 101  -0.243525890 -0.198722060  0.449738990 -0.0366181740 -0.089046514
## 102  -0.376025560 -0.309908730  0.670427780 -0.0329982000 -0.167240480
## 103  -0.303746390 -0.319631070  0.722056610 -0.0451324380 -0.262268960
## 104  -0.243031650 -0.249786880  0.716047050 -0.0664706230  0.005645369
## 105  -0.207386320 -0.185581470  0.671484730 -0.0475147220  0.144637250
## 106  -0.015885416 -0.026360987  0.451000730 -0.0599592100  0.025881487
## 107   0.034068108 -0.057197510  0.418676370 -0.0170109650 -0.132132070
## 108   0.039892134 -0.137543630  0.466354830  0.0367745900 -0.235416280
## 109  -0.039496952 -0.213296420  0.490822500  0.0017780167 -0.174895940
## 110  -0.097537775 -0.131092250  0.504007190 -0.0334570170 -0.049285129
## 111  -0.152900820 -0.131503590  0.610607290 -0.0813724460  0.056962195
## 112   0.006629045 -0.141784600  0.649873480 -0.6312848700  0.338864070
## 113  -0.046440592 -0.269314190  0.374280240 -0.3664444300  0.072161271
## 114   0.048377337 -0.139615990  0.472624590 -0.1993631100 -0.095754272
## 115  -0.117016980 -0.065315989  0.461054790 -0.0980312970  0.039626295
## 116  -0.285013790 -0.279160780  0.478108430  0.0174702530  0.051533555
## 117  -0.177311610 -0.256913530  0.529633930  0.0481354480 -0.082637884
## 118  -0.023716902 -0.144586770  0.330022230 -0.0070935541 -0.160172310
## 119   0.013310384 -0.025309559  0.210473910  0.0002141360 -0.257720910
## 120  -0.263201470 -0.087956434  0.313915700 -0.0213563490 -0.125467980
## 121  -0.228404290 -0.157196160  0.329508350 -0.0729442890 -0.115063500
## 122  -0.073647621 -0.113284490  0.339436250 -0.0470359840 -0.149365460
## 123  -0.023037179 -0.260822800  0.452506920  0.0080967756  0.018427911
```

```
## 124 -0.032043427 -0.253312530  0.461221180 -0.0281804970  0.134382080
## 125 -0.202682920 -0.107926410  0.414254740 -0.0439752200 -0.001417998
## 126 -0.325414600 -0.520593860  0.177339230 -0.0327278590 -0.111061650
## 127 -0.532470890 -0.223866290  0.250825240 -0.0734237860 -0.081083025
## 128 -0.574609320 -0.217664990  0.323986100 -0.4770527400  0.180647750
## 129 -0.381924240 -0.293633080  0.253779720 -0.4445244400  0.168844280
## 130 -0.073408328 -0.310543680  0.207009180  0.0763076690 -0.139809360
## 131 -0.100068850 -0.487030660  0.326443220 -0.1756098000 -0.024263868
## 132 -0.205623040 -0.558401880  0.330599070  0.0006238958 -0.096132919
## 133 -0.277257000 -0.318813200  0.283257060  0.4475728500 -0.307168600
## 134 -0.461440450 -0.418870300  0.399924850  0.2946423300 -0.206986920
## 135 -0.375365970 -0.665121630  0.290669630 -0.4128569000  0.182605990
## 136 -0.311439230 -0.439138570  0.292814530 -0.3301899200  0.137855930
## 137 -0.397842220 -0.401588960  0.326385070 -0.5619920300  0.354484130
## 138 -0.251188720 -0.300811930  0.037222261 -0.1731315500  0.079567930
## 139 -0.061905604 -0.174587720 -0.224629490  0.0573099430 -0.110243800
## 140 -0.246468740 -0.137000680 -0.127727660 -0.1924602200 -0.094912968
## 141 -0.209535650 -0.157124930  0.015637408  0.2096373900 -0.337988200
## 142 -0.101198210 -0.137534920 -0.100684400  0.4022881900 -0.338773950
## 143 -0.515840480 -0.316307170  0.450060470 -0.4701094300  0.217700420
## 144 -0.471619340 -0.286516520  0.336915560 -0.4379426300  0.165124860
## 145 -0.359559770 -0.224055980  0.269014510 -0.5885854500  0.472156490
## 146 -0.331255420  0.012143940  0.247685970 -0.1507958000  0.166182590
## 147 -0.125732620  0.046648801  0.036197431 -0.0894886130 -0.042483479
## 148 -0.113950610 -0.282466850  0.051126642 -0.1442861100 -0.048495712
## 149 -0.233364730 -0.272550870  0.184418960  0.3545192300 -0.475270960
## 150 -0.247556760 -0.214282500  0.188048080  0.3821750500 -0.404705260
## 151 -0.119928100 -0.242067970  0.278796070  0.2210552800 -0.263545070
## 152 -0.149293580 -0.266144730  0.437114220  0.0915495630 -0.184043120
## 153  0.165752590 -0.065337167  0.288024510  0.4014941700 -0.500936510
## 154 -0.074058179  0.131627360  0.195190360  0.2418690600 -0.274127170
## 155 -0.404679780 -0.134824510  0.331907320 -0.1183210600  0.041265770
## 156 -0.271849020 -0.186964440  0.379153570  0.1068370200 -0.254617830
## 157 -0.256435920 -0.100860560  0.384476190 -0.1133225300 -0.067416287
## 158 -0.303987750 -0.185242950  0.368801850 -0.4121534400  0.202418380
## 159 -0.148991320 -0.112092510  0.323898100  0.2141545900 -0.272891730
## 160 -0.311864060 -0.272433760  0.418475490  0.1574202100 -0.190156150
## 161 -0.255003490 -0.172418330  0.284097950  0.3938259600 -0.425280500
## 162 -0.194947020 -0.038603056  0.132062540  0.1233939400 -0.209000970
## 163 -0.358549470 -0.001777714  0.189790750 -0.0195484480 -0.158514950
## 164 -0.434010950 -0.009966085  0.240857520  0.0936091780 -0.315860580
## 165 -0.401828940  0.022505093  0.328932000 -0.2868720100  0.076320917
## 166 -0.292387060  0.011677073  0.363219360 -0.4025515000  0.188920680
## 167 -0.390538650  0.004434835  0.211550680 -0.2279948200  0.005252523
## 168 -0.174464670  0.200174970  0.088914435  0.4829414200 -0.411669890
## 169 -0.358086540 -0.035956463  0.441091430  0.3026892700 -0.242481230
## 170 -0.366932360 -0.042619214  0.524917070  0.4995618900 -0.529786350
## 171 -0.152767490 -0.093591032  0.401238610  0.1769649900 -0.397058870
## 172 -0.448711590 -0.243832230  0.369818360 -0.2152064700 -0.043170455
## 173 -0.503502070 -0.147258840  0.336463120  0.1134963200 -0.310938090
```

```
## 174 -0.202121720  0.061013034  0.278749480 -0.0806006290 -0.116268610
## 175 -0.156071960  0.174665830  0.291769390 -0.3998600700  0.181701500
## 176 -0.693816830  0.044065905  0.455786200 -0.2500102600  0.076122110
## 177 -0.029389798 -0.206925560  0.163407530  0.0134398750  0.121561090
##               NA           NA           NA            NA            NA
## 1     0.1077254000 -0.98531027 -0.976623440 -0.99220528 -0.98458626
## 2     0.1005842900 -0.98311996 -0.989045800 -0.98912123 -0.98689045
## 3     0.0961268760 -0.97629211 -0.993551820 -0.98637871 -0.97492153
## 4     0.0855376990 -0.99138480 -0.992407320 -0.98755418 -0.99158889
## 5     0.0773920350 -0.98518357 -0.992378120 -0.98740185 -0.98694370
## 6     0.0790121420 -0.98518080 -0.992117480 -0.98307675 -0.98578560
## 7     0.0954645550 -0.98817723 -0.989205710 -0.97915380 -0.98772264
## 8     0.0940956070 -0.98910723 -0.987403240 -0.97851956 -0.98912885
## 9     0.0778629820 -0.99088198 -0.992891350 -0.98724152 -0.99050928
## 10    0.0789758430 -0.98493784 -0.987303760 -0.98084404 -0.98510311
## 11    0.0854817750 -0.98466387 -0.988215590 -0.98090404 -0.98548275
## 12    0.0915775350 -0.99416933 -0.995566520 -0.99579097 -0.99402183
## 13    0.0861835190 -0.99544544 -0.997109200 -0.99586602 -0.99499607
## 14    0.0836222370 -0.99761834 -0.997609530 -0.99617388 -0.99734429
## 15   -0.1745214700 -0.97753165 -0.941867550 -0.91159041 -0.98098337
## 16   -0.0269414500 -0.98874836 -0.967257510 -0.93401801 -0.98803853
## 17    0.0609336250 -0.98911045 -0.982180280 -0.97436137 -0.98850318
## 18    0.0945036680 -0.98919640 -0.989762100 -0.98196822 -0.98945367
## 19    0.1078218700 -0.99128786 -0.997697480 -0.99533142 -0.99094655
## 20    0.1007478900 -0.99590036 -0.997545030 -0.99504298 -0.99590963
## 21    0.0937734690 -0.99747587 -0.998228080 -0.99813809 -0.99733101
## 22    0.0945852790 -0.99758401 -0.998648630 -0.99768157 -0.99745259
## 23    0.0889987580 -0.99808137 -0.997586300 -0.99486246 -0.99848514
## 24    0.0790552280 -0.99833703 -0.998208290 -0.99598691 -0.99861997
## 25    0.0808561270 -0.99624819 -0.997671450 -0.99406934 -0.99625450
## 26    0.0885527260 -0.99353980 -0.997429250 -0.99505457 -0.99374243
## 27    0.0894155930 -0.99433322 -0.997476570 -0.99679810 -0.99465918
## 28    0.2294843700 -0.97335570 -0.972203390 -0.91719890 -0.98014989
## 29    0.2470503700 -0.99422554 -0.975368420 -0.96888020 -0.99406462
## 30    0.1830192900 -0.99564427 -0.978231050 -0.96663998 -0.99549930
## 31    0.0765793130 -0.73087388 -0.499649460 -0.56901637 -0.81746389
## 32   -0.0502120920 -0.72058157 -0.488968540 -0.50932463 -0.78495030
## 33    0.0604051910 -0.92572959 -0.897016750 -0.72055919 -0.94347515
## 34    0.2031538800 -0.99621609 -0.978202470 -0.97771988 -0.99680444
## 35    0.1566043000 -0.99813599 -0.990542560 -0.97702357 -0.99780378
## 36    0.1177939600 -0.99673098 -0.994242210 -0.98667882 -0.99638761
## 37    0.0942838350 -0.99909646 -0.992917250 -0.99092483 -0.99908116
## 38    0.0848893220 -0.99834012 -0.994224820 -0.99602129 -0.99820505
## 39   -0.5941657600 -0.95390955 -0.972973420 -0.84095619 -0.95191223
## 40   -0.2865718300 -0.94503475 -0.988712060 -0.83657336 -0.94203201
## 41   -0.0405384660 -0.96234359 -0.988681120 -0.90097784 -0.96022695
## 42    0.0745763030 -0.98300305 -0.993492020 -0.97544897 -0.98260563
## 43    0.1157964700 -0.99429125 -0.994729220 -0.98163073 -0.99485404
## 44    0.1289361600 -0.99892436 -0.995596170 -0.98693836 -0.99893406
## 45    0.1068855000 -0.99735086 -0.994702320 -0.98453755 -0.99732325
```

```
## 46     0.0926319180 -0.99853579 -0.994201930 -0.98875701 -0.99841259
## 47     0.0921485360 -0.99878789 -0.995054670 -0.98844605 -0.99875639
## 48     0.0812382510 -0.99835296 -0.994911450 -0.99213197 -0.99851666
## 49     0.0848936500 -0.99853287 -0.995739250 -0.98903748 -0.99863450
## 50     0.0924671060 -0.99827112 -0.995050900 -0.98889306 -0.99822694
## 51     0.0808646120 -0.99810121 -0.993141980 -0.98862667 -0.99818155
## 52     0.5432788500 -0.95513929 -0.933605610 -0.81188693 -0.96509851
## 53     0.2575647900 -0.98117184 -0.992719250 -0.89226640 -0.98020457
## 54     0.1005448200 -0.99013041 -0.996153430 -0.94702521 -0.98987901
## 55     0.0430375740 -0.99618046 -0.995071170 -0.98902329 -0.99598742
## 56     0.0459467490 -0.99914537 -0.995488430 -0.99423868 -0.99899020
## 57     0.0555906940 -0.99911560 -0.994887490 -0.99445568 -0.99913337
## 58     0.0751469740 -0.99897201 -0.994454780 -0.98615570 -0.99913324
## 59     0.0850619870 -0.99917255 -0.993990740 -0.99480310 -0.99921115
## 60     0.0864718190 -0.99924487 -0.995764880 -0.99377387 -0.99926176
## 61     0.0881932550 -0.99960009 -0.995945040 -0.99434839 -0.99961180
## 62     0.0875748090 -0.99885209 -0.995185790 -0.99511471 -0.99891433
## 63     0.0852424670 -0.99843598 -0.994913710 -0.99437920 -0.99836980
## 64     0.0861522210 -0.99904601 -0.994318450 -0.99335143 -0.99905130
## 65     0.7316265700 -0.88716564 -0.915990420 -0.87226754 -0.90644809
## 66     0.5129021100 -0.94532037 -0.979073020 -0.86142570 -0.94173599
## 67     0.1312556800 -0.42283371 -0.788106630 -0.56517871 -0.56834982
## 68     0.0588127130 -0.38879976 -0.744798780 -0.59595082 -0.50876266
## 69     0.2159295300 -0.80797336 -0.924891460 -0.92594262 -0.83259985
## 70    -0.0521754020 -0.63256602 -0.783017970 -0.62485358 -0.74825330
## 71    -0.0985443640 -0.08129443 -0.670237930 -0.57189809 -0.35190001
## 72     0.1265847800 -0.11708191 -0.705085290 -0.72542219 -0.37048572
## 73     0.1956875900 -0.70487231 -0.858210790 -0.87840890 -0.74576458
## 74     0.2121310600 -0.94601195 -0.983027070 -0.96470731 -0.94542062
## 75     0.1590743300 -0.95021471 -0.988112220 -0.96948105 -0.94599969
## 76     0.1103430600 -0.96234199 -0.993114060 -0.98134938 -0.95835434
## 77     0.0812179640 -0.98176287 -0.994969890 -0.99107732 -0.98342245
## 78     0.0764133740 -0.99260027 -0.996918580 -0.99510021 -0.99224797
## 79     0.2564430900 -0.32354578 -0.141939720 -0.45659800 -0.29766521
## 80     0.0864411650 -0.39925291 -0.088415705 -0.40215750 -0.43858778
## 81     0.1019860100 -0.44543781 -0.063083329 -0.34705584 -0.46139436
## 82     0.0258594640 -0.36040537  0.042333424 -0.27613840 -0.38253398
## 83     0.0041745148 -0.37755748  0.133715030 -0.30814814 -0.38651704
## 84     0.0846554540 -0.51085478  0.026422841 -0.37242435 -0.51719760
## 85     0.1324832800 -0.50430997 -0.101970170 -0.32240541 -0.52175529
## 86     0.1488296400 -0.47230941 -0.061530134 -0.29837084 -0.48818386
## 87     0.0431372620 -0.46501506 -0.167400450 -0.43151087 -0.47543749
## 88     0.1498907100 -0.46773904 -0.088727759 -0.37812283 -0.48928779
## 89     0.1837547800 -0.51115059 -0.098407942 -0.34932550 -0.54132238
## 90     0.0995285430 -0.49171175 -0.065042631 -0.31606302 -0.51292997
## 91     0.0196041240 -0.43666047  0.033947370 -0.30922493 -0.44255838
## 92     0.0796641310 -0.45932476  0.034665288 -0.32584284 -0.47962629
## 93     0.1127021300 -0.51392579 -0.050255776 -0.28288630 -0.53727086
## 94     0.1428857800 -0.47216816 -0.027794022 -0.26281941 -0.49735102
## 95     0.1035978500 -0.41936161 -0.012322999 -0.30791562 -0.45413830
```

```
## 96    0.0068022451 -0.42216651 -0.013167728 -0.29260458 -0.43980928
## 97   -0.0137894220 -0.44827352  0.051216271 -0.26886698 -0.44548025
## 98    0.0956241230 -0.50437893  0.015762644 -0.30003199 -0.50069421
## 99   -0.0223875810 -0.45595247  0.030218936 -0.26607028 -0.46579031
## 100   0.0727822900 -0.48266333 -0.022088940 -0.31057250 -0.49406624
## 101   0.1596885100 -0.49677092 -0.080350970 -0.36284538 -0.52737714
## 102   0.1763366100 -0.46948578  0.032367693 -0.30173541 -0.51463924
## 103   0.0556777720 -0.44777597  0.055891583 -0.30133812 -0.48959818
## 104  -0.0289075520 -0.45538127  0.069813254 -0.34900948 -0.47497430
## 105   0.0618590230 -0.50627991  0.009218841 -0.36831531 -0.52234765
## 106   0.1155227500 -0.54702492 -0.073083343 -0.38671403 -0.56704405
## 107   0.1188107000 -0.50791561 -0.010991653 -0.34020651 -0.53993214
## 108   0.1669562800 -0.48177333  0.013741497 -0.31572741 -0.50853348
## 109   0.0812176170 -0.45651035  0.012341046 -0.32178859 -0.48098034
## 110  -0.0312597120 -0.44989473  0.041568905 -0.30846622 -0.47876818
## 111   0.0441700070 -0.48169764  0.010786752 -0.30636273 -0.49690365
## 112   0.0662646880 -0.43202934 -0.009447212 -0.30859732 -0.45632518
## 113   0.1771800100 -0.45341569 -0.061216287 -0.32763842 -0.48704126
## 114   0.0880907160 -0.47562751 -0.054418398 -0.27340978 -0.50056770
## 115   0.0130219740 -0.44779670 -0.000303382 -0.32409599 -0.47821063
## 116   0.1077640300 -0.44545035 -0.022369313 -0.34846722 -0.47360785
## 117   0.1243362800 -0.49519683 -0.075819651 -0.29826376 -0.52868960
## 118   0.1075178700 -0.51719470 -0.115544520 -0.32551653 -0.55144711
## 119   0.0962865750 -0.51147526 -0.114165040 -0.35043595 -0.53600722
## 120   0.1134271200 -0.56317897 -0.097972713 -0.35386260 -0.60015615
## 121   0.1011386600 -0.54614905 -0.132568370 -0.36042092 -0.57956798
## 122  -0.0166367940 -0.47892631 -0.114912570 -0.27374917 -0.49261276
## 123   0.0288346550 -0.40173287 -0.057885666 -0.21479001 -0.40287329
## 124   0.1379761700 -0.40244449 -0.035971716 -0.29586382 -0.41463411
## 125   0.0757317940 -0.51378170 -0.065370344 -0.33271229 -0.54522100
## 126   0.1354629800 -0.67804595 -0.331174890 -0.32873594 -0.69242514
## 127   0.1117395000 -0.72682759 -0.159999430 -0.30760673 -0.75253100
## 128   0.0937456810 -0.34599847 -0.115286560 -0.25632971 -0.35102443
## 129   0.0740285730 -0.25952750 -0.174324110 -0.23970156 -0.28199975
## 130   0.0623900040 -0.54270950 -0.210707100 -0.16995951 -0.55138770
## 131   0.0892646900 -0.24056586 -0.087622849 -0.05253490 -0.21858120
## 132   0.0543641450 -0.14671664 -0.068871797 -0.09763150 -0.11467332
## 133   0.1179795000 -0.73433644 -0.246945320 -0.17787937 -0.74986371
## 134   0.1214822300 -0.74671130 -0.249120060 -0.23858846 -0.75192087
## 135   0.1533726800 -0.62878244 -0.010617799 -0.08246270 -0.66382079
## 136   0.2027245000 -0.66430820 -0.033440531 -0.09899060 -0.68545262
## 137   0.1750142000 -0.31801206  0.033933754 -0.05679736 -0.34657011
## 138   0.0003964888 -0.08568680  0.049300317  0.12732965 -0.04918201
## 139   0.0750702440 -0.36310657  0.064423707  0.11899540 -0.39755628
## 140   0.1075884400 -0.23369188  0.041119193 -0.13944291 -0.27608826
## 141  -0.0100624260 -0.26577972 -0.111831410 -0.16116687 -0.37893172
## 142   0.1794381200 -0.71373238 -0.139656820 -0.07395244 -0.71787719
## 143   0.1241266000 -0.64435903 -0.151241560 -0.15750311 -0.65438513
## 144   0.2813640500 -0.59954558 -0.143646510 -0.16523367 -0.61868940
## 145   0.0580359580 -0.29874790 -0.083700618 -0.04627086 -0.35271921
```

```
## 146  -0.0764482840 -0.06923546  0.037772628 -0.07928910 -0.08705971
## 147   0.1498433100 -0.21736271 -0.102482900 -0.14144583 -0.21783887
## 148   0.1149999300 -0.25878873 -0.127134910 -0.18214981 -0.26941455
## 149   0.0704262310 -0.60159804 -0.131965080 -0.25889060 -0.62618752
## 150   0.1169666000 -0.68828384 -0.208714730 -0.20020957 -0.68724591
## 151   0.0344481070 -0.68634674 -0.001321991 -0.55655051 -0.67876882
## 152   0.0466166610 -0.73791670 -0.020884050 -0.56188542 -0.74395205
## 153  -0.1189745000 -0.35180201 -0.026260286 -0.41956706 -0.37807307
## 154   0.0045285318 -0.20117646  0.006509982 -0.36459996 -0.21370313
## 155   0.1731541200 -0.53763313  0.009375310 -0.46154130 -0.52969764
## 156   0.1345927600 -0.60474306 -0.042601701 -0.46215867 -0.64665134
## 157   0.1847528700 -0.54435665 -0.019643429 -0.52116002 -0.53234506
## 158   0.1512020100 -0.72564864  0.012712706 -0.57456488 -0.73954287
## 159   0.0273753060 -0.65416238 -0.018962532 -0.61725207 -0.65093819
## 160   0.0463248120 -0.65814209 -0.020163289 -0.60270510 -0.66867892
## 161  -0.0615945450 -0.40939661  0.079773244 -0.30926751 -0.42073523
## 162   0.0249903250 -0.23879635  0.083457815 -0.34269519 -0.23053170
## 163   0.0607045640 -0.46432442 -0.116471980 -0.54808938 -0.43571251
## 164   0.0615959640 -0.49124717 -0.165186320 -0.52137641 -0.47206881
## 165   0.2033377500 -0.58934520 -0.107517490 -0.60749461 -0.61151087
## 166   0.1662548000 -0.76002085 -0.071266043 -0.59683363 -0.76296943
## 167   0.1103678300 -0.70387303 -0.085518582 -0.66346585 -0.71702461
## 168  -0.0132410200 -0.65619121 -0.035274007 -0.61595769 -0.66222258
## 169   0.0070514413 -0.69210253 -0.026432354 -0.59775683 -0.70153403
## 170  -0.0656235970 -0.44075342  0.030076113 -0.41783704 -0.48779453
## 171   0.0174525740 -0.18306779  0.017116928 -0.41529288 -0.18015774
## 172   0.1066202000 -0.62986471 -0.136806240 -0.54853658 -0.62851120
## 173   0.1027981500 -0.53118891 -0.244705030 -0.53867943 -0.58074232
## 174   0.1650279900 -0.40714449 -0.119546180 -0.54632096 -0.43364487
## 175   0.1571412500 -0.76357626 -0.045350642 -0.57194274 -0.75832847
## 176   0.0903591880 -0.65300139 -0.052249131 -0.59116617 -0.69516179
## 177  -0.0271252670 -0.96761340 -0.938871960 -0.90291680 -0.96940714
##               NA          NA          NA          NA          NA
## 1    -0.9763526200 -0.992361640 -0.867043740 -0.93378602 -0.7475661800
## 2    -0.9890379600 -0.989184580 -0.864903820 -0.95356049 -0.7458700000
## 3    -0.9941221100 -0.985786180 -0.864903820 -0.95904912 -0.7432771000
## 4    -0.9931420700 -0.989584910 -0.885320380 -0.95665634 -0.7432771000
## 5    -0.9925425000 -0.988162830 -0.870154080 -0.95335965 -0.7497799300
## 6    -0.9922686800 -0.982704930 -0.870154080 -0.95335965 -0.7463993500
## 7    -0.9897401300 -0.980000490 -0.880846490 -0.95431618 -0.7425941900
## 8    -0.9876054700 -0.976192240 -0.878916490 -0.95332025 -0.7425941900
## 9    -0.9939067700 -0.987830810 -0.878916490 -0.95332025 -0.7494695000
## 10   -0.9888956400 -0.982974350 -0.871571120 -0.94869370 -0.7477413400
## 11   -0.9898279900 -0.983507280 -0.871571120 -0.94869370 -0.7477413400
## 12   -0.9954854100 -0.996186790 -0.885642960 -0.95433478 -0.7558745100
## 13   -0.9970289700 -0.995882500 -0.886159170 -0.95606969 -0.7572021000
## 14   -0.9977533100 -0.996035480 -0.886159170 -0.95512014 -0.7592831100
## 15   -0.9442419300 -0.915308410 -0.859841110 -0.87785296 -0.8034711800
## 16   -0.9656623800 -0.929283930 -0.874785700 -0.92541442 -0.7690723300
## 17   -0.9820981700 -0.976089050 -0.874862200 -0.94352911 -0.7509771000
```

```
## 18   -0.9918735800 -0.983990880 -0.874862200 -0.95095864 -0.7467830600
## 19   -0.9979059800 -0.995617510 -0.878836550 -0.95829725 -0.7467830600
## 20   -0.9973872400 -0.994882180 -0.884585970 -0.95800296 -0.7511170500
## 21   -0.9981400200 -0.998062430 -0.886939260 -0.95753247 -0.7568416700
## 22   -0.9986228000 -0.997688100 -0.886450590 -0.95753247 -0.7552944200
## 23   -0.9974636800 -0.994550420 -0.884890440 -0.95667138 -0.7552944200
## 24   -0.9980769600 -0.996092550 -0.884858430 -0.95613276 -0.7604617200
## 25   -0.9975744800 -0.994214780 -0.883961710 -0.95613276 -0.7554665100
## 26   -0.9975339800 -0.995311080 -0.883961710 -0.95574729 -0.7554665100
## 27   -0.9976724800 -0.997413380 -0.885156850 -0.95574729 -0.7559536100
## 28   -0.9786105900 -0.940880760 -0.856909130 -0.94748333 -0.6941836300
## 29   -0.9743136300 -0.966260600 -0.893364430 -0.96970507 -0.6941836300
## 30   -0.9770687500 -0.965959670 -0.890292840 -0.96441189 -0.7021190700
## 31   -0.6144029600 -0.689653520 -0.630321630 -0.57256752 -0.3809859000
## 32   -0.5748374000 -0.523945930 -0.630321630 -0.57256752 -0.3809859000
## 33   -0.9214794400 -0.726837800 -0.729150490 -0.86675014 -0.6815977000
## 34   -0.9825548700 -0.977247730 -0.887202680 -0.96019878 -0.7068539700
## 35   -0.9901451400 -0.976183050 -0.893344930 -0.95672721 -0.7210076800
## 36   -0.9945620200 -0.987044360 -0.888859980 -0.95435237 -0.7387397100
## 37   -0.9930882700 -0.990700700 -0.888651410 -0.95151568 -0.7505039700
## 38   -0.9946296800 -0.995999470 -0.887021410 -0.95151568 -0.7567234400
## 39   -0.9735727900 -0.831619680 -0.945123310 -0.95210908 -0.8881398400
## 40   -0.9886514600 -0.834172510 -0.909885970 -0.95210908 -0.7847187200
## 41   -0.9892186700 -0.895251330 -0.893069070 -0.95185671 -0.7603445500
## 42   -0.9934162200 -0.974654960 -0.884277250 -0.95185671 -0.7551646100
## 43   -0.9942945200 -0.981949670 -0.883048460 -0.95406718 -0.7329922500
## 44   -0.9954679400 -0.987463040 -0.882191880 -0.95438956 -0.7329922500
## 45   -0.9946407000 -0.984232350 -0.882191880 -0.95341814 -0.7426082100
## 46   -0.9940811300 -0.988347350 -0.885803010 -0.95341814 -0.7480359100
## 47   -0.9952515000 -0.988271010 -0.885685320 -0.95364902 -0.7480359100
## 48   -0.9945046900 -0.992078710 -0.885685320 -0.95540150 -0.7567481700
## 49   -0.9955776400 -0.989107870 -0.887603920 -0.95600256 -0.7503479600
## 50   -0.9951672800 -0.988834140 -0.886810810 -0.95248937 -0.7503479600
## 51   -0.9930738200 -0.989173630 -0.886810810 -0.95248937 -0.7535786700
## 52   -0.9511682100 -0.802836380 -0.805127760 -0.91142884 -0.4560381600
## 53   -0.9926555100 -0.888909080 -0.854175900 -0.95495175 -0.6240574900
## 54   -0.9963092400 -0.944515960 -0.873037560 -0.95495175 -0.7128218600
## 55   -0.9951402500 -0.989828710 -0.883269750 -0.95478669 -0.7646032900
## 56   -0.9955176600 -0.994460090 -0.888446160 -0.95478669 -0.7699082300
## 57   -0.9945444900 -0.995157600 -0.888506980 -0.95478928 -0.7602256700
## 58   -0.9942484300 -0.984341510 -0.886909190 -0.95312683 -0.7593653600
## 59   -0.9935499900 -0.994250460 -0.886909190 -0.95312683 -0.7593653600
## 60   -0.9952203700 -0.993625820 -0.887098610 -0.95625161 -0.7545263600
## 61   -0.9953637400 -0.994355090 -0.887041580 -0.95625161 -0.7545263600
## 62   -0.9945251500 -0.995112600 -0.886518090 -0.95527648 -0.7569267900
## 63   -0.9946771500 -0.994202590 -0.886518090 -0.95527648 -0.7569267900
## 64   -0.9943657300 -0.992971260 -0.887292640 -0.95429691 -0.7574963300
## 65   -0.9301546300 -0.884780780 -0.624751190 -0.88229736 -0.4065699600
## 66   -0.9815491700 -0.857488320 -0.778554050 -0.92598189 -0.5232741900
## 67   -0.8163726100 -0.625598990 -0.682358590 -0.74219793 -0.6294429100
```

```
## 68   -0.7656499300 -0.669623080 -0.622402340 -0.74219793 -0.6294429100
## 69   -0.9309375300 -0.930375900 -0.622402340 -0.95274785 -0.6359053200
## 70   -0.7977898300 -0.660965950 -0.687602610 -0.83089889 -0.6485824400
## 71   -0.6885754300 -0.594377970 -0.487310000 -0.62851398 -0.4658304400
## 72   -0.7601085000 -0.783588290 -0.487310000 -0.62851398 -0.4658304400
## 73   -0.9115796600 -0.916740470 -0.762954450 -0.80909107 -0.6635484200
## 74   -0.9840537400 -0.963172100 -0.762954450 -0.95165715 -0.6954428500
## 75   -0.9893705700 -0.969856500 -0.795164100 -0.95165715 -0.7122335600
## 76   -0.9934036200 -0.980389010 -0.841278140 -0.95642916 -0.7407614000
## 77   -0.9952276800 -0.992154540 -0.862702120 -0.95535928 -0.7519238400
## 78   -0.9972082300 -0.995264940 -0.884578680 -0.95535928 -0.7593043000
## 79   -0.1524847700 -0.481025800 -0.498341930 -0.40900560 -0.2083963700
## 80   -0.1065440000 -0.421053660 -0.399042060 -0.44752477 -0.2083963700
## 81   -0.0630748160 -0.358472260 -0.399042060 -0.43408921 -0.1782762200
## 82    0.0003877810 -0.269310540 -0.417515540 -0.23368541 -0.1782762200
## 83    0.1096502500 -0.330104180 -0.461680990 -0.23368541 -0.2586299300
## 84    0.0166362220 -0.422175740 -0.503428250 -0.33509312 -0.2586299300
## 85   -0.1207335200 -0.364816400 -0.503428250 -0.38846854 -0.1484262800
## 86   -0.0836358890 -0.329053520 -0.539237330 -0.33972413 -0.1137514100
## 87   -0.1857702900 -0.464688580 -0.528386130 -0.47587563 -0.2221951900
## 88   -0.0871015730 -0.436942620 -0.527033040 -0.48347672 -0.1880610500
## 89   -0.1211859000 -0.403635470 -0.503487320 -0.44746442 -0.1416982300
## 90   -0.0843258460 -0.333833080 -0.503487320 -0.31742918 -0.1416982300
## 91    0.0424750470 -0.318709630 -0.421474940 -0.31742918 -0.2922427100
## 92    0.0230440880 -0.386680870 -0.378226890 -0.27550138 -0.2922427100
## 93   -0.0876059600 -0.390333050 -0.378226890 -0.27550138 -0.0295532940
## 94   -0.0601463180 -0.324732390 -0.421434180 -0.32459005 -0.0295532940
## 95   -0.0660427500 -0.313918530 -0.421434180 -0.32459005 -0.2719874100
## 96   -0.0580348820 -0.293619360 -0.465953870 -0.37814199 -0.2927511800
## 97    0.0381363880 -0.278557590 -0.555130750 -0.30662999 -0.2927511800
## 98    0.0140175310 -0.310106260 -0.555130750 -0.30662999 -0.4073666100
## 99    0.0308539980 -0.273257500 -0.419046300 -0.37984858 -0.2063837400
## 100 -0.0290207190 -0.346646070 -0.419046300 -0.42556337 -0.2245095900
## 101 -0.0949600380 -0.391582330 -0.430597090 -0.40085477 -0.2245095900
## 102  0.0101915560 -0.326699910 -0.398475080 -0.31288727 -0.1825218300
## 103  0.0065825910 -0.322886460 -0.398475080 -0.29242038 -0.1825218300
## 104  0.0412713750 -0.363579740 -0.519299090 -0.29242038 -0.3763456800
## 105  0.0273803020 -0.393674110 -0.504067720 -0.30604219 -0.3238756400
## 106 -0.0647076970 -0.403059210 -0.504067720 -0.43299321 -0.3238756400
## 107 -0.0372303590 -0.363344410 -0.445817880 -0.36720039 -0.0691651510
## 108 -0.0208252970 -0.365143620 -0.445817880 -0.35329739 -0.0691651510
## 109  0.0054487434 -0.345400190 -0.456620180 -0.35329739 -0.3151685800
## 110  0.0549568460 -0.309876080 -0.491987470 -0.26245398 -0.3203012400
## 111  0.0223414260 -0.312579530 -0.526643170 -0.26245398 -0.3203012400
## 112 -0.0068567683 -0.333980450 -0.724575830 -0.24552931 -0.2032038000
## 113 -0.0666225100 -0.355983950 -0.612082340 -0.39205191 -0.3702673500
## 114 -0.0644367240 -0.307714810 -0.551815350 -0.39205191 -0.2937966000
## 115  0.0104555920 -0.340395930 -0.503082060 -0.35842493 -0.2937966000
## 116 -0.0341512570 -0.386710240 -0.375066320 -0.35842493 -0.0227999400
## 117 -0.0962992280 -0.344473780 -0.375066320 -0.39419181 -0.0227999400
```

```
## 118 -0.1220041800 -0.355595410 -0.474885280 -0.47801665 -0.1144594600
## 119 -0.1551350900 -0.363975290 -0.474885280 -0.35987088 -0.3635781400
## 120 -0.1463850200 -0.354438520 -0.554232980 -0.35987088 -0.4013626500
## 121 -0.1672990900 -0.361443130 -0.480758210 -0.39335370 -0.4165112600
## 122 -0.1292984200 -0.266604660 -0.480758210 -0.42388005 -0.3392742300
## 123 -0.0585343590 -0.200658550 -0.442134720 -0.28704391 -0.3170613200
## 124 -0.0487271200 -0.322002340 -0.442134720 -0.28704391 -0.3170613200
## 125 -0.1100142500 -0.351952940 -0.529952250 -0.30836262 -0.3369287900
## 126 -0.3399171300 -0.405919730 -0.525495070 -0.62512663 -0.1511967700
## 127 -0.2021699900 -0.363469550 -0.525495070 -0.45071031 -0.1511967700
## 128 -0.1916012500 -0.292765780 -0.720894840 -0.45071031 -0.2458964200
## 129 -0.2436996200 -0.288019630 -0.497858220 -0.45704417 -0.2458964200
## 130 -0.2166469500 -0.231544470 -0.448156640 -0.52766600 -0.2324664200
## 131 -0.1251240100 -0.123840070 -0.409216630 -0.29305858 -0.2324664200
## 132 -0.1004625000 -0.158952960 -0.409216630 -0.29305858 -0.2556345200
## 133 -0.2623554400 -0.174836030 -0.431622720 -0.54836273 -0.2556345200
## 134 -0.2785981500 -0.282145680 -0.538453090 -0.44912996 -0.2442462300
## 135 -0.0852521310 -0.186966780 -0.652745090 -0.13080261 -0.0253641340
## 136 -0.1097042400 -0.200611590 -0.620502270 -0.22113840 -0.2595960300
## 137 -0.0156444020 -0.145496070 -0.611398920 -0.19200914 -0.0005718645
## 138  0.0168028640  0.006465708 -0.493633710 -0.19200914 -0.0005718645
## 139  0.0112805740  0.051248023 -0.493633710 -0.09266469 -0.1599728200
## 140 -0.0002242084 -0.139838250 -0.523726780 -0.09266469 -0.1791669200
## 141 -0.1284688100 -0.186734000 -0.400496050 -0.39271465 -0.1681218900
## 142 -0.1534956000 -0.141072790 -0.400496050 -0.58510918 -0.1539106800
## 143 -0.1876562000 -0.216022550 -0.771182360 -0.44974415 -0.0328823150
## 144 -0.1564182700 -0.265952810 -0.771182360 -0.44974415 -0.0328823150
## 145 -0.0865646110 -0.091492441 -0.377212970 -0.34274457 -0.2631020000
## 146  0.0347466380 -0.112448850 -0.377212970 -0.34274457 -0.2573351500
## 147 -0.1266865700 -0.198114240 -0.381430670 -0.46202778 -0.2573351500
## 148 -0.1388740500 -0.232600800 -0.463171660 -0.40756286 -0.2904947400
## 149 -0.1489906500 -0.292261700 -0.370051510 -0.40756286 -0.2730187900
## 150 -0.1905022200 -0.261841770 -0.370051510 -0.62868176 -0.2716268600
## 151 -0.0613739870 -0.574539880 -0.487137850 -0.30207487 -0.4743699400
## 152 -0.0685176950 -0.567577000 -0.560027830 -0.35874565 -0.3735618600
## 153 -0.0721678320 -0.467755270 -0.043060724 -0.45070023 -0.3735618600
## 154 -0.0268824500 -0.405803980 -0.043060724 -0.24992202 -0.3311077200
## 155 -0.0281538690 -0.485044020 -0.578689450 -0.17317766 -0.3311077200
## 156 -0.0958381400 -0.472152060 -0.543887120 -0.17317766 -0.3187797600
## 157 -0.0914256770 -0.540048110 -0.543887120 -0.29562025 -0.3187797600
## 158 -0.0470544940 -0.602521630 -0.828280870 -0.29562025 -0.3270703800
## 159 -0.0327722120 -0.624221760 -0.511439780 -0.42646831 -0.4170199200
## 160 -0.0865973950 -0.606423990 -0.444996120 -0.38840225 -0.5042679000
## 161  0.0238939950 -0.330087630 -0.102529460 -0.38840225 -0.3094618200
## 162  0.0706764940 -0.398283220 -0.102529460 -0.52177648 -0.3094618200
## 163 -0.1267314900 -0.568195840 -0.473219340 -0.54369825 -0.3736162400
## 164 -0.1978208200 -0.536884340 -0.473219340 -0.48186007 -0.3736162400
## 165 -0.1322379000 -0.602051970 -0.489055280 -0.41756767 -0.3662923000
## 166 -0.0548474910 -0.604218380 -0.777539380 -0.39834643 -0.3551266000
## 167 -0.1024094900 -0.686679850 -0.666579230 -0.39834643 -0.3551266000
```

```
## 168 -0.0238195730 -0.624753860 -0.342718290 -0.54222605 -0.4396999700
## 169 -0.0363471500 -0.609105890 -0.333057870 -0.44135979 -0.4277482700
## 170  0.0133302920 -0.425552620  0.005557382 -0.44135979 -0.3479317000
## 171  0.0203126710 -0.428254670  0.005557382 -0.42799627 -0.3479317000
## 172 -0.1386124900 -0.543054070 -0.680996640 -0.42799627 -0.3933262900
## 173 -0.2706631000 -0.549559240 -0.185210850 -0.50786638 -0.3442403800
## 174 -0.1624046500 -0.557835860 -0.185210850 -0.44036005 -0.3442403800
## 175 -0.0494926760 -0.587038490 -0.873372470 -0.44036005 -0.3431502900
## 176 -0.0458571570 -0.609043580 -0.595297330 -0.44841921 -0.3431502900
## 177 -0.9392979000 -0.896846210 -0.836374890 -0.88827729 -0.7550638500
##               NA          NA          NA          NA          NA          NA
## 1    0.847307960 0.91489534  0.83084054 -0.967184280 -0.9995783 -0.9993543
## 2    0.833721060 0.90810964  0.82893499 -0.980613100 -0.9997558 -0.9998973
## 3    0.833721060 0.90575280  0.82893499 -0.976280290 -0.9996934 -0.9998283
## 4    0.834163960 0.90575280  0.82663382 -0.982295670 -0.9997929 -0.9999023
## 5    0.839090610 0.91118450  0.82137436 -0.985262010 -0.9998495 -0.9999519
## 6    0.839808040 0.91118450  0.81882667 -0.985214270 -0.9998740 -0.9999466
## 7    0.839232160 0.90706202  0.81882667 -0.984483570 -0.9999157 -0.9999021
## 8    0.839232160 0.90706202  0.82554291 -0.983166690 -0.9999198 -0.9998876
## 9    0.842403480 0.90784028  0.82171549 -0.988456690 -0.9999416 -0.9999461
## 10   0.836739430 0.90737892  0.80670461 -0.983648190 -0.9998594 -0.9998863
## 11   0.836739430 0.90737892  0.80670461 -0.984498600 -0.9998611 -0.9998965
## 12   0.841874410 0.91406722  0.82586725 -0.994010250 -0.9999670 -0.9999790
## 13   0.843589030 0.91406722  0.82856541 -0.995970130 -0.9999817 -0.9999881
## 14   0.846238340 0.91496550  0.82856541 -0.997447980 -0.9999936 -0.9999900
## 15   0.825064250 0.93234002  0.68601078 -0.833608230 -0.9995438 -0.9889871
## 16   0.845353540 0.91941571  0.75977230 -0.927060620 -0.9998330 -0.9975997
## 17   0.845353540 0.91198318  0.80165943 -0.971575750 -0.9997970 -0.9996629
## 18   0.843044510 0.91120310  0.81689110 -0.980373090 -0.9997852 -0.9999203
## 19   0.842770190 0.91120310  0.83632119 -0.987618610 -0.9999449 -0.9999604
## 20   0.842770190 0.91329769  0.83294290 -0.992828870 -0.9999837 -0.9999735
## 21   0.845124150 0.91452654  0.83216678 -0.996795320 -0.9999903 -0.9999907
## 22   0.844218380 0.91430311  0.83191838 -0.996915660 -0.9999922 -0.9999910
## 23   0.844218380 0.91430311  0.82960570 -0.997480460 -0.9999954 -0.9999905
## 24   0.846400910 0.91631244  0.82674198 -0.997282140 -0.9999963 -0.9999893
## 25   0.843871110 0.91422722  0.82674198 -0.995832960 -0.9999829 -0.9999901
## 26   0.841989680 0.91422722  0.82839042 -0.995422310 -0.9999702 -0.9999900
## 27   0.841989680 0.91463224  0.82789793 -0.995999760 -0.9999708 -0.9999904
## 28   0.824931370 0.86506491  0.75706536 -0.865476590 -0.9994045 -0.9920710
## 29   0.834266790 0.87930115  0.85762233 -0.886725600 -0.9996996 -0.9949675
## 30   0.839989480 0.89185775  0.84644320 -0.936281360 -0.9998960 -0.9982434
## 31   0.569016850 0.65672967  0.45807745 -0.668453410 -0.9666105 -0.8743615
## 32   0.569016850 0.65672967  0.45807745 -0.580387030 -0.9637318 -0.8691062
## 33   0.838134100 0.85411552  0.59554196 -0.851359890 -0.9970260 -0.9933674
## 34   0.838134100 0.87370085  0.85436239 -0.932023500 -0.9998430 -0.9986569
## 35   0.840774140 0.90485372  0.84121739 -0.959897920 -0.9998722 -0.9996714
## 36   0.841744230 0.91157870  0.83012180 -0.982507660 -0.9999511 -0.9999212
## 37   0.845128740 0.91218875  0.82889477 -0.993567800 -0.9999919 -0.9999572
## 38   0.845523500 0.91294464  0.82766253 -0.996641950 -0.9999962 -0.9999681
## 39   0.744723600 0.89203114  0.53805957 -0.629434620 -0.9739796 -0.9989774
```

```
## 40    0.765240830 0.90667361   0.61688830 -0.788442210 -0.9890423 -0.9997186
## 41    0.801002120 0.90709719   0.72701143 -0.919182400 -0.9975776 -0.9998356
## 42    0.828909000 0.91061673   0.81110596 -0.981509400 -0.9997734 -0.9999617
## 43    0.841813160 0.91311774   0.83253861 -0.985043340 -0.9999478 -0.9999724
## 44    0.850282750 0.91311774   0.83688493 -0.980575500 -0.9999317 -0.9999791
## 45    0.848176270 0.91368827   0.82867065 -0.987798530 -0.9999597 -0.9999691
## 46    0.847249020 0.91368827   0.82462861 -0.993489950 -0.9999912 -0.9999655
## 47    0.847209930 0.91324227   0.82462861 -0.994812630 -0.9999967 -0.9999753
## 48    0.845679950 0.91315922   0.82409607 -0.995418270 -0.9999964 -0.9999742
## 49    0.845679950 0.91315922   0.82409607 -0.995146420 -0.9999964 -0.9999799
## 50    0.846384930 0.91367878   0.82442470 -0.994522400 -0.9999961 -0.9999746
## 51    0.843936700 0.90886150   0.82203502 -0.993591280 -0.9999954 -0.9999588
## 52    0.826132940 0.83376315   0.88012796 -0.791877580 -0.9967593 -0.9970956
## 53    0.851912670 0.91018597   0.83429558 -0.919909750 -0.9989320 -0.9999519
## 54    0.847593690 0.91343303   0.81378971 -0.974489240 -0.9998088 -0.9999827
## 55    0.846335400 0.91343303   0.81378971 -0.984527610 -0.9999825 -0.9999749
## 56    0.846209480 0.91395142   0.81473330 -0.986312830 -0.9999965 -0.9999718
## 57    0.845000890 0.91428933   0.82013091 -0.988830460 -0.9999938 -0.9999740
## 58    0.845000890 0.91428933   0.82196065 -0.992815170 -0.9999954 -0.9999693
## 59    0.846109210 0.91401564   0.82452357 -0.995936490 -0.9999979 -0.9999664
## 60    0.846882340 0.91401564   0.82452357 -0.996829710 -0.9999990 -0.9999800
## 61    0.847064490 0.91445712   0.82766661 -0.997221390 -0.9999998 -0.9999809
## 62    0.845137040 0.91445712   0.82766661 -0.996709920 -0.9999980 -0.9999763
## 63    0.845137040 0.91329499   0.82658666 -0.996250210 -0.9999966 -0.9999739
## 64    0.846484640 0.91329499   0.82658666 -0.996124970 -0.9999984 -0.9999693
## 65    0.889760900 0.84872600   0.94696288 -0.589056310 -0.9601892 -0.9940473
## 66    0.869746830 0.91309136   0.88745278 -0.746770820 -0.9848286 -0.9992007
## 67   -0.033978851 0.86892587   0.37734712 -0.612150130 -0.8472528 -0.9728988
## 68   -0.033978851 0.83244238   0.37734712 -0.565371820 -0.8294499 -0.9671315
## 69    0.718907410 0.83244238   0.80572464 -0.798407710 -0.9752057 -0.9921354
## 70    0.001935021 0.78104024   0.45160555 -0.704045740 -0.9380647 -0.9763032
## 71   -0.532611300 0.74075538   0.45160555 -0.442638780 -0.5872657 -0.9448370
## 72   -0.532611300 0.74075538   0.52001903 -0.531198610 -0.6186887 -0.9565700
## 73    0.554459490 0.80125649   0.72289027 -0.744680240 -0.9561139 -0.9894868
## 74    0.888443260 0.89623078   0.84844251 -0.809364740 -0.9756903 -0.9992740
## 75    0.865935630 0.90100810   0.84202545 -0.887456010 -0.9904194 -0.9997090
## 76    0.848029830 0.90993843   0.82875951 -0.955720820 -0.9978950 -0.9999224
## 77    0.841004360 0.91284484   0.82479805 -0.987898920 -0.9997991 -0.9999747
## 78    0.839073990 0.91421990   0.82479805 -0.991808300 -0.9999409 -0.9999820
## 79    0.268551030 0.45388860   0.43995890 -0.040727264 -0.6602420 -0.6325089
## 80    0.292814970 0.45388860   0.42083315 -0.131749620 -0.8257512 -0.5806440
## 81    0.448093240 0.41552191   0.28386169 -0.071395993 -0.8229525 -0.5603150
## 82    0.221752610 0.41552191   0.28386169 -0.012224244 -0.8035159 -0.4631360
## 83    0.221752610 0.43795034   0.32971902 -0.009014088 -0.8223336 -0.3654732
## 84    0.381858230 0.45776979   0.31201164 -0.145428440 -0.8904789 -0.4755986
## 85    0.409977930 0.47944136   0.31201164 -0.189477650 -0.8876273 -0.6020943
## 86    0.363476370 0.52292538   0.32499810 -0.137446460 -0.8726909 -0.5617718
## 87    0.292404610 0.58087297   0.40165487 -0.215052100 -0.8405364 -0.6538867
## 88    0.292404610 0.53684225   0.20261489 -0.178444890 -0.8693824 -0.5900637
## 89    0.376317190 0.53684225   0.20261489 -0.191358860 -0.8897032 -0.5906594
```

```
## 90   0.376317190 0.50990221  0.31858713 -0.156442950 -0.8818864 -0.5675400
## 91   0.393360770 0.40156581  0.31858713 -0.069232292 -0.8547766 -0.4685002
## 92   0.393360770 0.40156581  0.06736621 -0.116686710 -0.8664012 -0.4667799
## 93   0.395420690 0.44815299  0.06736621 -0.187520820 -0.8918165 -0.5541199
## 94   0.324964710 0.43248035  0.14841522 -0.126403770 -0.8716481 -0.5299251
## 95   0.285122310 0.37716599  0.34254524 -0.102343370 -0.8449192 -0.5167279
## 96   0.285122310 0.37716599  0.29244787 -0.100271650 -0.8473422 -0.5189904
## 97   0.383254400 0.49006155  0.16851427 -0.066713560 -0.8599063 -0.4536957
## 98   0.453169480 0.49006155  0.16851427 -0.112884160 -0.8867840 -0.4858744
## 99   0.436835960 0.39304486  0.23161028 -0.026701717 -0.8339675 -0.4768437
## 100  0.416289600 0.39304486  0.23161028 -0.127819290 -0.8761529 -0.5251804
## 101  0.342702990 0.45178632  0.39857505 -0.188370050 -0.8842059 -0.5828234
## 102  0.281994930 0.38402557  0.26566164 -0.111277630 -0.8713984 -0.4731811
## 103  0.281994930 0.38402557  0.26114895 -0.096112235 -0.8605219 -0.4444410
## 104  0.308557700 0.52254357  0.25498620 -0.101355540 -0.8635490 -0.4348644
## 105  0.356027580 0.56224768  0.25498620 -0.144256700 -0.8883211 -0.4896574
## 106  0.387212500 0.56390013  0.34508546 -0.206009540 -0.9054715 -0.5745335
## 107  0.368354560 0.54073242  0.31313812 -0.156382370 -0.8892348 -0.5171850
## 108  0.368354560 0.42585023  0.21831959 -0.118574410 -0.8746194 -0.4889423
## 109  0.392725370 0.42585023  0.21831959 -0.098789246 -0.8645171 -0.4930598
## 110  0.323897680 0.46954720  0.23775876 -0.077178004 -0.8617589 -0.4651749
## 111  0.323897680 0.46954720  0.23775876 -0.110948460 -0.8753982 -0.4933803
## 112  0.035705525 0.57377729  0.26004679  0.085503460 -0.6190767 -0.4869004
## 113  0.213094200 0.57377729  0.24849065 -0.094615410 -0.7899523 -0.5616818
## 114  0.264187940 0.42149749  0.24849065 -0.138886890 -0.8554656 -0.5589935
## 115  0.339315310 0.42149749  0.32170579 -0.116486820 -0.8575538 -0.5050745
## 116  0.339315310 0.48471535  0.28219800 -0.132886220 -0.8582390 -0.5260379
## 117  0.457970080 0.48471535  0.28219800 -0.168277050 -0.8798497 -0.5787397
## 118  0.446592320 0.49113978  0.24103362 -0.194755420 -0.8931552 -0.6128224
## 119  0.406662820 0.52528749  0.24103362 -0.191702330 -0.8903984 -0.6071059
## 120  0.404826110 0.49022772  0.31518358 -0.232790170 -0.9126618 -0.5981994
## 121  0.404826110 0.49022772  0.31119480 -0.240498450 -0.9044640 -0.6284738
## 122  0.415073290 0.55422159  0.22519610 -0.149691920 -0.8756954 -0.6125712
## 123  0.424170460 0.48572827  0.22519610 -0.056643860 -0.8357906 -0.5608115
## 124  0.419459860 0.48572827  0.26809391 -0.089989782 -0.8369981 -0.5342592
## 125  0.377189850 0.39000589  0.15134199 -0.197583440 -0.8917504 -0.5682849
## 126  0.627813450 0.48176099  0.26837575 -0.384212440 -0.9524036 -0.7786694
## 127  0.629935140 0.02559787  0.08763880 -0.337536320 -0.9643310 -0.6517912
## 128  0.028102934 0.02559787  0.08763880 -0.068190292 -0.6753770 -0.6026857
## 129  0.028102934 0.36463504  0.05288628 -0.016046594 -0.6386027 -0.6533694
## 130  0.550073500 0.36463504  0.02475428 -0.190162780 -0.8974179 -0.6917096
## 131  0.172046090 0.38146518 -0.33419789  0.017415919 -0.7230527 -0.5889816
## 132  0.172046090 0.38146518 -0.33419789  0.089238937 -0.6677618 -0.5723303
## 133  0.755846090 0.33613761  0.16753140 -0.086959155 -0.8227029 -0.7106296
## 134  0.741715860 0.33613761  0.09896378 -0.233698990 -0.9038441 -0.7185344
## 135  0.324962010 0.38984686 -0.18506944 -0.073635228 -0.8417159 -0.5060443
## 136  0.387123940 0.40036260 -0.18506944 -0.115145340 -0.8896199 -0.5316048
## 137  0.090312096 0.24357714 -0.23145919  0.142823300 -0.6047962 -0.4414570
## 138  0.090312096 0.17332676 -0.36771314  0.187780630 -0.6056757 -0.4532625
## 139  0.119729280 0.17332676 -0.36771314  0.070102431 -0.8102738 -0.4413977
```

```
## 140 -0.159494780 0.21754225  0.04744967  0.050862647 -0.7149052 -0.4656705
## 141 -0.159494780 0.21754225  0.02510118  0.019828053 -0.7181003 -0.5989003
## 142  0.775427980 0.25957127 -0.08784568 -0.055952819 -0.8437924 -0.6227608
## 143  0.277073050 0.47244684 -0.07668657 -0.078090877 -0.8164970 -0.6298594
## 144  0.317544320 0.46343917 -0.07668657 -0.091921962 -0.8186373 -0.6282933
## 145 -0.172829860 0.34449694 -0.24419629  0.139081450 -0.5740017 -0.5345356
## 146 -0.172829860 0.14320272 -0.24419629  0.161374680 -0.5957264 -0.4592173
## 147  0.159491190 0.14320272 -0.05338371  0.005410363 -0.7183660 -0.6024663
## 148  0.159491190 0.37910406 -0.05338371 -0.034388284 -0.7408006 -0.6239929
## 149  0.597192150 0.44901571  0.02363557 -0.074150783 -0.8336492 -0.6006061
## 150  0.807933930 0.44901571  0.02363557 -0.118714070 -0.8476760 -0.6721318
## 151  0.739582340 0.39911866  0.48013558 -0.246016880 -0.9151595 -0.5021535
## 152  0.726837000 0.43174348  0.54185730 -0.316715140 -0.9592705 -0.5252637
## 153  0.726837000 0.37263101  0.18358265 -0.060699639 -0.6901987 -0.5012061
## 154  0.547285400 0.37263101  0.18358265 -0.003679062 -0.6625931 -0.4937238
## 155  0.518408760 0.46743788  0.39084278 -0.176990010 -0.8969558 -0.4954486
## 156  0.518408760 0.39734327  0.39084278 -0.233211650 -0.9168450 -0.5424260
## 157  0.417493380 0.39734327  0.57018947 -0.232451650 -0.9003321 -0.5261293
## 158  0.417493380 0.41034285  0.57018947 -0.182926190 -0.8705957 -0.4812590
## 159  0.691757600 0.35913089  0.50052868 -0.241019460 -0.9076467 -0.5187026
## 160  0.691757600 0.35913089  0.42036629 -0.290323260 -0.9244253 -0.5243324
## 161  0.648039300 0.24903680  0.20528147  0.007858990 -0.7268420 -0.4042636
## 162  0.582789360 0.24903680  0.20528147  0.017894448 -0.7212284 -0.4184028
## 163  0.582789360 0.41196144  0.41959138 -0.208032360 -0.8688693 -0.6136773
## 164  0.588112070 0.41196144  0.41959138 -0.242727350 -0.8722804 -0.6460433
## 165  0.553076520 0.45767216  0.62593188 -0.231243800 -0.8797141 -0.6031707
## 166  0.553076520 0.61380853  0.59389760 -0.195796990 -0.8833495 -0.5626859
## 167  0.550330040 0.51853088  0.59389760 -0.319904170 -0.9339760 -0.5864329
## 168  0.820550970 0.38446632  0.44731933 -0.078313799 -0.7786068 -0.5215230
## 169  0.780282720 0.46993584  0.44731933 -0.208141790 -0.8864810 -0.5277995
## 170  0.780282720 0.32585094  0.32250771  0.013316809 -0.6789291 -0.4413240
## 171  0.467712900 0.32585094  0.32250771  0.033247319 -0.6690244 -0.4721262
## 172  0.467712900 0.52134398  0.51044037 -0.276132570 -0.9146620 -0.6321996
## 173  0.540858370 0.40733398  0.51044037 -0.329679850 -0.8867130 -0.7086624
## 174  0.490528330 0.40733398  0.53262456 -0.210750160 -0.8377481 -0.6172607
## 175  0.490528330 0.49945229  0.53262456 -0.184112090 -0.8854132 -0.5393272
## 176  0.570622580 0.39957331  0.51506129 -0.228500400 -0.9130816 -0.5531602
## 177  0.842060520 0.92162804  0.73476226 -0.874138110 -0.9983837 -0.9914117
##             NA         NA          NA           NA          NA
NA
## 1   -0.9997634 -0.98343808 -0.978614010 -0.9929656  0.082631682
0.202267650
## 2   -0.9998224 -0.99283276 -0.989344720 -0.9902402  0.007469356 -
0.531156590
## 3   -0.9998216 -0.97235357 -0.995144320 -0.9868311 -0.260942670 -
1.000000000
## 4   -0.9998773 -0.99103127 -0.994165320 -0.9945820 -0.930551140 -
0.826618030
## 5   -0.9998443 -0.98981320 -0.993336690 -0.9911546 -0.628860990 -
0.467807560
```

```
## 6    -0.9997780 -0.98533726 -0.992994030 -0.9837056 -0.363801070 -
0.370507860
## 7    -0.9996824 -0.98722605 -0.991910060 -0.9824202 -0.373807050 -
0.570253130
## 8    -0.9996764 -0.98873353 -0.989527790 -0.9748798 -0.255472230 -
0.403097900
## 9    -0.9998449 -0.98987124 -0.995238950 -0.9893706 -0.323098590 -
0.313563550
## 10   -0.9997316 -0.98613552 -0.991310210 -0.9884861 -0.263317540 -
0.272795150
## 11   -0.9997536 -0.98876170 -0.992667470 -0.9889307 -0.299374210 -
0.253804740
## 12   -0.9999640 -0.99431769 -0.995792290 -0.9966483 -0.680620070 -
0.520638500
## 13   -0.9999752 -0.99375478 -0.996930750 -0.9960049 -0.629393300 -
0.646730090
## 14   -0.9999747 -0.99674239 -0.997702900 -0.9955489 -0.612105680 -
0.565844660
## 15   -0.9697990 -0.98468344 -0.948134800 -0.9251149  0.131630190
0.526683060
## 16   -0.9927812 -0.98674318 -0.965509970 -0.9333289 -0.044677186
0.370912380
## 17   -0.9993437 -0.98682877 -0.981870400 -0.9789136 -0.044654792 -
0.021778859
## 18   -0.9997506 -0.98989484 -0.996690880 -0.9904849 -0.035567454 -
0.679068910
## 19   -0.9997926 -0.98966075 -0.997931280 -0.9965139 -0.307469900 -
0.978711580
## 20   -0.9998881 -0.99548589 -0.996770850 -0.9949056 -0.654365360 -
0.891065220
## 21   -0.9999695 -0.99751343 -0.997676510 -0.9980508 -0.744013670 -
0.817488870
## 22   -0.9999618 -0.99697969 -0.998454150 -0.9978154 -0.754710410 -
0.872252910
## 23   -0.9999640 -0.99903615 -0.997429070 -0.9939951 -0.763566720 -
0.681373980
## 24   -0.9999557 -0.99901954 -0.997888320 -0.9969960 -0.695981270 -
0.529694770
## 25   -0.9999478 -0.99586830 -0.997243130 -0.9940440 -0.453269540 -
0.564337040
## 26   -0.9999665 -0.99356918 -0.997519950 -0.9958938 -0.495017300 -
0.667259230
## 27   -0.9999785 -0.99532160 -0.997758530 -0.9984449 -0.679697290 -
0.642595670
## 28   -0.9886090 -0.99494456 -0.980580680 -0.9732086 -0.703291360 -
0.957451830
## 29   -0.9894615 -0.99325025 -0.968089980 -0.9685101 -1.000000000 -
1.000000000
## 30   -0.9957451 -0.99474778 -0.978339320 -0.9695929 -1.000000000 -
1.000000000
```

```
## 31   -0.9130723 -0.99232282 -0.975720460 -0.9674255 -0.472702200 -
0.444882280
## 32   -0.8804617 -0.91454110 -0.764281480 -0.6068978  0.356737160 -
0.093988946
## 33   -0.9628045 -0.95994972 -0.967935930 -0.9376956 -0.049750176 -
0.626437970
## 34   -0.9944149 -0.99776598 -0.985259260 -0.9791995 -0.959512300 -
1.000000000
## 35   -0.9977577 -0.99710228 -0.989692170 -0.9744139 -1.000000000 -
0.978711580
## 36   -0.9994817 -0.99601223 -0.994834530 -0.9894637 -0.979742510 -
0.822073860
## 37   -0.9999004 -0.99890838 -0.992654130 -0.9911287 -0.950726150 -
0.453771390
## 38   -0.9999756 -0.99786280 -0.996078570 -0.9958785 -0.728860370 -
0.442667900
## 39   -0.8090859 -0.94382883 -0.978566340 -0.8489669 -1.000000000 -
0.915019220
## 40   -0.9334339 -0.93022784 -0.988890000 -0.8454614 -1.000000000 -
0.889748030
## 41   -0.9888865 -0.95536800 -0.991390700 -0.8919299 -1.000000000 -
0.755130430
## 42   -0.9995688 -0.98088121 -0.992691060 -0.9729973 -0.580815070 -
0.520128850
## 43   -0.9994344 -0.99730709 -0.994100680 -0.9859877 -0.340591030 -
0.475154310
## 44   -0.9991675 -0.99872621 -0.994751290 -0.9884315 -0.497025930 -
0.512046930
## 45   -0.9996635 -0.99741857 -0.994938680 -0.9843513 -0.349642180 -
0.412464750
## 46   -0.9998803 -0.99789686 -0.993888250 -0.9882614 -0.527048710 -
0.415380240
## 47   -0.9998780 -0.99870877 -0.995909470 -0.9883175 -0.639030290 -
0.521745350
## 48   -0.9999291 -0.99840904 -0.994145110 -0.9932352 -0.733120990 -
0.517666920
## 49   -0.9998988 -0.99893933 -0.994659380 -0.9898988 -0.839812760 -
0.599326750
## 50   -0.9998830 -0.99826999 -0.995782800 -0.9898022 -0.727303850 -
0.584449600
## 51   -0.9998822 -0.99823269 -0.992749960 -0.9912542 -0.726755880 -
0.419074700
## 52   -0.9024475 -0.97673337 -0.978508750 -0.7898296  0.361197220 -
0.717409070
## 53   -0.9829230 -0.97601083 -0.992994970 -0.8964817  0.223710100 -
0.578973720
## 54   -0.9984167 -0.98979920 -0.996305610 -0.9463726 -0.003909992 -
0.599474130
## 55   -0.9991762 -0.99525561 -0.995358990 -0.9919533 -0.463554710 -
0.579982830
```

```
## 56   -0.9993317 -0.99875415 -0.995520340 -0.9951724 -0.905961630 -
0.405908790
## 57   -0.9995984 -0.99895359 -0.993749310 -0.9962564 -0.916107830 -
0.493278110
## 58   -0.9998066 -0.99922997 -0.994240620 -0.9826468 -0.896017310 -
0.430367590
## 59   -0.9999656 -0.99935008 -0.993329280 -0.9939231 -0.852006120 -
0.426018640
## 60   -0.9999565 -0.99911877 -0.994517390 -0.9938372 -0.771633670 -
0.585417960
## 61   -0.9999607 -0.99958212 -0.994573530 -0.9943614 -0.771633670 -
0.610563820
## 62   -0.9999683 -0.99908146 -0.993504700 -0.9958558 -0.724791660 -
0.519932590
## 63   -0.9999619 -0.99803291 -0.994065630 -0.9942724 -0.737540700 -
0.549335350
## 64   -0.9999523 -0.99917306 -0.994370960 -0.9926111 -0.788171570 -
0.550080120
## 65   -0.8313377 -0.93582319 -0.946883970 -0.9031788  0.652548550
0.561088190
## 66   -0.9204227 -0.92937459 -0.984714700 -0.8748630  0.522660450
0.241363820
## 67   -0.9107922 -0.92304903 -0.931659560 -0.7815309  0.452774030
0.399708010
## 68   -0.9232333 -0.64700876 -0.842305950 -0.8576147  0.465594910 -
0.094491993
## 69   -0.9907001 -0.86889362 -0.944506710 -0.9438195  0.486687670 -
0.898893250
## 70   -0.9265619 -0.84697070 -0.808314950 -0.8291939  0.156494630 -
0.054463190
## 71   -0.9010681 -0.66570216 -0.717171430 -0.6988771 -0.033104441
0.376313160
## 72   -0.9636933 -0.55697474 -0.884056310 -0.8998066  0.036005537 -
0.145623950
## 73   -0.9881081 -0.85928950 -0.976184650 -0.9640645  0.486452360 -
0.641577220
## 74   -0.9931773 -0.93021683 -0.984909040 -0.9619627  0.543836980 -
0.915019220
## 75   -0.9974053 -0.94206561 -0.990914740 -0.9797407  0.506427810 -
0.915019220
## 76   -0.9995410 -0.94802822 -0.993724770 -0.9786388  0.365733700 -
0.748229810
## 77   -0.9999166 -0.98666331 -0.996282320 -0.9955322 -0.204807670 -
0.511998230
## 78   -0.9999309 -0.99119326 -0.997427130 -0.9955514 -0.696799770 -
0.443336460
## 79   -0.8512909 -0.20671799 -0.244961930 -0.5691185 -0.328055710 -
0.003926821
## 80   -0.8337639 -0.48362172 -0.080622316 -0.5097249  0.476467600 -
0.040184969
```

```
## 81   -0.8018637 -0.44318758 -0.064600580 -0.4637733  0.630207090 -
0.011640399
## 82   -0.7555179 -0.44774760 -0.130451990 -0.3080263  0.536832480 -
0.117432440
## 83   -0.7752200 -0.38757741 -0.040374783 -0.3323996  0.302588650 -
0.090452374
## 84   -0.8169459 -0.51903749  0.064500523 -0.5412201  0.146630060
0.058041334
## 85   -0.7860072 -0.55051748 -0.119117420 -0.5034918  0.266330520
0.021627565
## 86   -0.7700345 -0.50097758 -0.167541250 -0.4265431  0.398452140 -
0.116626930
## 87   -0.8488515 -0.45336831 -0.280176380 -0.6306124 -0.138801550
0.062191497
## 88   -0.8186742 -0.58859403 -0.038162829 -0.5959243  0.253101460 -
0.008068259
## 89   -0.7996615 -0.61172046 -0.180362470 -0.5427954  0.370553770 -
0.129539240
## 90   -0.7827790 -0.59228567 -0.207621290 -0.4037889  0.375567560 -
0.033202480
## 91   -0.7767929 -0.44003295  0.214494990 -0.3866889  0.282712220
0.011380792
## 92   -0.7889549 -0.49050312  0.032096523 -0.5185775  0.215454750 -
0.019535700
## 93   -0.7611436 -0.56186486 -0.151289220 -0.5741392  0.194097780
0.006488317
## 94   -0.7467240 -0.51592182 -0.094396440 -0.4766329  0.405481830 -
0.040184969
## 95   -0.7775609 -0.52532184 -0.143442240 -0.3738273  0.491888160 -
0.098327287
## 96   -0.7653546 -0.50409820 -0.091772409 -0.3442194  0.386136910 -
0.120907720
## 97   -0.7481838 -0.38057908 -0.002933921 -0.3510027  0.309711930 -
0.110387640
## 98   -0.7725817 -0.43293812 -0.092266842 -0.3905346  0.197330570 -
0.016450526
## 99   -0.7456021 -0.45110338  0.007933974 -0.3302532  0.606245530 -
0.014489284
## 100 -0.7792977 -0.50337226  0.063417858 -0.4555017  0.333213350
0.042571116
## 101 -0.8092805 -0.58585205 -0.072455850 -0.4594344  0.248934890
0.074752392
## 102 -0.7705880 -0.57794229  0.087409125 -0.3999351  0.265153490 -
0.065150305
## 103 -0.7730949 -0.52737935 -0.103802490 -0.4639950  0.239464920 -
0.210844290
## 104 -0.7980097 -0.44787782 -0.015650560 -0.4145147  0.234662880 -
0.084253659
## 105 -0.8143282 -0.49334863  0.094125584 -0.4812273  0.285212270 -
0.069333172
```

```
## 106 -0.8248015 -0.54952113  0.077209035 -0.5102319  0.251924420 -
0.112577040
## 107 -0.7974033 -0.60044785 -0.016354378 -0.4862688  0.345724710 -
0.156120950
## 108 -0.7801265 -0.55397428 -0.038434987 -0.5268734  0.416898390 -
0.168243680
## 109 -0.7864331 -0.54403393  0.051879587 -0.4165282  0.393598650 -
0.123292620
## 110 -0.7726921 -0.50978504  0.029962833 -0.3229399  0.383147370 -
0.078890872
## 111 -0.7759976 -0.50209108  0.074993335 -0.4130174  0.280367640 -
0.028448097
## 112 -0.7779554 -0.48242724 -0.001430836 -0.3890113 -0.818683170
0.144232790
## 113 -0.7869030 -0.53769640 -0.008154202 -0.4599364 -0.453494060
0.054285792
## 114 -0.7551031 -0.57623582 -0.099912220 -0.3678313 -0.010580115 -
0.069676185
## 115 -0.7858107 -0.54755451  0.045015171 -0.4248938  0.203945100 -
0.035949724
## 116 -0.8026305 -0.58401017 -0.088819789 -0.4566517  0.362973950
0.009964602
## 117 -0.7709149 -0.62844380 -0.119761020 -0.4218342  0.378345340 -
0.054665144
## 118 -0.7885959 -0.64255214 -0.100040770 -0.4544926  0.330223810 -
0.153721190
## 119 -0.8039512 -0.60412925 -0.243151150 -0.4513033  0.400679790 -
0.212694040
## 120 -0.8057547 -0.63163244 -0.286589390 -0.3721026  0.336120640 -
0.068805571
## 121 -0.8098438 -0.69857637 -0.247897810 -0.3910545  0.281347500 -
0.057876853
## 122 -0.7512409 -0.57795433 -0.162960790 -0.3662744  0.238695360 -
0.111441040
## 123 -0.7129822 -0.38135528 -0.040069942 -0.2949183  0.346755360 -
0.008504947
## 124 -0.7688873 -0.40952115 -0.073813987 -0.4559519  0.326598820
0.082605659
## 125 -0.7931792 -0.58373272 -0.245188970 -0.4564123  0.237296510 -
0.014019653
## 126 -0.7898362 -0.72936560 -0.359388550 -0.5643260  0.053117314
0.317541420
## 127 -0.7772296 -0.78406242 -0.269475190 -0.4852959 -0.081760235
0.246014920
## 128 -0.7435067 -0.36652905 -0.352334280 -0.3904125 -0.508613370
0.383620910
## 129 -0.7319426 -0.27573168 -0.422470980 -0.4601561 -0.328055710
0.497906170
## 130 -0.6806736 -0.52334810 -0.231684900 -0.4199875  0.489605080
0.223847510
```

```
## 131 -0.5847745 -0.25194618 -0.194165120 -0.2304212  0.252338070
0.104150400
## 132 -0.6227914 -0.09018039 -0.161242570 -0.3428632  0.486616550
0.119059050
## 133 -0.6865363 -0.75488176 -0.326821790 -0.3209181  0.984718660
0.102668410
## 134 -0.7307436 -0.74944383 -0.345944890 -0.4700497  0.853553060
0.265215620
## 135 -0.6087407 -0.74312220 -0.201619810 -0.4208016 -0.838716190
0.184953130
## 136 -0.6190876 -0.71515612 -0.208766100 -0.4381503 -0.619996100
0.257858140
## 137 -0.5854536 -0.36055395 -0.217078450 -0.2811056 -0.516698270
0.293431080
## 138 -0.4102029  0.07073068 -0.040793136 -0.2399798  0.362973950
0.162538190
## 139 -0.4216154 -0.41498445 -0.084509771 -0.2147226  0.541634510
0.083698305
## 140 -0.6569565 -0.39564029 -0.143647660 -0.2407340  0.132223960
0.077148508
## 141 -0.6705502 -0.59682261 -0.205420840 -0.3064763  0.686147510
0.075279614
## 142 -0.5999066 -0.71632711 -0.129455590 -0.2126581  0.978979370
0.080293349
## 143 -0.6707467 -0.67558879 -0.299100100 -0.3927694 -0.898987510
0.428507540
## 144 -0.6625950 -0.66584160 -0.189218290 -0.4317088 -0.763561790
0.410024750
## 145 -0.5789865 -0.42014666 -0.208039050 -0.2593653 -0.684083220
0.400214720
## 146 -0.5975653 -0.11766346 -0.046156578 -0.2004278  0.194341030
0.105025050
## 147 -0.6571605 -0.20407502 -0.194965110 -0.3107411  0.300107860
0.237608850
## 148 -0.6898321 -0.20984126 -0.184264030 -0.3342106  0.164661160
0.201047000
## 149 -0.7451830 -0.65215128 -0.194523520 -0.3572502  0.878772120 -
0.025716259
## 150 -0.7032470 -0.67003787 -0.160693920 -0.3933002  0.967323030
0.056816894
## 151 -0.9070244 -0.66038199 -0.103686390 -0.6200012  0.733158560 -
0.022305098
## 152 -0.9096314 -0.76833022 -0.267000890 -0.5725259  0.543144140 -
0.022590085
## 153 -0.8269719 -0.42468796 -0.201172940 -0.5491079  0.604931030 -
0.102664200
## 154 -0.8098051 -0.16862201 -0.091984938 -0.5392614  0.155644390 -
0.005692083
## 155 -0.8620181 -0.43665499 -0.170808570 -0.5727872  0.023176011
0.152445360
```

```
## 156 -0.8643348 -0.73403347 -0.161266110 -0.5261736  0.713386610
0.117196550
## 157 -0.8892243 -0.51636032 -0.233279370 -0.6247780  0.148442560
0.165586470
## 158 -0.9136857 -0.76320907 -0.190787330 -0.6734773 -0.898987510
0.179666550
## 159 -0.9299515 -0.63521927 -0.073705277 -0.6591685  0.707803600
0.023447176
## 160 -0.9254157 -0.65336053 -0.312422310 -0.6364958  0.582235360 -
0.065296288
## 161 -0.7700953 -0.48194975 -0.130814120 -0.4660760  0.626293080 -
0.154869690
## 162 -0.7978706 -0.22597666  0.007386389 -0.5482243  0.003652218
0.030896131
## 163 -0.9043036 -0.38940679 -0.236250570 -0.6371317  0.087540983
0.191489300
## 164 -0.8928213 -0.43439640 -0.277699770 -0.5812613  0.364786450
0.142887530
## 165 -0.9225044 -0.64734832 -0.145576110 -0.6492872 -0.497196810
0.123915980
## 166 -0.9213912 -0.77460251 -0.097729633 -0.6535927 -0.919134580
0.105130670
## 167 -0.9464913 -0.74878790 -0.176961520 -0.7291401 -0.458296100
0.116198370
## 168 -0.9270071 -0.65855235  0.022388467 -0.6930108  0.872761200
0.021706274
## 169 -0.9217750 -0.69437206 -0.045880150 -0.6437662  0.880948450 -
0.038159470
## 170 -0.8333970 -0.62910066 -0.002568931 -0.4907737  0.754202740 -
0.124380040
## 171 -0.8391047 -0.24625721  0.056359560 -0.5303328  0.099181957
0.087095469
## 172 -0.9045851 -0.59341511 -0.201414650 -0.5687020 -0.270731450
0.145269680
## 173 -0.9004761 -0.60788852 -0.375507750 -0.5966959  0.339015240
0.113724820
## 174 -0.9014266 -0.41435176 -0.207446120 -0.6171079 -0.154343930
0.219960880
## 175 -0.9123385 -0.73542599 -0.089602481 -0.6453534 -0.959512300
0.245885830
## 176 -0.9217174 -0.78365369 -0.043128050 -0.6581387 -0.609901650
0.075348593
## 177 -0.9903125 -0.97376659 -0.940957830 -0.9011915  0.391296460
0.604816750
##              NA          NA          NA           NA          NA
## 1   -0.168756690  0.096323236 -0.27498511  0.4986441900 -0.220316850
## 2   -0.177444550 -0.387680630  0.17913763  0.2107890000 -0.140259580
## 3   -0.248370660 -0.437155680  0.23898137  0.1452377300 -0.113917200
## 4   -0.543421690 -0.165885490 -0.01288054  0.3200550100 -0.165113930
## 5   -0.650852060 -0.212690270  0.00211118  0.3880986000 -0.233270970
```

```
## 6    -0.462126000 -0.402826730  0.24203652  0.0591393540  0.030283565
## 7    -0.165701500 -0.094931822 -0.03772939  0.3349041000 -0.101481800
## 8    -0.242876160 -0.052298295 -0.11029405  0.4456852600 -0.182772340
## 9    -0.591481440 -0.090887832 -0.03827504  0.4097227200 -0.284106990
## 10   -0.494849280 -0.176044910  0.07353460  0.2104499500  0.053306766
## 11   -0.359201110 -0.229788370  0.12027896  0.1063026200  0.171444110
## 12   -0.472057770  0.074258266 -0.10542436  0.2351779600 -0.075180838
## 13   -0.602162450  0.007629410 -0.02362116  0.2859808000 -0.253015890
## 14   -0.690319930  0.053738459 -0.01774413  0.2619884500 -0.089092501
## 15   -1.000000000 -0.222339290  0.03217036  0.3183526600 -0.197970320
## 16   -1.000000000  0.026985978 -0.13989996  0.3136114500 -0.142739130
## 17   -0.622710490  0.027312056 -0.13930033  0.3521900700 -0.236310830
## 18   -0.211663510 -0.058822624 -0.08904074  0.4335112600 -0.401432920
## 19   -0.269465670  0.012054002 -0.16493906  0.4052564400 -0.155919580
## 20   -0.277121390  0.195695480 -0.22192628  0.2294152600  0.267022140
## 21   -0.478366310  0.262399020 -0.23988372  0.3921209500 -0.142428930
## 22   -0.442424960  0.245322210 -0.19125220  0.4807134000 -0.363967650
## 23   -0.503953790  0.177324350 -0.10964209  0.4581095100 -0.291514020
## 24   -0.843517490  0.308733360 -0.20241645  0.3607885100  0.034204579
## 25   -0.692538780  0.062293136 -0.05903722  0.1462723700  0.025209101
## 26   -0.518857850 -0.175729690  0.10454487  0.0438364310  0.178283890
## 27   -0.546247660 -0.041037194 -0.03535085  0.2191433700  0.036450384
## 28    0.230846230 -0.246060150  0.08278863  0.2837746400 -0.274879940
## 29    0.213591120  0.065405090 -0.06993331  0.2849507400 -0.409712970
## 30    0.293270250  0.064430162 -0.01876075  0.0878857170 -0.174083030
## 31    0.279205940 -0.558652880  0.34578108  0.0074490102  0.011415148
## 32    0.191222050 -0.523733250  0.32098514 -0.0009580482  0.043664226
## 33    0.254298930 -0.281020600  0.12667573  0.2725068000 -0.328588950
## 34    0.203379460  0.004089088 -0.15722846  0.4338486500 -0.290341900
## 35    0.201264480  0.162757500 -0.19701492  0.5783372200 -0.766885770
## 36    0.010590246  0.097336738 -0.07209703  0.2922691200 -0.461744640
## 37   -0.315411770  0.274523100 -0.22733444  0.4138118900 -0.417444470
## 38   -0.639316230  0.348242650 -0.27241373  0.4602474700 -0.321647260
## 39   -1.000000000  0.139027030 -0.37776634  0.5210587700 -0.049962700
## 40   -1.000000000 -0.207151580  0.04449585 -0.0188835250  0.324007960
## 41   -0.921424400 -0.258992960  0.12333014  0.0651477040  0.008700858
## 42   -0.466129180 -0.035023234 -0.01752243  0.1495007300 -0.116341740
## 43    0.044679634  0.028506460 -0.03334072  0.1368608700 -0.128630110
## 44    0.015421898  0.103703880 -0.12851869  0.2507281300 -0.218519860
## 45   -0.067077359  0.425494700 -0.33955823  0.3749608800 -0.377698400
## 46   -0.302627300  0.361330540 -0.17295759  0.2099995400 -0.335768060
## 47   -0.321839170  0.176314230  0.02338090  0.0407053380 -0.093196295
## 48   -0.643461460  0.168927860 -0.04761226  0.1515058900 -0.032319117
## 49   -0.506210830  0.425840970 -0.32836742  0.4939127900 -0.239989170
## 50   -0.324227540  0.472365160 -0.38749455  0.5079510200 -0.161750400
## 51   -0.560586510  0.273811030 -0.13173695  0.2824653100 -0.124247570
## 52    0.915183180 -0.187157350 -0.04759388  0.2839454700  0.025213017
## 53    0.755127290  0.061373474 -0.19231545  0.3475355700 -0.144848390
## 54   -0.048775850  0.025608095 -0.05346935  0.1923547300 -0.201876550
## 55   -1.000000000  0.206947380 -0.11819176  0.1812746500 -0.257371320
```

```
## 56   -1.000000000   0.277435240  -0.13710896   0.2284556400  -0.251697010
## 57   -0.939956110   0.279139060  -0.23789143   0.3784234400  -0.251518890
## 58   -0.622629040   0.338619440  -0.28695881   0.4780267600  -0.248684280
## 59   -0.622931220   0.349444000  -0.23260230   0.3474586800  -0.049971817
## 60   -0.542768230   0.090106962   0.00970623   0.1268117600   0.044762403
## 61   -0.512503090   0.530501440  -0.41293831   0.5843930400  -0.062325520
## 62   -0.528694240   0.533130690  -0.29411200   0.4608752900   0.078609924
## 63   -0.573314230   0.387682690  -0.21217907   0.3446143700   0.080085229
## 64   -0.558494220   0.373819690  -0.30349114   0.4647072300  -0.025297583
## 65    0.791073380  -0.483855970   0.47584002  -0.6450050600   0.720755720
## 66    0.811027000  -0.273082970  -0.05731095   0.4480762600  -0.149283480
## 67    0.438112750  -0.933199520   0.72391530  -0.2000650200  -0.032652103
## 68    0.498684600  -0.873324040   0.65820890  -0.1498068600  -0.031941383
## 69    0.542253270  -0.509506500   0.31334142  -0.0428534930   0.157304210
## 70    0.075057473  -0.420595270   0.29394571   0.0148201290  -0.009009970
## 71   -0.047418798  -0.693229540   0.47096462  -0.0404152760   0.030457632
## 72    0.414256560  -0.586389700   0.34201982   0.0526751820   0.051508498
## 73    0.356223880  -0.487565150   0.16366768   0.3704347400  -0.279350330
## 74    0.378919750  -0.081085902  -0.03398814   0.3025589100  -0.292004460
## 75    0.203081940   0.054780281  -0.10799744   0.2925869500  -0.290649320
## 76   -0.034677501  -0.045939435  -0.07080621   0.1824374900  -0.003354002
## 77   -0.623975050  -0.013863529  -0.06057845   0.2411130700  -0.176192600
## 78   -0.814193110  -0.046303312  -0.02402228   0.3253298900  -0.353433600
## 79    0.504825450  -0.759438350   0.59799210  -0.0505233780  -0.274543270
## 80    0.328029460  -0.532186030   0.36241948   0.2613899600  -0.427251560
## 81    0.341290270  -0.450896400   0.27696661   0.3307591600  -0.445587130
## 82    0.293201470  -0.546237880   0.48889704  -0.0473957770  -0.060387281
## 83    0.177590980  -0.473764630   0.36114406   0.1968676100  -0.269051650
## 84    0.185961880  -0.268892910   0.14230884   0.4640891000  -0.359309820
## 85    0.340294890  -0.304829840   0.22231832   0.3403967000  -0.267527410
## 86    0.389780340  -0.259090060   0.15507810   0.4338025400  -0.336123530
## 87    0.242617600  -0.462386950   0.25938451   0.4251776900  -0.567657590
## 88    0.358188900  -0.276735000   0.18608549   0.3784436800  -0.281027720
## 89    0.378567620  -0.325276690   0.26148103   0.2625072500  -0.199971850
## 90    0.300669160  -0.479004900   0.42531739   0.0710285600  -0.120792140
## 91    0.164140800  -0.525566810   0.51767974  -0.1263140900   0.109125990
## 92    0.236232460  -0.475683040   0.47392161  -0.0969925960   0.086009213
## 93    0.343062310  -0.448448880   0.42091390   0.0078189624  -0.071294856
## 94    0.438677910  -0.468282120   0.41596762   0.0447299610  -0.085877242
## 95    0.375613410  -0.499844210   0.42797355   0.0707978370  -0.126077110
## 96    0.215057530  -0.476402310   0.44877559   0.0103345620  -0.031009418
## 97    0.230621640  -0.353397140   0.31214598   0.2035555700  -0.182112300
## 98    0.354977080  -0.361205630   0.28902644   0.2580758700  -0.309016600
## 99    0.251709700  -0.567553110   0.43237347   0.1308801900  -0.308874280
## 100   0.300307820  -0.511000210   0.39585102   0.1619219100  -0.233555690
## 101   0.355327740  -0.167403130   0.19193903   0.1850354800   0.036471683
## 102   0.427183540  -0.042091434   0.11449877   0.2289139000   0.084040401
## 103   0.333209570  -0.155561680   0.13567114   0.2720598800  -0.072742619
## 104   0.197042560  -0.313915100   0.28838963   0.1785106000  -0.156700940
## 105   0.258613790  -0.275509520   0.27646263   0.2018800000  -0.170076760
```

```
## 106   0.306710430 -0.332090310  0.33712298  0.0636428820  0.039909088
## 107   0.387833070 -0.357356420  0.38821802  0.0215058300  0.053796472
## 108   0.472370170 -0.281954660  0.17059151  0.4407381800 -0.347159830
## 109   0.345295860 -0.367766560  0.29314761  0.2437302300 -0.239527490
## 110   0.200931700 -0.408983050  0.39038324  0.0811614940 -0.116165810
## 111   0.317410960 -0.470336540  0.46085926 -0.0181943530 -0.056148304
## 112   0.286356460 -0.466511090  0.28115000  0.3317210200 -0.541149120
## 113   0.422103070 -0.420698010  0.24527048  0.3761933400 -0.521502640
## 114   0.401881620 -0.469249730  0.34447571  0.2283338800 -0.355095390
## 115   0.326082200 -0.488804690  0.45536431 -0.0102447290 -0.048864545
## 116   0.411706300 -0.375266320  0.31277598  0.1854258000 -0.186417330
## 117   0.367768390 -0.365436380  0.30175841  0.2260057000 -0.273916970
## 118   0.303880980 -0.380859560  0.38055485  0.0401766720 -0.047949916
## 119   0.360136170 -0.313849710  0.23311309  0.2908523100 -0.249219980
## 120   0.450103350 -0.301768940  0.17773980  0.4374868000 -0.422935470
## 121   0.404599950 -0.318984240  0.22419267  0.3347567500 -0.275051630
## 122   0.299986450 -0.268003820  0.10570660  0.6039221700 -0.595725840
## 123   0.408515170 -0.364063080  0.16282745  0.5564622800 -0.671581480
## 124   0.558505680 -0.443861790  0.28245485  0.3049491400 -0.382235650
## 125   0.432678840 -0.416741240  0.33826383  0.1845736800 -0.229671010
## 126   0.348877690 -0.248175620  0.29488048  0.0969923540 -0.129699540
## 127   0.251171110 -0.191792690  0.23208940  0.2159258800 -0.193511480
## 128   0.314199150 -0.588862950  0.47284365 -0.0725389040 -0.170171310
## 129   0.372401590 -0.498483650  0.32469543  0.1871953400 -0.372646930
## 130   0.358714780 -0.400158040  0.27420662  0.2258664800 -0.359991660
## 131   0.368461300 -0.435698070  0.35700375 -0.0040025488 -0.200358670
## 132   0.232482040 -0.295313580  0.17781094  0.2349749100 -0.381890980
## 133   0.331241280 -0.270414540  0.13832919  0.3367807900 -0.509073410
## 134   0.396229050 -0.435338520  0.34487227  0.0472809410 -0.250143220
## 135   0.534515380 -0.571622830  0.43637380  0.0534505060 -0.307870460
## 136   0.647477090 -0.487555730  0.38542124  0.0263083650 -0.214704970
## 137   0.584886490 -0.638639630  0.55977574 -0.2870913700  0.069642209
## 138   0.376139290 -0.535383420  0.42768655 -0.0999235830 -0.078959694
## 139   0.401408820 -0.417716330  0.32662341 -0.0232417660 -0.097809597
## 140   0.367768390 -0.748250940  0.63836971 -0.2421912000 -0.019323682
## 141   0.249906550 -0.626717710  0.46910607  0.0022419661 -0.195246480
## 142   0.507219190 -0.291563990  0.20750063  0.1664407200 -0.338983290
## 143   0.334835470 -0.403705220  0.27600970  0.2671936200 -0.528100840
## 144   0.541081170 -0.398194340  0.28530644  0.2190297300 -0.461997790
## 145   0.341797750 -0.618684720  0.49755620 -0.0325628090 -0.273111960
## 146   0.215144390 -0.710458150  0.60669083 -0.1685788500 -0.173019960
## 147   0.432342630 -0.464596960  0.33258331  0.0580608070 -0.184802070
## 148   0.310987330 -0.465304050  0.35634193 -0.0360378740 -0.065312005
## 149   0.166669910 -0.497120880  0.41472163 -0.1054845900 -0.059737173
## 150   0.385931580 -0.492340280  0.37986073  0.0594579980 -0.311948760
## 151   0.007833277 -0.480523900  0.33606210  0.1013835500 -0.225921460
## 152   0.123370180 -0.322098520  0.15028105  0.3055636300 -0.220440820
## 153  -0.068882724 -0.500899930  0.30281541  0.1822175900 -0.311012120
## 154   0.215144390 -0.640622380  0.47023106 -0.0400698340 -0.141153770
## 155   0.495913990 -0.605203290  0.41021115  0.0895522160 -0.219361080
```

```
## 156    0.392334520 -0.453529460  0.22157925   0.3638699400 -0.440295630
## 157    0.438520630 -0.363860110  0.15786803   0.3651911200 -0.399820920
## 158    0.418832090 -0.473999640  0.31417378   0.1700852500 -0.332891320
## 159    0.141557210 -0.393151920  0.18928189   0.3757291400 -0.428148830
## 160    0.260278690 -0.381607650  0.22643501   0.2718389600 -0.307071060
## 161    0.151875370 -0.424210240  0.24873056   0.1689821800 -0.236933990
## 162    0.235772590 -0.377450870  0.22642573   0.1187313700 -0.164519220
## 163    0.223245820 -0.525288990  0.37277329   0.0388546260 -0.170694050
## 164    0.261825610 -0.605404270  0.44498566   0.0050380832 -0.183199110
## 165    0.431186780 -0.663383200  0.56137820  -0.2025433500 -0.056008785
## 166    0.315319630 -0.484501820  0.30469118   0.1466357300 -0.263159160
## 167    0.236030200 -0.517621940  0.34887541   0.1078854900 -0.174460850
## 168    0.067751090 -0.536531920  0.37216343   0.0593264560 -0.219395220
## 169    0.187853460 -0.595920430  0.47460726  -0.0568970220 -0.143134180
## 170    0.144689220 -0.534266770  0.33742078   0.1517958600 -0.284874260
## 171    0.197067640 -0.546161830  0.36435790   0.0773570480 -0.209092120
## 172    0.273933440 -0.667870340  0.56540747  -0.1514287600 -0.088667917
## 173    0.228666240 -0.533928890  0.38565283   0.0502286720 -0.190528750
## 174    0.362037660 -0.596426110  0.36486110   0.2390723600 -0.411994320
## 175    0.367803670 -0.545789330  0.32493379   0.3175392300 -0.542337320
## 176    0.305445870 -0.445196780  0.26720720   0.2910760800 -0.475912890
## 177   -0.666956390  0.495035120 -0.79160289   0.8689451500 -0.069323504
##               NA            NA            NA            NA            NA
## 1      1.0000000000 -0.972971390  0.316654510   0.375726410  0.7233991900
## 2     -0.0470318090 -0.064949068  0.117686610   0.081691287  0.0423640400
## 3      0.0323115580 -0.127879260  0.114924260   0.125398290  0.1120920500
## 4      0.0445532340 -0.125193310  0.078321232   0.177027580  0.1934016500
## 5     -0.1632209000  0.186459650 -0.434916170   0.650136770  0.2399500700
## 6     -0.1196924300  0.150617030 -0.380937330   0.573308540  0.1037746400
## 7     -0.0468875550 -0.054896524  0.063395367   0.240145870  0.0175826610
## 8     -0.0858852630 -0.013247702 -0.053852950   0.366075450  0.1657064100
## 9     -0.1710221100  0.040170943  0.229182820  -0.027345769  0.1813357600
## 10    -0.2040347800  0.075507804  0.136991990   0.210594290 -0.0822568230
## 11    -0.1853922400  0.077083572  0.062205217   0.298176460 -0.0701909850
## 12     0.0059400482 -0.039328794  0.124843630   0.138644560  0.2344542300
## 13     0.1389326100 -0.172233230  0.304293970  -0.145814260  0.3602199000
## 14     0.1996714300 -0.207251030  0.386044200  -0.115930660  0.2615177000
## 15     0.0655366580 -0.258422490  0.193586330   0.237530960 -0.0125142720
## 16    -0.0918231630  0.040956067 -0.072000061   0.115801310  0.0460112920
## 17    -0.2103694200  0.124735740 -0.093569267   0.148133470  0.1862910300
## 18    -0.1698509800  0.088359656 -0.161130800   0.374685300  0.2057262500
## 19    -0.1810636300  0.096079629 -0.049897808   0.184759600  0.1784831500
## 20     0.0073890131 -0.113453640  0.201698470  -0.004428769  0.1456562500
## 21     0.1700668200 -0.171094020  0.290009410  -0.145300660  0.4697768300
## 22     0.2150033600 -0.216748930  0.448786840  -0.307667780  0.5498062400
## 23     0.1463022900 -0.144025430  0.246490060  -0.020293652  0.4453434700
## 24     0.1542391200 -0.129970890  0.241788230  -0.103947110  0.6426101700
## 25     0.1445524300 -0.080118956  0.187668220  -0.123373340  0.7424880500
## 26     0.1241839900 -0.048459105  0.092720868   0.047553244  0.7328511700
## 27     0.2799874600 -0.164788430  0.197222890   0.057836815  0.5825762900
```

```
## 28   -0.4086606400   0.280127750   0.003717856  -0.114275050  -0.1336149500
## 29   -0.2596698600   0.155927700  -0.054887477   0.063705374   0.4033406300
## 30    0.0455756850  -0.119512200   0.268225120  -0.255044880   0.0591736600
## 31   -0.7997929100   0.658900460  -0.460237670   0.339319290  -0.8031181700
## 32   -0.6901207400   0.517910360  -0.277261600   0.234407300  -0.6326472500
## 33   -0.1719744300   0.041519868   0.225715110  -0.182117130  -0.1736715000
## 34   -0.0592009810  -0.084768539   0.302304460  -0.189324610   0.1587814500
## 35    0.1288018400  -0.107542720   0.243867280  -0.378765280   0.2640592100
## 36    0.1667742700  -0.110296600   0.059409527  -0.024308777   0.2411555500
## 37    0.1265625200  -0.055531757   0.046630480   0.097884313   0.2465073400
## 38    0.0268796170   0.037886066   0.089424404   0.056578389   0.3934470100
## 39   -0.0254631690  -0.077475399   0.114779170   0.038429680  -0.2069566600
## 40   -0.1628609700   0.132221330  -0.079319091   0.039058154  -0.1645525000
## 41   -0.1028369900   0.056837115   0.010875074   0.006716147  -0.0246670590
## 42    0.1561355600  -0.104174570   0.266244070  -0.233500800   0.1176035900
## 43    0.2171422100  -0.148990730   0.248332800  -0.160777890   0.0841678180
## 44    0.1143969300  -0.015729686  -0.054788957   0.118043120   0.2982075700
## 45    0.0133228650   0.021878410   0.031119714  -0.003832468   0.3192744600
## 46    0.1008612600  -0.110932540   0.262061500  -0.123957150   0.3148107300
## 47    0.1451615400  -0.107315690   0.034380194   0.248404490   0.3278837800
## 48    0.0161529200   0.041468027  -0.144161760   0.264484840   0.1020982100
## 49    0.0426656470   0.021735864   0.057744568  -0.066759218   0.2572481000
## 50    0.0951390520   0.031616380  -0.162557540   0.167451760   0.3426707400
## 51    0.0224549400   0.044878873  -0.209201550   0.331511860   0.1658671700
## 52   -0.5243985800   0.526520920  -0.431197520   0.362640410  -0.5247967100
## 53    0.0981378600  -0.128814140   0.040503424   0.196634420  -0.1945870700
## 54    0.1918029700  -0.175185970   0.139221010   0.057553502   0.0661549230
## 55    0.0088913876  -0.097770771   0.180774740   0.060732003   0.1480252600
## 56   -0.0667394650  -0.027421226   0.183970170  -0.010901646   0.3484609200
## 57    0.0301135450  -0.144738330   0.270954800   0.054683970   0.3091047800
## 58    0.0378828760  -0.076040032   0.039529017   0.243131370   0.1499189500
## 59   -0.0161941330  -0.003906293  -0.139759180   0.366312320   0.4101527700
## 60    0.0704130910  -0.120859230   0.018991945   0.275833400   0.4272522300
## 61    0.0511751760  -0.049352462   0.034536015   0.075228798   0.3864985000
## 62   -0.0162774300   0.006778372  -0.110332230   0.311549660   0.3808663800
## 63    0.1372344200  -0.222272200   0.202226630   0.176634760   0.2461179200
## 64   -0.0093156390  -0.034178590   0.061987757   0.126959220   0.3074057200
## 65    0.0053962989   0.094128802  -0.214610380   0.112963960  -0.0833655490
## 66   -0.1772341100   0.189769140  -0.271915060   0.234794460  -0.0760458530
## 67   -0.5239511000   0.490608910  -0.348035290   0.154536520  -0.4159947300
## 68   -0.4876134500   0.445629420  -0.295493890   0.122618950  -0.3989683500
## 69   -0.2585540300   0.201800310  -0.118061350   0.073429053  -0.1886999900
## 70   -0.1626219100   0.173282980  -0.184690760   0.182411470  -0.4941057600
## 71   -0.2283909200   0.232632670   0.059361673  -0.128277470  -0.3706536900
## 72   -0.2544823200   0.257318540   0.089681257  -0.142683380  -0.2199762500
## 73   -0.4317781900   0.306886680  -0.030597378   0.060928718  -0.4473804200
## 74   -0.1042937400   0.119442630   0.089930695  -0.320953350  -0.0223194270
## 75   -0.0808008660   0.077731281   0.274652830  -0.531425530   0.2357314700
## 76    0.1218521200  -0.079979646   0.124791390  -0.194614500   0.3283127300
## 77    0.1732526700  -0.078851724   0.103660270  -0.008242749   0.2948211300
```

```
## 78    0.1450336400 -0.028333042  0.220215960 -0.017427241  0.4007228900
## 79   -0.5151807800  0.510638230 -0.375723870  0.202351270 -0.0224238410
## 80   -0.4651137800  0.461711950 -0.388177670  0.302660760  0.0313224030
## 81   -0.2609378000  0.246592530 -0.201314980  0.263125980 -0.0236322770
## 82   -0.2282215900  0.195290210  0.043596166  0.016330567 -0.0351217890
## 83   -0.2648452500  0.252758190 -0.068664096  0.071030981 -0.2310023200
## 84   -0.2534003900  0.285430370 -0.265250290  0.262391610 -0.2972543100
## 85   -0.2878322100  0.344318070 -0.387937670  0.377269020 -0.2529340400
## 86   -0.1207479100  0.125914170 -0.028692301  0.076916450 -0.1974602000
## 87   -0.4571042000  0.463008970 -0.418192570  0.337561480 -0.3262670400
## 88   -0.3603807000  0.377389440 -0.444217410  0.477243260 -0.1190789200
## 89   -0.1615702700  0.124971800 -0.060667895  0.179841990  0.0059524414
## 90   -0.2660028300  0.277499780 -0.197515590  0.222042830 -0.0536999780
## 91   -0.3445042600  0.394515590 -0.478770680  0.506915290 -0.0506480040
## 92   -0.3156798700  0.379156460 -0.443869250  0.425537980 -0.0405175100
## 93   -0.4181897000  0.517175290 -0.665712070  0.597383190 -0.0921392290
## 94   -0.3832660300  0.426849060 -0.405173120  0.331216340 -0.0650445600
## 95   -0.3541287400  0.364517270 -0.215752250  0.163274000 -0.0690566180
## 96   -0.3057404900  0.367103360 -0.352145090  0.367345240 -0.0495741470
## 97   -0.2738156000  0.329615950 -0.297769050  0.313234630 -0.2061373800
## 98   -0.2660190900  0.257058560 -0.074158462  0.046850359 -0.3637709000
## 99   -0.3027417100  0.268808830 -0.079079176  0.077875235 -0.1298425100
## 100  -0.3921374800  0.378912960 -0.283448120  0.265934230 -0.0444088640
## 101  -0.3814874600  0.474423450 -0.577511230  0.552575040 -0.1085412600
## 102  -0.1190635800  0.222899800 -0.263081210  0.319201360  0.0460808910
## 103  -0.1692714100  0.258303180 -0.301060340  0.346182930  0.0140391480
## 104  -0.2811007800  0.311646010 -0.247055910  0.280026630 -0.4025212800
## 105  -0.1765390700  0.175850720 -0.065785980  0.147127860 -0.2745457200
## 106  -0.2352346200  0.249678620 -0.272231800  0.373828280 -0.0224353130
## 107  -0.1717455100  0.180918950 -0.168473130  0.303697410  0.0264824400
## 108  -0.1511577100  0.108897980 -0.005512095  0.181637170  0.0317944550
## 109  -0.3362494400  0.343350410 -0.320469920  0.378749360  0.0218591020
## 110  -0.4204592700  0.470942900 -0.475115660  0.435316720 -0.1660204300
## 111  -0.4065225100  0.428212870 -0.310120440  0.198518870 -0.3309667100
## 112  -0.1981452100  0.248915650 -0.252401670  0.288102470 -0.0827830270
## 113  -0.2044634800  0.232893200 -0.349063100  0.474607660  0.0298850410
## 114  -0.2106362100  0.236233510 -0.208452000  0.278898760 -0.2245144800
## 115  -0.2077500900  0.213879660 -0.132012420  0.205112730 -0.1466693500
## 116  -0.1498158600  0.151927360 -0.038623954  0.089500662  0.0388719040
## 117  -0.2264565200  0.248666470 -0.179675030  0.211583450 -0.0232002050
## 118  -0.2847703300  0.342075030 -0.434323470  0.467046320 -0.1479959600
## 119  -0.2128445300  0.219444340 -0.159137850  0.202265220 -0.1113971100
## 120  -0.2968632700  0.265477790 -0.075661670  0.077134289 -0.2405086500
## 121  -0.3122756500  0.297314420 -0.184592250  0.196735240 -0.2715784500
## 122  -0.4213211600  0.462439180 -0.479786010  0.423281210 -0.1808111200
## 123  -0.4269612700  0.446468440 -0.387894550  0.291004000 -0.2442981500
## 124  -0.3449110800  0.320786400 -0.176794540  0.131798610 -0.5531141500
## 125  -0.3335211400  0.321460100 -0.173539600  0.170820680 -0.3894172200
## 126  -0.0082576075  0.026628929  0.065847870  0.074777575  0.2167050100
## 127  -0.0158083310  0.151863980 -0.261871070  0.441725720 -0.1170053700
```

```
## 128   0.1367969700   0.020943891  -0.042492478   0.143302960  -0.1621089900
## 129   0.0936326010  -0.028808060   0.130565120  -0.057738964  -0.1307682400
## 130  -0.2016103700   0.235486440  -0.141183570   0.161937140  -0.2972053000
## 131  -0.2074606100   0.259904490  -0.088998084  -0.009995090  -0.1825805600
## 132  -0.0433014700   0.090138876   0.082579172  -0.129584070  -0.1895190400
## 133   0.0912647500  -0.071227219   0.216108140  -0.070282954  -0.2395378200
## 134   0.0794626000   0.013546589   0.099545370  -0.025315808  -0.1050025300
## 135  -0.0101995170   0.135633520  -0.059698596   0.126996250  -0.3146283800
## 136  -0.0801299540   0.173959340  -0.137609350   0.228467680  -0.3378602300
## 137  -0.1510642900   0.226151830  -0.094767965   0.062210875  -0.3054190000
## 138  -0.1099960600   0.191881180  -0.143308560   0.121024210  -0.2489873400
## 139  -0.1137113500   0.211501470  -0.174041730   0.130142600  -0.2327909900
## 140   0.0002221421   0.035854109   0.153486490  -0.136845240  -0.3146849400
## 141   0.0497013220  -0.016761328   0.144946200   0.015257318  -0.4124402300
## 142  -0.2322682500   0.254389350  -0.150737310   0.258269330  -0.3175586300
## 143  -0.2331066500   0.225408280  -0.089943022   0.176011610  -0.3747333600
## 144  -0.1738619000   0.213340800  -0.171921150   0.320894680  -0.3092130000
## 145  -0.0885160950   0.144767000  -0.076150972   0.081874721  -0.2665925100
## 146   0.0294077840   0.093466882  -0.182603790   0.237274680  -0.2291379600
## 147  -0.0244592900   0.130791750  -0.318137840   0.458517310  -0.1752931300
## 148  -0.3719580100   0.412466340  -0.286313840   0.174058590  -0.3820844500
## 149  -0.3321585000   0.381464720  -0.261276170   0.159131260  -0.3159956000
## 150  -0.2850173600   0.286010830  -0.154087380   0.115607710  -0.1973142300
## 151  -0.4688781500   0.365003270  -0.001750991  -0.171326690  -0.4021847300
## 152  -0.3717056600   0.216324710   0.229789880  -0.312351970  -0.3991865900
## 153  -0.4844966300   0.346357480  -0.068698166   0.030708926  -0.4146714400
## 154  -0.5967220900   0.498819830  -0.265629320   0.144293640  -0.3695114700
## 155  -0.5707911000   0.461072320  -0.115167010  -0.081725938  -0.4845772000
## 156  -0.5738432200   0.489167370  -0.217924460   0.019799798  -0.6341754900
## 157  -0.5607937300   0.479207850  -0.163244600  -0.051009334  -0.2949701100
## 158  -0.5000767200   0.373317970   0.046817880  -0.226241500  -0.2711437900
## 159  -0.4067202600   0.304354700  -0.020918120  -0.084492866  -0.2669899300
## 160  -0.4838825900   0.338617680   0.041294777  -0.140460710  -0.3242567500
## 161  -0.6490358400   0.574105750  -0.337897350   0.114524340  -0.5060858000
## 162  -0.5453634000   0.461961890  -0.218808490   0.037031097  -0.4358530200
## 163  -0.5148729200   0.412488290  -0.185878340   0.080567046  -0.2817575800
## 164  -0.4010481700   0.350465620  -0.246607940   0.182048300  -0.2678710000
## 165  -0.3938305100   0.311612260  -0.201328720   0.187297290  -0.2274333800
## 166  -0.6359656800   0.499066620  -0.199742850   0.067545303  -0.3808862900
## 167  -0.5561481400   0.431315420  -0.150340020   0.038149690  -0.4489091000
## 168  -0.6509688700   0.574452280  -0.456638670   0.311785590  -0.3289129400
## 169  -0.6827349700   0.652763800  -0.585544430   0.372577520  -0.2340231100
## 170  -0.7886439300   0.793609030  -0.766158950   0.459886850  -0.3069867300
## 171  -0.7236974800   0.700904280  -0.656689810   0.415907600  -0.4064975600
## 172  -0.4354901800   0.348013560  -0.199610330   0.152510440  -0.4287430400
## 173  -0.3323895400   0.242486900  -0.061118672   0.044647745  -0.4757115600
## 174  -0.5456831100   0.479605570  -0.322836940   0.180420420  -0.5419091500
## 175  -0.6158393500   0.503595950  -0.268190250   0.131252110  -0.3077227600
## 176  -0.6538911600   0.581225780  -0.373997540   0.148979620  -0.1531025900
## 177   0.7978282100  -0.874354660   0.494576490   0.150893120   0.0003674101
```

```
##                NA           NA            NA           NA            NA
## 1    -0.77111201  0.690213230 -0.3318310400  0.709583770  0.134873360
## 2    -0.14992836  0.292618930 -0.1494293500  0.046721243 -0.256929400
## 3    -0.16564496  0.134554440  0.1843489800 -0.010129565  0.043311584
## 4    -0.20718879  0.112457470  0.2020919300  0.210194130  0.141100840
## 5    -0.33952923  0.132537080  0.4732513800 -0.142000700  0.484418850
## 6    -0.22767973  0.138241320  0.3461754600 -0.448102490  0.645013580
## 7    -0.11721192  0.048762132  0.3357637200 -0.016117067  0.466061630
## 8    -0.28304927  0.177423270  0.3079970000  0.204362480  0.193000890
## 9    -0.28317573  0.342415210 -0.0591899250 -0.187376790  0.233717240
## 10    0.05872100  0.035193368  0.1870195500 -0.365844870  0.160245330
## 11    0.08164453 -0.052891273  0.3116983400 -0.425716120  0.152389830
## 12   -0.17971629  0.086658513  0.2243891200  0.015827178  0.059518490
## 13   -0.25448649  0.146609330 -0.0243917080  0.382153110 -0.336155810
## 14   -0.14046523  0.116767880 -0.0055653679 -0.150034710  0.261495120
## 15   -0.13173952  0.100359870  0.1621901700 -0.262291610  0.230272180
## 16   -0.15267218  0.013496817  0.2921851500  0.484807610 -0.513689560
## 17   -0.25134770  0.017479875  0.3569637400 -0.530258780  0.461326320
## 18   -0.23345586  0.108919780  0.1425399900  0.180950290 -0.343992750
## 19   -0.19802532  0.166634710 -0.0701348330  0.111296290 -0.076928197
## 20   -0.10745182  0.018243872  0.0248701720 -0.138034570  0.033427343
## 21   -0.31765493  0.230536330 -0.1389244900  0.172961270 -0.285873050
## 22   -0.40242534  0.268496500 -0.1592855500  0.141273290 -0.181434640
## 23   -0.34895310  0.194231330  0.0682225350  0.082247765 -0.208376420
## 24   -0.58346139  0.365647160  0.0924000410  0.005935114 -0.004609539
## 25   -0.66247916  0.464546340  0.0033378982 -0.200005060  0.015846362
## 26   -0.57627848  0.441655050 -0.0973877400  0.078967501 -0.410562650
## 27   -0.37574613  0.274767660 -0.0444510830  0.218693530 -0.251705190
## 28   -0.13374758  0.329685910 -0.0552984360  0.610399490 -0.885549330
## 29   -0.52736762  0.551473750 -0.3115252500  0.841329160 -0.803092130
## 30   -0.17292377  0.206645750 -0.0603416020  0.849325290 -0.852237130
## 31    0.61404165 -0.297293110  0.1984382900  0.621307770  0.867191880
## 32    0.42625846 -0.179794750  0.2189920500  0.554477380  0.654858550
## 33   -0.01301168  0.080413499  0.1576902100 -0.039286896 -0.718088640
## 34   -0.32119037  0.214815540  0.1978329800 -0.426960330 -0.064531570
## 35   -0.24439191  0.033672171  0.1241977900  0.606366720 -0.811699320
## 36   -0.16333083 -0.056656862  0.1110902500  0.380156590 -0.762989470
## 37   -0.08734008 -0.121534360  0.0671937610  0.028098667 -0.280402940
## 38   -0.16271830  0.039351938  0.1826818500 -0.508735770  0.104834830
## 39    0.06269229 -0.160079070  0.4525638700  0.441709450  0.946102040
## 40   -0.11938092  0.224197360  0.1606809100 -0.069613474  0.996369330
## 41   -0.16823466  0.195996870  0.1055342100  0.514428730  0.983433040
## 42   -0.13952153  0.228858740 -0.3058704700 -0.050829927  0.938052860
## 43   -0.21487387  0.370262980 -0.2905079300 -0.492227930  0.587989060
## 44   -0.35017328  0.215541430  0.0346343150 -0.496560140  0.338028400
## 45   -0.28278556  0.124424110 -0.0077623815 -0.302224850  0.753439590
## 46   -0.31423428  0.217920410  0.0002327177 -0.056931831 -0.113018650
## 47   -0.31819791  0.215199450 -0.0274402950 -0.522545070  0.152187330
## 48   -0.04194086  0.060310170 -0.0892713820 -0.538302180  0.556581380
## 49   -0.23772088  0.287323110 -0.2521227300 -0.344371430  0.398428220
```

```
## 50   -0.31315797   0.165462320   0.0541894840  -0.322234520   0.274327670
## 51   -0.19400800   0.087130525   0.2079904100  -0.117097650   0.048721790
## 52    0.52757226  -0.460046510   0.2210710000  -0.217129890   0.338002890
## 53    0.07433822  -0.180300370   0.4348682500  -0.785538950   0.976583240
## 54   -0.07840109   0.017261554   0.0253066110   0.598523070   0.955206920
## 55   -0.16052276   0.097600875  -0.0300448800  -0.269840680   0.526345800
## 56   -0.36381501   0.180061290   0.0493090880  -0.158725950  -0.367527300
## 57   -0.33369647   0.176628370   0.0505439950   0.020600730   0.446232840
## 58   -0.21788456   0.203454520  -0.0273326790   0.189606720   0.428543300
## 59   -0.32364370   0.194702790   0.0597151240  -0.186193460   0.077711230
## 60   -0.29143779   0.142554620  -0.0233155560   0.207146560   0.401666620
## 61   -0.25071682   0.085828002   0.0852431510   0.318847470   0.267904810
## 62   -0.30655326   0.195309440   0.0782167720   0.198454860   0.069544537
## 63   -0.17386919   0.159101480  -0.0907253720   0.245689600   0.173923180
## 64   -0.19177174  -0.002765841   0.1726792200   0.294392050   0.365256250
## 65    0.08903725  -0.235745060   0.2932966800  -0.434549850   0.667717000
## 66   -0.04044613   0.032374513   0.1357613900   0.691688850   0.954811960
## 67    0.28504032  -0.137176690   0.1904332800  -0.443255370   0.303823260
## 68    0.28257441  -0.154684760   0.2192227100  -0.447987390   0.284859200
## 69    0.15444814  -0.136898850   0.1181659500  -0.190806960   0.352694510
## 70    0.46138319  -0.474433760   0.4469372200  -0.572095620   0.571763160
## 71    0.29712061  -0.158825570   0.1835684100  -0.214425760   0.012155568
## 72    0.21713603  -0.079332337   0.2503799000  -0.172633380  -0.003436661
## 73    0.34737167  -0.396576690   0.5770017200  -0.277178420   0.710360680
## 74   -0.10580422   0.141767940   0.0199735770  -0.310446830   0.830127570
## 75   -0.28163989   0.211877250  -0.0630461760  -0.448029220   0.910218740
## 76   -0.40662689   0.325458060  -0.0563091840  -0.793513980   0.898475870
## 77   -0.37009195   0.291213740   0.1007913200  -0.705085790   0.688568870
## 78   -0.47506846   0.453641450  -0.1076420600  -0.084264797   0.486706220
## 79    0.15837001  -0.307141660   0.5045310500  -0.247858180  -0.174488660
## 80    0.09935118  -0.211073320   0.4632182100  -0.205119470   0.123433540
## 81    0.13533303  -0.238551650   0.4786467400  -0.151346610   0.161032720
## 82    0.11628373  -0.190332980   0.3948046700   0.104329580   0.197395100
## 83    0.28265016  -0.326120360   0.4394692400   0.079807808   0.203211840
## 84    0.34700082  -0.438393410   0.6261847900  -0.013876819   0.132047200
## 85    0.35844646  -0.533664430   0.7209631800  -0.008034684   0.068513315
## 86    0.30711985  -0.423826390   0.5552177800  -0.075796089  -0.030988393
## 87    0.39798666  -0.536899370   0.6648772300  -0.145165400   0.082040898
## 88    0.21098070  -0.329115130   0.5262500900  -0.056253106   0.006015072
## 89    0.06546761  -0.159103860   0.4254818600  -0.045529573   0.049992440
## 90    0.10294272  -0.160638600   0.3722416900   0.114394180   0.153830690
## 91    0.08453578  -0.112873560   0.3611833300   0.112856440   0.039004516
## 92    0.07637808  -0.040655296   0.2796987100  -0.022017127   0.054399109
## 93    0.18198920  -0.196025100   0.3863519800  -0.067428863   0.145394300
## 94    0.16304762  -0.226821910   0.4537335500  -0.073316197   0.059822092
## 95    0.14389347  -0.198196360   0.4104742400  -0.029789280   0.011579143
## 96    0.09245758  -0.136677680   0.3573934800   0.097797010   0.068664487
## 97    0.19793546  -0.092323416   0.2134592200   0.079522663  -0.125851150
## 98    0.37804851  -0.277060030   0.3089730100  -0.104234350  -0.323393060
## 99    0.17924920  -0.191422840   0.3690808400  -0.059409245  -0.015622734
```

```
## 100   0.11702425 -0.165915870  0.4234768700 -0.065998135  0.014103695
## 101   0.23182303 -0.355275470  0.5573083100  0.051770265  0.034725703
## 102   0.07266653 -0.187450930  0.4497173700  0.085968090  0.038059549
## 103   0.06550126 -0.225605880  0.5439486200  0.117099150  0.180710050
## 104   0.45811203 -0.490774740  0.5566240200  0.157099700  0.107869110
## 105   0.27485867 -0.226483610  0.3605437200  0.007845214 -0.021711281
## 106   0.01342090  0.067395953  0.1524534600  0.018254550 -0.058759468
## 107   0.08137283 -0.232421450  0.5399652600  0.121700090 -0.022481307
## 108   0.10167049 -0.247385110  0.5395780300  0.022281512 -0.040418148
## 109   0.03480758 -0.002616908  0.2333876300 -0.027049202 -0.055189865
## 110   0.12635226  0.015159842  0.1018038700  0.069576874 -0.009128814
## 111   0.38067043 -0.438433300  0.5775770900  0.037931194 -0.084553423
## 112   0.13033203 -0.213867540  0.5108611100 -0.127244190 -0.003084686
## 113  -0.09612915  0.120907610  0.2529530700 -0.117862300  0.153621120
## 114   0.16054433 -0.132653600  0.3723403900  0.004104681  0.288388650
## 115   0.09531184 -0.085789466  0.3612079400  0.131344940  0.190748290
## 116  -0.02397133  0.006381294  0.2929100000 -0.003280086  0.008534615
## 117   0.08370271 -0.145604330  0.4064870600 -0.087754602  0.010023543
## 118   0.23688297 -0.355640170  0.5921328400 -0.062092223 -0.047559305
## 119   0.06677005 -0.041883455  0.3459383100 -0.092475979  0.013131752
## 120   0.23312105 -0.149982880  0.2696999600 -0.037383514  0.028674052
## 121   0.30096104 -0.293622870  0.3845128300  0.010404151 -0.136211180
## 122   0.22700131 -0.440856690  0.7126682800 -0.049433708 -0.192910770
## 123   0.26367219 -0.372923540  0.6224682500 -0.154733120 -0.113061440
## 124   0.55297275 -0.447829530  0.4221254100 -0.171189110 -0.032183388
## 125   0.40007825 -0.336314700  0.3946679500 -0.036966180 -0.035552208
## 126  -0.07778948 -0.148861720  0.4354988400  0.358998540 -0.297029270
## 127   0.07087060  0.071201576  0.0600183090  0.375831640 -0.246146540
## 128   0.21447472 -0.203578370  0.2870034900 -0.042546710 -0.090887785
## 129   0.20803597 -0.295725920  0.4366804700 -0.262517890 -0.095277776
## 130   0.33225879 -0.323249480  0.3729972900 -0.095683030 -0.197161890
## 131   0.13446700  0.107048160 -0.0904719890 -0.217706340 -0.169647620
## 132   0.25037148 -0.196563610  0.2306961000 -0.298264780 -0.093504320
## 133   0.33629512 -0.451652750  0.5501216200  0.331023040 -0.330514540
## 134   0.08338892  0.008403936  0.1436872800  0.313029280 -0.286240690
## 135   0.32318463 -0.204154780  0.2467868600  0.214974990  0.090683463
## 136   0.37523401 -0.309451920  0.3401983600  0.196973390 -0.136193240
## 137   0.35751325 -0.316623350  0.3672828300 -0.207867030 -0.122647720
## 138   0.29723380 -0.284385260  0.3699627100 -0.356610850 -0.068077973
## 139   0.27675871 -0.296899590  0.4212370100 -0.368879150  0.055359956
## 140   0.29853632 -0.198857210  0.3020542000 -0.414235770 -0.049899470
## 141   0.42508291 -0.390932270  0.4596238500 -0.156878450 -0.082079222
## 142   0.27215668 -0.152667110  0.2624142800  0.274194740 -0.220644340
## 143   0.35101026 -0.148403810  0.0744262100  0.357891030 -0.074351949
## 144   0.31095902 -0.201066330  0.1770574300  0.377345840 -0.450152430
## 145   0.28081426 -0.280516910  0.3769046700 -0.088970663 -0.501936490
## 146   0.26282375 -0.239629140  0.3452843000 -0.238631370 -0.216064860
## 147   0.13675657 -0.070811490  0.2593386300 -0.247558770 -0.078348171
## 148   0.30967014 -0.168502730  0.2466848500 -0.264787700 -0.025420777
## 149   0.37205537 -0.350464020  0.3408119100  0.241067530  0.073429134
```

```
## 150   0.23039223 -0.175086590  0.2226757400  0.015313696 -0.087620141
## 151   0.41682469 -0.354433940  0.3281198800 -0.179732390 -0.254312940
## 152   0.42425727 -0.387263510  0.3918078400 -0.159550640 -0.439128260
## 153   0.28040974 -0.036621331  0.0493499410 -0.462867170 -0.684046630
## 154   0.27435398 -0.038080991  0.0144318810 -0.347230510 -0.646811210
## 155   0.46147837 -0.248138680  0.1335054600 -0.132364630 -0.428252730
## 156   0.56800503 -0.269586900  0.0404986580 -0.363218300 -0.443612660
## 157   0.27020306 -0.199410070  0.2646835700 -0.115264130 -0.243806910
## 158   0.30487408 -0.292406530  0.3728914200 -0.024786476 -0.451715190
## 159   0.21241426  0.059172040 -0.0231588200 -0.176332580 -0.065700769
## 160   0.33645361 -0.224765290  0.2513160400  0.183823740 -0.128362630
## 161   0.49767400 -0.389951970  0.3040191100 -0.367989910 -0.490882360
## 162   0.39961574 -0.255990950  0.1879256000 -0.568378090 -0.506868960
## 163   0.20714624  0.003869461 -0.0215883660 -0.196891130 -0.378947080
## 164   0.20170569  0.020927153 -0.0493930990 -0.021632439 -0.372101890
## 165   0.22802297 -0.031108414  0.0075762397 -0.027963814 -0.039419036
## 166   0.37926319 -0.210824550  0.1415665600  0.123878010 -0.056683240
## 167   0.47920502 -0.423523600  0.3476540500  0.149237850 -0.263550440
## 168   0.33119486 -0.175418460  0.2016494000 -0.342393670 -0.299981260
## 169   0.23928570 -0.034635603  0.0276809370 -0.134373580 -0.432500440
## 170   0.21520778  0.059986123 -0.1223456000 -0.462113100 -0.561667070
## 171   0.29727280  0.017461340 -0.1165441400 -0.477760050 -0.518069700
## 172   0.38885166 -0.190261810  0.1264744100 -0.017147028 -0.468544910
## 173   0.42709713 -0.236383860  0.1677116100  0.143522890 -0.192820000
## 174   0.55935125 -0.374001200  0.2332907800  0.054281808 -0.226145540
## 175   0.32044140 -0.121307280  0.1231006500  0.117556290 -0.427553320
## 176   0.15616289  0.096937431 -0.1093352600 -0.326771900 -0.424578800
## 177  -0.12910979 -0.054822061  0.4479370400  0.579868900 -0.608869170
##                 NA          NA            NA           NA           NA
## NA
## 1     0.301099480 -0.09916740 -0.055517369 -0.061985797 -0.9921107 -
## 0.99251927
## 2     0.169394800 -0.11050283 -0.044818731 -0.059242822 -0.9898726 -
## 0.99729260
## 3    -0.350646130 -0.10848567 -0.042410306 -0.055828829 -0.9884618 -
## 0.99563214
## 4    -0.725301060 -0.09116989 -0.036332620 -0.060464660 -0.9911194 -
## 0.99664096
## 5    -0.724557530 -0.09077010 -0.037632533 -0.058289319 -0.9913545 -
## 0.99647298
## 6    -0.745979240 -0.09424758 -0.043355261 -0.041935999 -0.9916216 -
## 0.99601465
## 7    -0.687680730 -0.09708861 -0.041589277 -0.044704559 -0.9904185 -
## 0.99541459
## 8    -0.732650040 -0.10316236 -0.035546068 -0.063208931 -0.9911036 -
## 0.99579433
## 9    -0.442480850 -0.10069440 -0.047715247 -0.067720045 -0.9924195 -
## 0.99631178
## 10   -0.446921360 -0.09842938 -0.043540216 -0.048562914 -0.9839125 -
## 0.99307848
```

```
## 11   -0.478497700 -0.09944295 -0.032515146 -0.045512651 -0.9859109 -
0.99371782
## 12   -0.369694060 -0.09420755 -0.040316155 -0.057682038 -0.9957170 -
0.99755680
## 13   -0.727809090 -0.09899450 -0.040496948 -0.054137882 -0.9960237 -
0.99888814
## 14   -0.574225280 -0.10048744 -0.042113616 -0.053738021 -0.9975124 -
0.99826836
## 15   -0.991771930 -0.08417587 -0.080866451  0.007531561 -0.9846701 -
0.99282912
## 16   -0.991660000 -0.09986049 -0.057413011 -0.022366509 -0.9947609 -
0.99694746
## 17   -0.948048310 -0.09479039 -0.050648170 -0.034809761 -0.9956387 -
0.99702529
## 18   -0.898799900 -0.10533471 -0.046139602 -0.046398495 -0.9964649 -
0.99736626
## 19   -0.501154380 -0.10413693 -0.041083288 -0.054341093 -0.9961731 -
0.99845498
## 20   -0.424326310 -0.09712284 -0.039561886 -0.054821896 -0.9966247 -
0.99929097
## 21   -0.020311386 -0.09699966 -0.039383672 -0.055209671 -0.9972131 -
0.99885611
## 22   -0.286956920 -0.09721769 -0.040646212 -0.054870288 -0.9966684 -
0.99847664
## 23   -0.668137430 -0.09798059 -0.039427698 -0.055537897 -0.9973165 -
0.99855988
## 24   -0.597540010 -0.09705365 -0.039995777 -0.059039117 -0.9977921 -
0.99830456
## 25   -0.619822470 -0.09698408 -0.040981257 -0.056018736 -0.9969277 -
0.99810702
## 26   -0.145128270 -0.09715447 -0.039321883 -0.051857918 -0.9957425 -
0.99798917
## 27   -0.120152160 -0.10226052 -0.040127012 -0.052669203 -0.9954386 -
0.99754026
## 28   -0.631152340 -0.11571413 -0.066663019  0.016335990 -0.9852016 -
0.98666522
## 29   -0.924111720 -0.09424213 -0.022414444 -0.066970560 -0.9970374 -
0.99794847
## 30   -0.984050560 -0.09529121 -0.026020031 -0.078193929 -0.9980773 -
0.99817308
## 31    0.730785840 -0.01652141 -0.065023681 -0.150639070 -0.8938046 -
0.88147183
## 32    0.620604700 -0.09552168 -0.067817006 -0.040522627 -0.8863080 -
0.87419654
## 33   -0.494592840 -0.18174043 -0.014079617  0.047204388 -0.9636738 -
0.95824501
## 34   -0.550885700 -0.10305335 -0.011939118 -0.062791658 -0.9959289 -
0.98907867
## 35   -0.826582210 -0.09553788 -0.035066258 -0.068364914 -0.9991885 -
0.99412613
```

```
## 36   -0.625272100 -0.09575153 -0.036409127 -0.065751415 -0.9987960 -
0.99464491
## 37   -0.639344450 -0.09639015 -0.039033170 -0.061621011 -0.9987328 -
0.99459335
## 38   -0.229487430 -0.09732419 -0.042724214 -0.056653466 -0.9986055 -
0.99482467
## 39    0.551734620 -0.07613627 -0.023511625  0.048746095 -0.9921825 -
0.99252142
## 40   -0.042144153 -0.06046825 -0.047491065  0.053835275 -0.9983178 -
0.99404793
## 41    0.604869360 -0.07424087 -0.038811650  0.004460921 -0.9978430 -
0.99528855
## 42   -0.053418344 -0.08617537 -0.040941551 -0.041286479 -0.9970879 -
0.99492132
## 43   -0.075413977 -0.09341342 -0.040875199 -0.043482017 -0.9975639 -
0.99580404
## 44   -0.008998401 -0.09840228 -0.036623752 -0.052670226 -0.9992789 -
0.99686121
## 45   -0.490231170 -0.09964431 -0.041465690 -0.064887957 -0.9982804 -
0.99659289
## 46   -0.239656020 -0.09987610 -0.044019406 -0.055598998 -0.9973808 -
0.99615461
## 47   -0.217958900 -0.10051458 -0.038433452 -0.057589453 -0.9977780 -
0.99672581
## 48   -0.520131630 -0.09951091 -0.038919699 -0.058039297 -0.9982185 -
0.99701461
## 49   -0.363967710 -0.09639977 -0.043673429 -0.046565566 -0.9982141 -
0.99703634
## 50   -0.537046910 -0.09737348 -0.037230976 -0.056344653 -0.9982045 -
0.99623539
## 51   -0.585806270 -0.10231372 -0.047165727 -0.056428730 -0.9974262 -
0.99591829
## 52   -0.483846330 -0.11906637 -0.048786067 -0.155449510 -0.9697419 -
0.95314390
## 53   -0.835101610 -0.11001902 -0.036833082 -0.123623390 -0.9970592 -
0.99724402
## 54    0.566142330 -0.10579546 -0.041967089 -0.090942119 -0.9977386 -
0.99816120
## 55    0.186453330 -0.10094779 -0.040474051 -0.060445163 -0.9986279 -
0.99843113
## 56    0.227522390 -0.09961923 -0.040330798 -0.047750664 -0.9988554 -
0.99813088
## 57   -0.051786571 -0.09820626 -0.041243883 -0.046094169 -0.9986589 -
0.99809354
## 58    0.573380540 -0.09801259 -0.038934592 -0.048297637 -0.9982894 -
0.99746648
## 59    0.493249490 -0.09789262 -0.038695857 -0.057581924 -0.9988551 -
0.99797965
## 60    0.528645800 -0.09796862 -0.041539573 -0.055677600 -0.9997279 -
0.99896022
```

```
## 61    0.489284410 -0.09785459 -0.041437227 -0.051773459 -0.9998141 -
0.99857120
## 62    0.469038410 -0.09866363 -0.040145171 -0.054970621 -0.9977071 -
0.99821401
## 63    0.556186420 -0.09878671 -0.043011336 -0.055590732 -0.9973999 -
0.99823857
## 64    0.584748530 -0.09777343 -0.041491156 -0.054167484 -0.9993053 -
0.99769529
## 65   -0.163472000 -0.11950341 -0.033136459 -0.081185235 -0.9352406 -
0.93776472
## 66    0.704335130 -0.11843114 -0.038440072 -0.136265670 -0.9874577 -
0.98708777
## 67   -0.857317080 -0.04233134 -0.073041670 -0.056678688 -0.6058686 -
0.89932747
## 68   -0.838493530 -0.09658881 -0.074083925 -0.056614254 -0.5884292 -
0.89356735
## 69   -0.441182050 -0.19508446 -0.004628999 -0.128992860 -0.8816520 -
0.96388666
## 70   -0.591632650 -0.79429092  0.069186911 -0.219667870 -0.6729598 -
0.87982746
## 71   -0.349682540 -0.26163473 -0.119858330 -0.012435592 -0.3626256 -
0.72314441
## 72   -0.253011640  0.60049262 -0.144505770  0.106279180 -0.4569194 -
0.74054968
## 73   -0.491054800  0.11264077  0.027738790 -0.064159118 -0.9214377 -
0.92801395
## 74   -0.292908440 -0.11341681 -0.029336611 -0.066985016 -0.9789231 -
0.98440393
## 75   -0.282372830 -0.13014634 -0.036068798 -0.069935123 -0.9845120 -
0.98667782
## 76   -0.696599580 -0.12062556 -0.035133122 -0.064724956 -0.9939596 -
0.99601352
## 77   -0.364944660 -0.11018738 -0.038877206 -0.060758143 -0.9935332 -
0.99574747
## 78    0.156801280 -0.10087654 -0.036907457 -0.050117834 -0.9949242 -
0.99568523
## 79    0.032063043  0.09424803 -0.476210050 -0.142133640 -0.3457161 -
0.48674954
## 80    0.146325840  0.16674262 -0.033796125 -0.089260236 -0.2498919 -
0.45374418
## 81    0.165789680 -0.16322550 -0.005560408 -0.231554790 -0.2642317 -
0.42467650
## 82    0.091175040 -0.05462885  0.340289290 -0.269671590 -0.1020531 -
0.24344225
## 83    0.094166194 -0.07566824  0.171466880  0.136450720 -0.1290674 -
0.19010724
## 84    0.116457940 -0.33244254 -0.406247560  0.238770620 -0.2875010 -
0.29241241
## 85    0.101230050 -0.25613684 -0.190438070 -0.010926571 -0.2418950 -
0.36814485
```

```
## 86    0.089979894   0.06436962 -0.068501754 -0.208081940 -0.2069462 -
0.34268862
## 87    0.045361960   0.03446728 -0.346229650  0.190770190 -0.2890267 -
0.49804596
## 88    0.079658740   0.18603411 -0.332579640 -0.026497040 -0.1997635 -
0.46388403
## 89    0.017173934   0.04508272  0.224458400 -0.250617440 -0.2529335 -
0.46293500
## 90    0.033696891  -0.14267476  0.395783430 -0.212129910 -0.2417004 -
0.35470816
## 91    0.109444900  -0.13278403 -0.037932658 -0.065283761 -0.1709756 -
0.30613491
## 92    0.149306490  -0.08703497 -0.291154270  0.298031280 -0.1951596 -
0.26988336
## 93    0.139876330  -0.09396427 -0.263730190 -0.067837338 -0.2756479 -
0.31532794
## 94    0.064519882  -0.18520624 -0.132872280 -0.147674750 -0.2343417 -
0.32301273
## 95    0.061752321  -0.29718539  0.002598069 -0.130057200 -0.1569296 -
0.28572187
## 96    0.036495140   0.01400096  0.403991090 -0.473045260 -0.1223961 -
0.24923106
## 97   -0.062028465  -0.15539915  0.427455930  0.192416690 -0.1322885 -
0.19251285
## 98   -0.034253211  -0.25653499 -0.318280380  0.313074910 -0.2430962 -
0.28409765
## 99    0.173697910  -0.32034437  0.233154860  0.020468126 -0.2520750 -
0.31816424
## 100   0.141764010  -0.13520120  0.039407764  0.222430000 -0.2782030 -
0.38913764
## 101   0.116274660   0.03671847 -0.368108650 -0.160545150 -0.1967668 -
0.30996790
## 102   0.090481900   0.05507989 -0.220132960  0.013602134 -0.1112245 -
0.11567141
## 103   0.187890100  -0.44250138 -0.053248324 -0.091127344 -0.1711331 -
0.14115854
## 104   0.144476930  -0.33879212  0.173199700 -0.044852940 -0.1532874 -
0.21289807
## 105   0.035590680   0.14784692  0.213243760  0.149348340 -0.1891030 -
0.27999397
## 106   0.060103507   0.18695314 -0.112682190 -0.030516287 -0.2809896 -
0.38880511
## 107   0.050963714   0.02969876 -0.281201950 -0.124743050 -0.1988336 -
0.32634804
## 108   0.074086210  -0.16067999 -0.095764335 -0.080900177 -0.2060078 -
0.34147491
## 109   0.139503610  -0.56239894 -0.055131597 -0.144395870 -0.1750300 -
0.33935405
## 110   0.061817291  -0.14331220  0.148856540 -0.251833240 -0.1254202 -
0.27286228
```

```
## 111   0.006518665   0.16863397   0.300534900   0.153982220 -0.1983548 -
0.28847986
## 112   0.132509780   0.11746285 -0.236708150   0.124921730 -0.1767196 -
0.24802649
## 113   0.126915930 -0.12692638 -0.166802570 -0.178129070 -0.2233820 -
0.40202293
## 114   0.138890260 -0.04752922   0.529764130 -0.228089930 -0.2391981 -
0.32726353
## 115   0.132678650 -0.24627691   0.095352315 -0.019403398 -0.1723820 -
0.29843382
## 116   0.054125495 -0.19267678 -0.518209250   0.039482138 -0.1735095 -
0.31881260
## 117   0.088938177   0.20131231 -0.144073410 -0.145968980 -0.2261391 -
0.33818770
## 118   0.084245781   0.01730789 -0.185741480 -0.075808703 -0.2400915 -
0.39331447
## 119   0.033308133 -0.27274669 -0.224400330   0.157938730 -0.2849432 -
0.40216183
## 120   0.033739236 -0.15055604   0.164992280   0.044084842 -0.3586263 -
0.39934145
## 121   0.045536683 -0.26728072 -0.071256112 -0.443601930 -0.3091017 -
0.43815967
## 122   0.078055318   0.05532868   0.284623800 -0.311024450 -0.2198594 -
0.41854496
## 123   0.010673870 -0.13690997   0.433166420   0.313774650 -0.2263358 -
0.39120603
## 124 -0.025065721 -0.31473251 -0.353529690   0.185084090 -0.2674953 -
0.40418392
## 125   0.044662921   0.06437148 -0.359780750 -0.229097730 -0.2933135 -
0.36245680
## 126 -0.370509900 -0.06831363   0.019193884   0.025862246 -0.4573219 -
0.48743110
## 127 -0.510195140 -0.07984600 -0.089740410 -0.122444910 -0.5149260 -
0.22645512
## 128 -0.435129810 -0.34881860 -0.189340580   0.016560915 -0.5078095 -
0.10905087
## 129 -0.286402320   0.06155402 -0.202781000 -0.017391151 -0.4331476 -
0.29295959
## 130 -0.410677190 -0.09460057   0.097166120 -0.019976938 -0.4866870 -
0.39743699
## 131 -0.365167690 -0.18283560   0.036192498 -0.113145930 -0.4215252 -
0.23197406
## 132 -0.367691040   0.16404521 -0.344609110 -0.039105794 -0.4584449 -
0.23991094
## 133 -0.535384320 -0.06071285   0.076541275 -0.093312803 -0.6108447 -
0.38975997
## 134 -0.490498570 -0.27003834   0.088308860 -0.131867240 -0.6272504 -
0.31021650
## 135 -0.510104480   0.19139611   0.479450500 -0.142809770 -0.5404718 -
0.03819442
```

```
## 136 -0.564428350 -0.23734906 -0.139075760  0.178861280 -0.5654021 -
0.14086785
## 137 -0.360175800 -0.14145873 -0.561079360  0.032110404 -0.4960500 -
0.07657366
## 138 -0.341149550  0.25543693  0.143369910 -0.368073380 -0.5257392 -
0.11384903
## 139 -0.388026220 -0.76314989  0.366100800  0.246018530 -0.5345238 -
0.08739357
## 140 -0.211814420  0.02619441 -0.325370730 -0.067965243 -0.3766814 -
0.14064585
## 141 -0.347446510  0.58267592 -0.644292770 -0.113443760 -0.4191693 -
0.26736555
## 142 -0.423637890 -0.25697403  0.261078630  0.123902200 -0.5844140 -
0.33665927
## 143 -0.410077490  0.03236140  0.034560422  0.279629520 -0.4372675 -
0.37838102
## 144 -0.491541770 -0.39119353  0.071967930  0.208651470 -0.4242312 -
0.33771249
## 145 -0.204204410  0.03044307 -0.192767550 -0.536633640 -0.3733375 -
0.22228692
## 146 -0.245028870  0.18555062 -0.429328330  0.002792312 -0.3597814 -
0.09207739
## 147 -0.366858580 -0.24074731  0.243308590  0.103704040 -0.4411178 -
0.27289108
## 148 -0.247258710  0.01431945 -0.018155334 -0.320791960 -0.4591279 -
0.32799436
## 149 -0.280731060  0.18108171 -0.197348960  0.064717759 -0.5564673 -
0.28796903
## 150 -0.459013260 -0.14231865  0.144780500 -0.044116230 -0.6244111 -
0.44551596
## 151  0.025174011 -0.21559862  0.034228727 -0.015072922 -0.6506394 -
0.50593079
## 152  0.216312880 -0.12499571  0.134023230  0.137706080 -0.6976712 -
0.53820256
## 153  0.404069600  0.08729590  0.044658829 -0.153468460 -0.6345278 -
0.59544474
## 154  0.384532840  0.03333602  0.201749520 -0.373501140 -0.6159635 -
0.57476215
## 155  0.063039319 -0.18886922 -0.482886930  0.041695922 -0.6577584 -
0.57872166
## 156 -0.029898588 -0.21036590 -0.592595200  0.134011030 -0.6741488 -
0.61041550
## 157  0.038662671 -0.24143193  0.070908552 -0.076358357 -0.6350464 -
0.51669560
## 158  0.188854950 -0.15688387 -0.009103149  0.026084993 -0.6113833 -
0.51329986
## 159 -0.069891059  0.02240180 -0.060417603 -0.085348317 -0.5809312 -
0.58654269
## 160  0.013308926  0.04782313 -0.092770022 -0.170624330 -0.5680580 -
0.57778733
```

```
## 161  0.173044380 -0.21565778 -0.033554862  0.030606459 -0.5710959 -
0.56949902
## 162  0.277110280 -0.32887030  0.185255320  0.078780625 -0.6184621 -
0.59734456
## 163  0.173253340  0.17698182 -0.005422670 -0.150174040 -0.6591855 -
0.66854164
## 164  0.076044932 -0.08134889  0.146029820 -0.095476592 -0.6533521 -
0.62504664
## 165  0.070125050 -0.40714936  0.156664500  0.013531911 -0.7144402 -
0.65577620
## 166  0.143373190 -0.04435304 -0.243052930  0.017607186 -0.7304566 -
0.68538628
## 167  0.269444150  0.12181176 -0.021329426 -0.209087860 -0.6714688 -
0.67161543
## 168 -0.058261910 -0.25657209  0.001140936  0.114463560 -0.6746535 -
0.69792143
## 169  0.032862675 -0.10083848 -0.057229487 -0.065120127 -0.5903639 -
0.65031220
## 170  0.125296380 -0.07964956  0.122918710 -0.056539581 -0.5498630 -
0.63630922
## 171  0.195464850 -0.26187294  0.261808640  0.024876553 -0.5818544 -
0.68132758
## 172  0.119183890 -0.05626886 -0.263020730 -0.096833741 -0.6015045 -
0.67144443
## 173  0.143624360 -0.14423158 -0.332513490 -0.102073810 -0.6135785 -
0.67500962
## 174  0.063568848 -0.33788829 -0.020148679  0.005079964 -0.6076437 -
0.65713351
## 175 -0.004250318 -0.07288986 -0.089950215 -0.033759713 -0.6606369 -
0.68427635
## 176  0.019096748  0.15811947 -0.073977233 -0.156027480 -0.6702024 -
0.68563707
## 177 -0.945319830 -0.11031752 -0.071431297 -0.001072615 -0.9866346 -
0.98579173
##              NA          NA          NA          NA          NA
NA
## 1   -0.992055280 -0.9921648 -0.9949416 -0.99261905 -0.99015585 -
0.986742770
## 2   -0.993851000 -0.9898762 -0.9974917 -0.99377834 -0.99194685 -
0.997717140
## 3   -0.991531840 -0.9878680 -0.9957250 -0.99159633 -0.99335904 -
0.993800220
## 4   -0.993328890 -0.9912405 -0.9969579 -0.99401945 -0.99367632 -
0.993800220
## 5   -0.994510990 -0.9928823 -0.9965406 -0.99438301 -0.97984554 -
0.997509350
## 6   -0.993090590 -0.9930196 -0.9960382 -0.99263396 -0.97984554 -
0.997509350
## 7   -0.990486800 -0.9900961 -0.9956022 -0.98986093 -0.99132256 -
0.996220840
```

```
## 8    -0.990738590 -0.9910476 -0.9959429 -0.99013635 -0.99132256 -
0.996220840
## 9    -0.993956340 -0.9925746 -0.9968531 -0.99385425 -0.98991960 -
0.997381210
## 10   -0.984399560 -0.9835479 -0.9935663 -0.98594735 -0.98464572 -
0.992359640
## 11   -0.984762180 -0.9870704 -0.9941192 -0.98701124 -0.98464572 -
0.992359640
## 12   -0.996550310 -0.9955327 -0.9977407 -0.99714760 -0.99601099 -
0.997685610
## 13   -0.997893140 -0.9959607 -0.9988115 -0.99789766 -0.99601099 -
0.998860630
## 14   -0.996377560 -0.9974957 -0.9981433 -0.99609803 -0.99723086 -
0.998860630
## 15   -0.989837330 -0.9861202 -0.9932122 -0.99100636 -0.97742064 -
0.992683220
## 16   -0.996676600 -0.9941909 -0.9967257 -0.99674191 -0.99600922 -
0.997911870
## 17   -0.994961750 -0.9951174 -0.9969149 -0.99532111 -0.99600922 -
0.997911870
## 18   -0.993434480 -0.9960772 -0.9974332 -0.99312381 -0.99696651 -
0.996861670
## 19   -0.995943050 -0.9956147 -0.9986232 -0.99605188 -0.99845162 -
0.996861670
## 20   -0.997157520 -0.9959967 -0.9992397 -0.99717320 -0.99696993 -
0.999418560
## 21   -0.995891950 -0.9970182 -0.9988644 -0.99564396 -0.99642017 -
0.999418560
## 22   -0.995865030 -0.9967189 -0.9984780 -0.99572954 -0.99642017 -
0.999366510
## 23   -0.996369710 -0.9975981 -0.9985257 -0.99612572 -0.99718866 -
0.999366510
## 24   -0.995754990 -0.9980497 -0.9983753 -0.99505171 -0.99718866 -
0.997946170
## 25   -0.994004410 -0.9968523 -0.9981691 -0.99307676 -0.99762338 -
0.997946170
## 26   -0.994453480 -0.9958811 -0.9978942 -0.99388225 -0.99422382 -
0.998614640
## 27   -0.995374070 -0.9955815 -0.9974477 -0.99519583 -0.99422382 -
0.998567650
## 28   -0.981966570 -0.9888605 -0.9906778 -0.98694566 -0.98021352 -
0.989373130
## 29   -0.996662020 -0.9968998 -0.9980004 -0.99633819 -0.99785444 -
0.998121760
## 30   -0.998352450 -0.9981768 -0.9982084 -0.99803474 -0.99785444 -
0.998121760
## 31   -0.858535610 -0.9193004 -0.9173462 -0.89525272 -0.87127759 -
0.879888300
## 32   -0.848088760 -0.8998204 -0.8899841 -0.86526037 -0.87127759 -
0.879888300
```

```
## 33   -0.949034500 -0.9719128 -0.9651946 -0.96290242 -0.97297553 -
0.941313210
## 34   -0.993230890 -0.9966435 -0.9904338 -0.99438954 -0.99761083 -
0.983591310
## 35   -0.997356540 -0.9990019 -0.9945118 -0.99753875 -0.99923195 -
0.995136000
## 36   -0.996815660 -0.9985841 -0.9954282 -0.99684238 -0.99923195 -
0.995434370
## 37   -0.995322030 -0.9984293 -0.9954876 -0.99510985 -0.99842439 -
0.995434370
## 38   -0.994516450 -0.9984018 -0.9952719 -0.99445355 -0.99842439 -
0.996097560
## 39   -0.992445340 -0.9928050 -0.9932239 -0.99259643 -0.99102338 -
0.991449870
## 40   -0.996353940 -0.9979386 -0.9947100 -0.99661824 -0.99666683 -
0.993164800
## 41   -0.996214640 -0.9976517 -0.9955770 -0.99626180 -0.99666683 -
0.995244720
## 42   -0.997639610 -0.9972134 -0.9955244 -0.99768885 -0.99624574 -
0.995244720
## 43   -0.996850860 -0.9978622 -0.9959711 -0.99684044 -0.99624574 -
0.996863260
## 44   -0.995629880 -0.9992477 -0.9966239 -0.99547186 -0.99759525 -
0.996863260
## 45   -0.994994680 -0.9981520 -0.9966171 -0.99471093 -0.99782712 -
0.994869220
## 46   -0.995204020 -0.9970007 -0.9965320 -0.99466962 -0.99782712 -
0.994869220
## 47   -0.995654280 -0.9972340 -0.9968352 -0.99542140 -0.99778378 -
0.996856780
## 48   -0.995073340 -0.9978564 -0.9971313 -0.99482152 -0.99778378 -
0.996182960
## 49   -0.994368450 -0.9981779 -0.9973372 -0.99388396 -0.99802213 -
0.996182960
## 50   -0.994717960 -0.9981885 -0.9964912 -0.99427012 -0.99802213 -
0.997240180
## 51   -0.995136230 -0.9973203 -0.9962752 -0.99495670 -0.99574293 -
0.996706090
## 52   -0.972101940 -0.9779115 -0.9702332 -0.98164975 -0.96195428 -
0.947281330
## 53   -0.997607050 -0.9966061 -0.9971548 -0.99755348 -0.99869637 -
0.997929730
## 54   -0.994219760 -0.9974413 -0.9981077 -0.99415155 -0.99867475 -
0.998267770
## 55   -0.994597150 -0.9985764 -0.9982771 -0.99487366 -0.99867475 -
0.997764420
## 56   -0.997412910 -0.9989584 -0.9980971 -0.99761124 -0.99863760 -
0.996975810
## 57   -0.996962660 -0.9985868 -0.9980309 -0.99707612 -0.99863760 -
0.996975810
```

```
## 58    -0.996881030 -0.9982807 -0.9974914 -0.99685632 -0.99864967 -
0.996243820
## 59    -0.996614810 -0.9989959 -0.9982051 -0.99681687 -0.99864967 -
0.996243820
## 60    -0.995609690 -0.9996711 -0.9989397 -0.99561074 -0.99950173 -
0.999213010
## 61    -0.995595880 -0.9997830 -0.9984803 -0.99502785 -0.99950173 -
0.998716050
## 62    -0.996835830 -0.9980478 -0.9980889 -0.99653875 -0.99441892 -
0.998480420
## 63    -0.996671680 -0.9974913 -0.9981587 -0.99661368 -0.99441892 -
0.998480420
## 64    -0.995875380 -0.9989745 -0.9975318 -0.99567922 -0.99963995 -
0.996806570
## 65    -0.934830040 -0.9520515 -0.9492301 -0.95364705 -0.90432989 -
0.933630620
## 66    -0.990429690 -0.9903599 -0.9878200 -0.99058683 -0.97839979 -
0.982338840
## 67    -0.816630180 -0.7740725 -0.9230995 -0.86787954 -0.27510694 -
0.890389950
## 68    -0.812138180 -0.7045889 -0.9024382 -0.84284860 -0.27510694 -
0.890389950
## 69    -0.959474020 -0.9048227 -0.9652485 -0.96147431 -0.91583205 -
0.972488710
## 70    -0.858932730 -0.8003205 -0.9060667 -0.88277093 -0.87290512 -
0.903503120
## 71    -0.716325390 -0.5378707 -0.7535493 -0.73542326 -0.13804501 -
0.803773600
## 72    -0.749963130 -0.6258177 -0.7941961 -0.81301640 -0.13804501 -
0.803773600
## 73    -0.948519360 -0.9429870 -0.9493795 -0.96586583 -0.87268051 -
0.915599360
## 74    -0.991611340 -0.9789227 -0.9848873 -0.99116268 -0.98136486 -
0.986469100
## 75    -0.993883270 -0.9864385 -0.9894251 -0.99409185 -0.98136486 -
0.986469100
## 76    -0.996163530 -0.9935784 -0.9962916 -0.99597702 -0.99705102 -
0.996898550
## 77    -0.996964310 -0.9934724 -0.9958066 -0.99684973 -0.99244435 -
0.997063450
## 78    -0.996845680 -0.9948071 -0.9957595 -0.99717009 -0.99244435 -
0.996628840
## 79    -0.421507950 -0.3681565 -0.5462025 -0.43231831 -0.32766917 -
0.521465040
## 80    -0.369813110 -0.2471715 -0.4897975 -0.37798102 -0.32766917 -
0.478149410
## 81    -0.342542190 -0.2605290 -0.4638364 -0.35725145 -0.44080224 -
0.439699910
## 82    -0.311577140 -0.1582090 -0.2849396 -0.32351594  0.03279736 -
0.271721960
```

```
## 83   -0.418349140 -0.1722758 -0.2208442 -0.41872155  0.03279736 -
0.271721960
## 84   -0.482555010 -0.2646782 -0.2964086 -0.45779956 -0.35604965 -
0.340269080
## 85   -0.409590390 -0.2159513 -0.3674378 -0.41070197 -0.33049895 -
0.387823830
## 86   -0.343877530 -0.1844495 -0.3684405 -0.37452296 -0.33049895 -
0.288066260
## 87   -0.549488270 -0.3218449 -0.5208637 -0.54105951 -0.26182559 -
0.480856650
## 88   -0.425991710 -0.1947954 -0.4926104 -0.40463794 -0.26182559 -
0.480856650
## 89   -0.390176350 -0.2470983 -0.4821565 -0.36212296 -0.36403130 -
0.557386030
## 90   -0.393922420 -0.2313459 -0.3575725 -0.34520137 -0.36403130 -
0.532560040
## 91   -0.383886530 -0.1298883 -0.3241661 -0.32818785 -0.29224755 -
0.532560040
## 92   -0.362334930 -0.1951583 -0.3012651 -0.33611331 -0.22079167 -
0.538264790
## 93   -0.273828860 -0.2738423 -0.3373361 -0.26901760 -0.22079167 -
0.538264790
## 94   -0.268927010 -0.2333304 -0.3468058 -0.25332918 -0.20224181 -
0.239616790
## 95   -0.343925710 -0.1798860 -0.3226443 -0.32486429 -0.20224181 -
0.239616790
## 96   -0.380307470 -0.1340154 -0.2807821 -0.36456830 -0.22153271 -
0.318653770
## 97   -0.367396210 -0.1535748 -0.2380484 -0.35804981 -0.22153271 -
0.318653770
## 98   -0.404834790 -0.2440589 -0.3126943 -0.43351477 -0.40396040 -
0.462814630
## 99   -0.325120160 -0.2231167 -0.3255178 -0.29526597 -0.41563283 -
0.239518960
## 100 -0.340337610 -0.2418195 -0.3889981 -0.32818448 -0.41395184 -
0.543529920
## 101 -0.361001670 -0.1881482 -0.3519577 -0.37123310 -0.15511209 -
0.430717270
## 102 -0.275464210 -0.1077436 -0.1670091 -0.29222147 -0.15511209 -
0.359729890
## 103 -0.367899580 -0.1619390 -0.1793411 -0.36550491 -0.23643213 -
0.359729890
## 104 -0.464228580 -0.1480588 -0.2502178 -0.41075275 -0.22512760 -
0.202357430
## 105 -0.489790730 -0.2075803 -0.3318155 -0.42918621 -0.22512760 -
0.202357430
## 106 -0.457687880 -0.2958727 -0.4180278 -0.42789744 -0.37867669 -
0.532980530
## 107 -0.350255230 -0.2072144 -0.3708559 -0.36582351 -0.37867669 -
0.439948200
```

```
## 108 -0.283795090 -0.1863295 -0.3732542 -0.29548768 -0.45533971 -
0.439948200
## 109 -0.322795140 -0.1619589 -0.3504328 -0.28903697 -0.22266401 -
0.573301600
## 110 -0.419854310 -0.1215115 -0.2830345 -0.39453465 -0.19161998 -
0.161560250
## 111 -0.439585390 -0.1886262 -0.2973416 -0.44359609 -0.19161998 -
0.161560250
## 112 -0.393759450 -0.1966382 -0.2630115 -0.37360649 -0.23939215 -
0.457845480
## 113 -0.477489130 -0.2530254 -0.4126109 -0.42995827 -0.31300030 -
0.561781670
## 114 -0.509061780 -0.2457083 -0.3412661 -0.45300855 -0.33816270 -
0.273486620
## 115 -0.510526260 -0.1629689 -0.3107980 -0.46766475 -0.36257238 -
0.273486620
## 116 -0.426434890 -0.1772283 -0.3432506 -0.42272938 -0.37803139 -
0.299079400
## 117 -0.325943190 -0.2239806 -0.3589595 -0.33998167 -0.43038483 -
0.299079400
## 118 -0.381281000 -0.2245605 -0.4091437 -0.37435070 -0.43038483 -
0.571241040
## 119 -0.500448080 -0.2959805 -0.4397677 -0.46273468 -0.34794564 -
0.287832370
## 120 -0.462888910 -0.3981332 -0.4276239 -0.45558285 -0.34794564 -
0.287832370
## 121 -0.475841310 -0.3309697 -0.4651116 -0.50218374 -0.29647716 -
0.391368570
## 122 -0.479168380 -0.1873804 -0.4602985 -0.48834372 -0.29647716 -
0.416846010
## 123 -0.426104500 -0.1600539 -0.4128389 -0.39606739 -0.46216283 -
0.563252770
## 124 -0.461915000 -0.2330740 -0.4139156 -0.41685273 -0.34936791 -
0.530972050
## 125 -0.462423180 -0.3155215 -0.4226908 -0.44629189 -0.20903621 -
0.182435440
## 126 -0.314338350 -0.4705641 -0.4995432 -0.40686320 -0.43997842 -
0.588431090
## 127 -0.438560190 -0.5110603 -0.3384719 -0.43315687 -0.51557127 -
0.303411880
## 128 -0.333095960 -0.4939425 -0.2194420 -0.35919939 -0.62470853 -
0.303411880
## 129 -0.327865250 -0.4005687 -0.3319657 -0.34339730 -0.47498388 -
0.494993850
## 130 -0.323980700 -0.4956711 -0.3736380 -0.28988410 -0.47498388 -
0.572119970
## 131 -0.169623620 -0.4588083 -0.2367354 -0.18891223 -0.43986942 -
0.443864020
## 132 -0.143874930 -0.4748524 -0.2916300 -0.22443478 -0.43986942 -
0.443864020
```

```
## 133 -0.275436860 -0.5945968 -0.4160881 -0.29209927 -0.63959542 -
0.565906340
## 134 -0.370330230 -0.6074243 -0.3543147 -0.33851558 -0.63959542 -
0.432514970
## 135 -0.190669350 -0.5264443 -0.1648145 -0.19696626 -0.59267131
0.003751782
## 136 -0.194960620 -0.5533468 -0.2191834 -0.22637525 -0.59267131 -
0.296647270
## 137 -0.145966850 -0.4903856 -0.1956802 -0.15115989 -0.62013457 -
0.296647270
## 138 -0.004358876 -0.5382243 -0.1743059 -0.03400716 -0.62013457 -
0.448215500
## 139 -0.050008326 -0.5734576 -0.1509476 -0.06463025 -0.55329001
0.088936425
## 140 -0.299713110 -0.4186839 -0.2243277 -0.27566821 -0.26791673
0.088936425
## 141 -0.341496950 -0.4274977 -0.2685771 -0.32334952 -0.26791673 -
0.284353940
## 142 -0.291991850 -0.5625872 -0.3350703 -0.29500887 -0.47487536 -
0.284353940
## 143 -0.301501380 -0.4380217 -0.3884741 -0.28807472 -0.34998454 -
0.591721590
## 144 -0.316993950 -0.4292519 -0.3330898 -0.31584031 -0.34998454 -
0.591721590
## 145 -0.242907640 -0.4032859 -0.2705658 -0.25556913 -0.43253337 -
0.430713360
## 146 -0.193995090 -0.3518053 -0.1456952 -0.18429635 -0.43253337 -
0.391703900
## 147 -0.339498250 -0.4401665 -0.3294304 -0.32616195 -0.57983743 -
0.391703900
## 148 -0.436991400 -0.4666731 -0.3631097 -0.42429734 -0.59507146 -
0.435362280
## 149 -0.360185100 -0.5337154 -0.3126614 -0.35470745 -0.59507146 -
0.435362280
## 150 -0.296197710 -0.5879965 -0.4485113 -0.28647963 -0.71136436 -
0.632688070
## 151 -0.659214950 -0.6642163 -0.5033950 -0.68039391 -0.49517573 -
0.574783800
## 152 -0.658422650 -0.6917329 -0.5288089 -0.67992902 -0.69545642 -
0.659000930
## 153 -0.651949760 -0.6304035 -0.5961619 -0.66909528 -0.58751663 -
0.596308020
## 154 -0.568777000 -0.5972264 -0.5955238 -0.57605795 -0.58751663 -
0.596308020
## 155 -0.554804600 -0.6538084 -0.6026281 -0.56894722 -0.70710542 -
0.600154870
## 156 -0.628747990 -0.6728040 -0.6225006 -0.65004838 -0.81010254 -
0.702515430
## 157 -0.649327380 -0.6169851 -0.5312991 -0.66357675 -0.72313863 -
0.679703760
```

```
## 158  -0.642477770 -0.5971381 -0.5261281 -0.66163804 -0.71154514 -
0.634443510
## 159  -0.647571470 -0.5390685 -0.5784466 -0.63502167 -0.70058461 -
0.634968270
## 160  -0.648667270 -0.5274745 -0.5710228 -0.63345046 -0.70058461 -
0.634968270
## 161  -0.503857410 -0.5363689 -0.5712112 -0.49440204 -0.60614434 -
0.603954080
## 162  -0.556483190 -0.5895072 -0.6021511 -0.58240047 -0.60614434 -
0.603954080
## 163  -0.685173020 -0.6475615 -0.6693389 -0.68506081 -0.64353338 -
0.745267370
## 164  -0.645029490 -0.6343510 -0.6317730 -0.63601300 -0.64353338 -
0.745267370
## 165  -0.619427290 -0.7044099 -0.6609971 -0.59717368 -0.74808262 -
0.774100810
## 166  -0.647969830 -0.7193670 -0.6888651 -0.63481558 -0.73686051 -
0.645034780
## 167  -0.739901020 -0.6569363 -0.6749108 -0.74583480 -0.70229321 -
0.645034780
## 168  -0.647341410 -0.6539542 -0.6912148 -0.65761668 -0.65163213 -
0.706286350
## 169  -0.602519070 -0.5978493 -0.6783760 -0.61831536 -0.50721658 -
0.692084960
## 170  -0.574967360 -0.5517690 -0.6755316 -0.57720833 -0.50721658 -
0.692084960
## 171  -0.598031440 -0.5769571 -0.6852845 -0.60054270 -0.55456258 -
0.740116410
## 172  -0.647377360 -0.5977870 -0.6760870 -0.64940899 -0.60640552 -
0.740116410
## 173  -0.667443910 -0.6028641 -0.6904149 -0.66922020 -0.63679212 -
0.832082330
## 174  -0.585433950 -0.5978816 -0.6635601 -0.58705469 -0.63679212 -
0.811621540
## 175  -0.576147950 -0.6580846 -0.6935147 -0.56654978 -0.69601858 -
0.763225620
## 176  -0.579561130 -0.6806862 -0.7064862 -0.57348456 -0.61463732 -
0.693752160
## 177  -0.989795950 -0.9857065 -0.9886162 -0.98943785 -0.98495860 -
0.978524610
##                NA          NA           NA          NA          NA          NA
## 1    -0.99204155 0.9944288   0.99175581 0.9893519 -0.9944534 -0.9999375
## 2    -0.99492085 0.9904860   0.99712219 0.9945031 -0.9952984 -0.9999077
## 3    -0.98896309 0.9892905   0.99712219 0.9941426 -0.9934149 -0.9998871
## 4    -0.98896309 0.9892905   0.99813033 0.9941426 -0.9954961 -0.9999251
## 5    -0.99341985 0.9936848   0.99745314 0.9965279 -0.9958778 -0.9999280
## 6    -0.99341985 0.9938443   0.99745314 0.9965279 -0.9952321 -0.9999316
## 7    -0.99197796 0.9924061   0.99657686 0.9954176 -0.9935554 -0.9999161
## 8    -0.99197796 0.9924061   0.99657686 0.9954176 -0.9940795 -0.9999250
## 9    -0.99604625 0.9923928   0.99443314 0.9958928 -0.9957653 -0.9999411
```

```
## 10   -0.97955372 0.9892216   0.99443314 0.9868988 -0.9898501 -0.9998070
## 11   -0.97955372 0.9892216   0.99488906 0.9868988 -0.9913272 -0.9998450
## 12   -0.99285086 0.9964246   0.99756624 0.9955390 -0.9977860 -0.9999737
## 13   -0.99679079 0.9964246   0.99902394 0.9984978 -0.9986118 -0.9999763
## 14   -0.99472660 0.9974849   0.99853798 0.9983493 -0.9982931 -0.9999870
## 15   -0.97917768 0.9868978   0.99462905 0.9968916 -0.9912664 -0.9998208
## 16   -0.99577474 0.9952240   0.99823913 0.9983023 -0.9966658 -0.9999654
## 17   -0.98865701 0.9966597   0.99781159 0.9970754 -0.9967769 -0.9999731
## 18   -0.98865701 0.9963766   0.99781159 0.9958695 -0.9968760 -0.9999794
## 19   -0.99664438 0.9963766   0.99881033 0.9958695 -0.9980120 -0.9999773
## 20   -0.99594573 0.9971459   0.99999475 0.9979605 -0.9986763 -0.9999809
## 21   -0.99594573 0.9959003   0.99923251 0.9975391 -0.9984150 -0.9999850
## 22   -0.99536700 0.9950542   0.99923251 0.9975391 -0.9981590 -0.9999812
## 23   -0.99536700 0.9950542   0.99932569 0.9979318 -0.9985113 -0.9999857
## 24   -0.99687031 0.9978154   0.99844816 0.9955015 -0.9983173 -0.9999888
## 25   -0.99403951 0.9971994   0.99844816 0.9955015 -0.9974402 -0.9999830
## 26   -0.99403951 0.9962541   0.99862820 0.9973390 -0.9972134 -0.9999740
## 27   -0.99479001 0.9962541   0.99880259 0.9948080 -0.9971979 -0.9999714
## 28   -0.94540482 0.9822560   0.98133991 0.9935950 -0.9903219 -0.9998303
## 29   -0.99447940 0.9973716   0.99917934 0.9965408 -0.9980141 -0.9999837
## 30   -0.99828675 0.9974419   0.99894712 0.9982335 -0.9988150 -0.9999904
## 31   -0.82526842 0.9105935   0.92114238 0.8810457 -0.9147884 -0.9939245
## 32   -0.82526842 0.9105935   0.92114238 0.8810457 -0.8873061 -0.9931096
## 33   -0.92036362 0.9356434   0.96946471 0.9287252 -0.9677574 -0.9991606
## 34   -0.98924934 0.9913570   0.98997344 0.9912727 -0.9938032 -0.9999754
## 35   -0.99265749 0.9992361   0.99463727 0.9978683 -0.9971566 -0.9999964
## 36   -0.99638971 0.9992361   0.99397606 0.9962575 -0.9973899 -0.9999944
## 37   -0.99530146 0.9979276   0.99397606 0.9962575 -0.9969884 -0.9999941
## 38   -0.99308938 0.9978253   0.99435224 0.9955700 -0.9967110 -0.9999935
## 39   -0.98918669 0.9918112   0.99554754 0.9974708 -0.9928592 -0.9999358
## 40   -0.99148302 0.9999076   0.99554754 0.9981707 -0.9954378 -0.9999842
## 41   -0.99148302 0.9991548   0.99694504 0.9981707 -0.9966584 -0.9999860
## 42   -0.99671399 0.9974001   0.99632888 0.9971418 -0.9971680 -0.9999834
## 43   -0.99671399 0.9974001   0.99632888 0.9971418 -0.9974435 -0.9999872
## 44   -0.99295004 0.9988893   0.99772379 0.9976492 -0.9978568 -0.9999969
## 45   -0.99295004 0.9983107   0.99716972 0.9975627 -0.9973735 -0.9999917
## 46   -0.99570436 0.9983107   0.99716972 0.9975627 -0.9970006 -0.9999861
## 47   -0.99570436 0.9984337   0.99736370 0.9953632 -0.9973989 -0.9999887
## 48   -0.99596954 0.9984337   0.99865438 0.9953632 -0.9975941 -0.9999913
## 49   -0.99488355 0.9989494   0.99854725 0.9962222 -0.9975630 -0.9999913
## 50   -0.99488355 0.9991586   0.99702196 0.9970069 -0.9972389 -0.9999912
## 51   -0.99380668 0.9971294   0.99696255 0.9965848 -0.9970389 -0.9999864
## 52   -0.95369491 0.9653198   0.95288988 0.9694617 -0.9748585 -0.9994211
## 53   -0.99770453 0.9975907   0.99793005 0.9956519 -0.9972771 -0.9999832
## 54   -0.99610118 0.9985049   0.99938887 0.9950311 -0.9976658 -0.9999881
## 55   -0.99581698 0.9989517   0.99927030 0.9950311 -0.9983667 -0.9999936
## 56   -0.99581698 0.9989833   0.99927030 0.9964822 -0.9990125 -0.9999948
## 57   -0.99546942 0.9989833   0.99914814 0.9964822 -0.9987497 -0.9999938
## 58   -0.99546942 0.9982789   0.99902288 0.9981947 -0.9983617 -0.9999917
## 59   -0.99597001 0.9982789   0.99902288 0.9953308 -0.9988911 -0.9999948
```

```
## 60   -0.99396928 0.9986095   0.99946736 0.9953308 -0.9991700 -0.9999989
## 61   -0.99396928 0.9995907   0.99890047 0.9982405 -0.9988477 -0.9999992
## 62   -0.99654046 0.9957633   0.99890047 0.9977129 -0.9985135 -0.9999882
## 63   -0.99468816 0.9957633   0.99854398 0.9973437 -0.9984097 -0.9999863
## 64   -0.99468816 0.9990413   0.99854398 0.9964850 -0.9982890 -0.9999970
## 65   -0.88106200 0.9326700   0.95898501 0.9257347 -0.9514022 -0.9976509
## 66   -0.99119340 0.9903190   0.99229315 0.9907286 -0.9894758 -0.9998695
## 67   -0.73491917 0.5860212   0.90385502 0.8677784 -0.8708735 -0.9210521
## 68   -0.73491917 0.5860212   0.90385502 0.8677784 -0.8351061 -0.9140020
## 69   -0.96291421 0.8306195   0.97342055 0.9641474 -0.9485234 -0.9925026
## 70   -0.83876397 0.3107043   0.86822904 0.8811256 -0.8782908 -0.9428248
## 71   -0.59135059 0.3107043   0.67664895 0.8056303 -0.6891436 -0.7950028
## 72   -0.59135059 0.5679225   0.67664895 0.8056303 -0.7586914 -0.8483272
## 73   -0.91439999 0.9696659   0.93639093 0.9463390 -0.9528083 -0.9963737
## 74   -0.99065391 0.9757563   0.98795724 0.9943017 -0.9854013 -0.9996935
## 75   -0.99065391 0.9819666   0.98795724 0.9956053 -0.9903262 -0.9998133
## 76   -0.99627186 0.9919324   0.99679261 0.9956274 -0.9961627 -0.9999551
## 77   -0.99777541 0.9919324   0.99679261 0.9959850 -0.9961359 -0.9999526
## 78   -0.99338195 0.9953610   0.99760759 0.9979251 -0.9965861 -0.9999669
## 79   -0.42609092 0.3022580   0.51564168 0.4675918 -0.4698030 -0.7840024
## 80   -0.42609092 0.3022580   0.56015388 0.4675918 -0.3958845 -0.7164229
## 81   -0.45690660 0.3898230   0.53664511 0.4204669 -0.3830270 -0.7274464
## 82   -0.39490331 0.3743732   0.53664511 0.4204669 -0.2568683 -0.5948639
## 83   -0.39490331 0.3743732   0.58227221 0.5936239 -0.2498025 -0.6187763
## 84   -0.47122301 0.5265640   0.58227221 0.6137691 -0.3205125 -0.7440497
## 85   -0.43731657 0.4513479   0.62738914 0.5145703 -0.3337782 -0.7106284
## 86   -0.33705498 0.4513479   0.61183275 0.4887299 -0.3172611 -0.6834834
## 87   -0.58398099 0.3126711   0.53601577 0.6456939 -0.4689136 -0.7453376
## 88   -0.58398099 0.3126711   0.53037509 0.5896086 -0.3895854 -0.6774628
## 89   -0.41184708 0.3995681   0.53037509 0.4758249 -0.3880930 -0.7189703
## 90   -0.41184708 0.3995681   0.49239838 0.4758249 -0.3185008 -0.7106042
## 91   -0.59553449 0.4515023   0.45200573 0.6154278 -0.2698049 -0.6544187
## 92   -0.48462688 0.4248481   0.35342390 0.5982940 -0.2769253 -0.6741988
## 93   -0.32725612 0.4248481   0.35342390 0.5088595 -0.3031301 -0.7358158
## 94   -0.32725612 0.3791644   0.52454729 0.5088595 -0.2927913 -0.7049599
## 95   -0.45166758 0.3791644   0.47263265 0.5190298 -0.2816390 -0.6424599
## 96   -0.46231351 0.4300502   0.41928482 0.5190298 -0.2594583 -0.6128754
## 97   -0.42047260 0.4258570   0.23805402 0.6224720 -0.2410294 -0.6215633
## 98   -0.41487103 0.4258570   0.23805402 0.6630385 -0.3196944 -0.7115388
## 99   -0.27581591 0.4206894   0.63327458 0.5211109 -0.2894609 -0.7181728
## 100  -0.27581591 0.5469279   0.63327458 0.5211109 -0.3327867 -0.7376589
## 101  -0.21923974 0.4290011   0.42710936 0.5654563 -0.3091929 -0.6753948
## 102  -0.21923974 0.3679538   0.28230632 0.4002869 -0.1763931 -0.6029448
## 103  -0.49771166 0.3679538   0.28230632 0.4002869 -0.2144242 -0.6539181
## 104  -0.59692231 0.4250177   0.43972586 0.6597558 -0.2562246 -0.6392820
## 105  -0.61172398 0.4250177   0.43972586 0.7262146 -0.3167766 -0.6689758
## 106  -0.53104838 0.4681387   0.55271381 0.5372417 -0.3849062 -0.7392390
## 107  -0.39481439 0.4058061   0.52612899 0.4204232 -0.3222709 -0.6770645
## 108  -0.39481439 0.4058061   0.52612899 0.4204232 -0.3026286 -0.6828593
## 109  -0.42251908 0.3196683   0.46203281 0.5717872 -0.2822660 -0.6566216
```

```
## 110 -0.50648154 0.3196683  0.46203281 0.6464646 -0.2616607 -0.6155832
## 111 -0.50648154 0.4795303  0.62002984 0.6413224 -0.2998896 -0.6763851
## 112 -0.41848943 0.3175776  0.43173647 0.6130150 -0.2692810 -0.6589241
## 113 -0.67330925 0.3175776  0.43173647 0.6402286 -0.3713958 -0.6965348
## 114 -0.67621377 0.4586163  0.57408561 0.7193932 -0.3388443 -0.7086979
## 115 -0.69193864 0.2982188  0.55285838 0.6019283 -0.3046479 -0.6554732
## 116 -0.44391047 0.2982188  0.53114400 0.4858652 -0.3125367 -0.6564763
## 117 -0.44391047 0.4315246  0.53114400 0.4858652 -0.3156986 -0.6981960
## 118 -0.44410657 0.4358865  0.59850702 0.4990628 -0.3488963 -0.7093200
## 119 -0.49025585 0.4779903  0.59850702 0.7439467 -0.4041279 -0.7423523
## 120 -0.48644890 0.4967278  0.65938827 0.6730119 -0.4250060 -0.7925688
## 121 -0.48644890 0.4168208  0.65938827 0.6730119 -0.4348855 -0.7593739
## 122 -0.51914213 0.4168208  0.45993493 0.6772140 -0.3903132 -0.6936672
## 123 -0.52141044 0.4741895  0.45993493 0.6772140 -0.3381663 -0.6988234
## 124 -0.53270141 0.4741895  0.59940597 0.7273923 -0.3625351 -0.7296163
## 125 -0.41585065 0.4693033  0.59940597 0.6460098 -0.3956126 -0.7483336
## 126 -0.03927925 0.4854241  0.62257779 0.3676124 -0.4694712 -0.8511695
## 127 -0.37828761 0.6253232  0.04397555 0.6403700 -0.4051838 -0.8808854
## 128 -0.37828761 0.5404764  0.04397555 0.5041326 -0.3235863 -0.8770576
## 129 -0.38531464 0.5404764  0.40687408 0.5041326 -0.3511867 -0.8375829
## 130 -0.46571978 0.3744222  0.57920397 0.6962300 -0.3861965 -0.8667341
## 131 -0.08022678 0.3744222  0.41707949 0.1695219 -0.2842301 -0.8310064
## 132 -0.07598710 0.5052332  0.41707949 0.1695219 -0.3238754 -0.8514148
## 133 -0.07598710 0.6749347  0.48434703 0.4441045 -0.4350336 -0.9230223
## 134 -0.44346836 0.6749347  0.33815927 0.6563295 -0.4178517 -0.9291613
## 135 -0.06569725 0.6599382  0.05544506 0.5421800 -0.2673343 -0.8925547
## 136 -0.06569725 0.6599382  0.05750544 0.5421800 -0.3102355 -0.9041025
## 137 -0.18959599 0.3874435 -0.05255551 0.3618250 -0.2649241 -0.8715048
## 138  0.12471813 0.3874435 -0.05255551 0.3618250 -0.2370126 -0.8854231
## 139  0.12471813 0.3771142  0.16766087 0.4208609 -0.2428187 -0.8878634
## 140 -0.22173325 0.3771142  0.16766087 0.4805248 -0.2873367 -0.8039437
## 141 -0.23898066 0.5698524  0.58897034 0.6440670 -0.3218749 -0.8271798
## 142 -0.23898066 0.6910226  0.63934409 0.5231172 -0.3855408 -0.9121964
## 143 -0.34952047 0.4977504  0.55784599 0.5496996 -0.3761639 -0.8399626
## 144 -0.34952047 0.3092380  0.55784599 0.5496996 -0.3537371 -0.8321494
## 145 -0.05958872 0.3092380  0.14748819 0.4201179 -0.3012873 -0.8018430
## 146 -0.05958872 0.4400284  0.14748819 0.4201179 -0.2086876 -0.7928919
## 147 -0.29678667 0.3121911  0.25057436 0.5525542 -0.3567270 -0.8421112
## 148 -0.49828129 0.3121911  0.40218957 0.5525542 -0.4026367 -0.8520878
## 149 -0.33245634 0.6463774  0.40218957 0.5045003 -0.3802650 -0.8998437
## 150 -0.33245634 0.7134117  0.54204381 0.5045003 -0.4483838 -0.9282402
## 151 -0.45163033 0.7233792  0.67373798 0.7622604 -0.5860524 -0.9377503
## 152 -0.45163033 0.7292025  0.67373798 0.7622604 -0.6068965 -0.9532720
## 153 -0.62795309 0.7292025  0.78162327 0.7053625 -0.6216980 -0.9318393
## 154 -0.50537677 0.7623947  0.77640385 0.7053625 -0.5903987 -0.9249281
## 155 -0.42867032 0.6450155  0.62807383 0.7499209 -0.6063805 -0.9402606
## 156 -0.42867032 0.6450155  0.62807383 0.7499209 -0.6395167 -0.9457558
## 157 -0.62613461 0.5929692  0.62285990 0.7314699 -0.5840930 -0.9321050
## 158 -0.62613461 0.5929692  0.62285990 0.7314699 -0.5750709 -0.9232222
## 159 -0.72112720 0.7415315  0.76052051 0.7847106 -0.5794053 -0.9107921
```

```
## 160 -0.65419653 0.5900927   0.76052051 0.7923214 -0.5718353 -0.9052485
## 161 -0.63088664 0.5900927   0.76279005 0.5871215 -0.5435795 -0.9066037
## 162 -0.63088664 0.7261791   0.77171696 0.5871215 -0.5941098 -0.9256977
## 163 -0.74573224 0.7261791   0.75309078 0.7555258 -0.6653165 -0.9403881
## 164 -0.74573224 0.7453419   0.68220189 0.7555258 -0.6326381 -0.9387739
## 165 -0.69510098 0.7453419   0.68220189 0.7847692 -0.6563268 -0.9577387
## 166 -0.69510098 0.8032066   0.75655974 0.7847692 -0.6834615 -0.9627280
## 167 -0.73531327 0.7166646   0.75655974 0.8045944 -0.6852336 -0.9446786
## 168 -0.64153797 0.7978408   0.84143119 0.6754092 -0.6727491 -0.9458542
## 169 -0.59817665 0.6258547   0.65911319 0.6754092 -0.6420801 -0.9148009
## 170 -0.59817665 0.6258547   0.65911319 0.6807450 -0.6193363 -0.8972963
## 171 -0.61269161 0.6849377   0.77433499 0.6807450 -0.6357144 -0.9111150
## 172 -0.61269161 0.6386719   0.76943503 0.7795624 -0.6484287 -0.9193194
## 173 -0.69175391 0.6386719   0.62862361 0.7513854 -0.6609270 -0.9240853
## 174 -0.58529605 0.7086293   0.62862361 0.7235974 -0.6270163 -0.9214623
## 175 -0.58529605 0.7086293   0.75760531 0.7235974 -0.6545596 -0.9412898
## 176 -0.63650551 0.7359578   0.79909098 0.6963594 -0.6698919 -0.9441653
## 177 -0.98409934 0.9874052   0.98432966 0.9935704 -0.9886282 -0.9998570
##              NA          NA          NA         NA          NA          NA
## 1    -0.9999535 -0.9999229 -0.99229974 -0.9969389 -0.9922430 -0.58985096
## 2    -0.9999897 -0.9999459 -0.99074179 -0.9973013 -0.9938078 -0.60094453
## 3    -0.9999798 -0.9999158 -0.98713045 -0.9954278 -0.9927755 -0.54363477
## 4    -0.9999862 -0.9999396 -0.99090865 -0.9970785 -0.9954046 -0.56203107
## 5    -0.9999852 -0.9999535 -0.99451316 -0.9967177 -0.9939689 -0.61773780
## 6    -0.9999824 -0.9999362 -0.99373357 -0.9961224 -0.9919696 -0.62786347
## 7    -0.9999784 -0.9999002 -0.99028337 -0.9961920 -0.9890412 -0.51976607
## 8    -0.9999809 -0.9999041 -0.99117705 -0.9962854 -0.9889278 -0.58211553
## 9    -0.9999841 -0.9999467 -0.99314799 -0.9969638 -0.9931573 -0.63477856
## 10   -0.9999592 -0.9997896 -0.98537015 -0.9933696 -0.9866199 -0.39114362
## 11   -0.9999649 -0.9997970 -0.98981028 -0.9934527 -0.9913767 -0.48060723
## 12   -0.9999911 -0.9999743 -0.99551477 -0.9979006 -0.9969742 -0.70911126
## 13   -0.9999967 -0.9999857 -0.99518065 -0.9986302 -0.9976446 -0.73833759
## 14   -0.9999943 -0.9999727 -0.99735911 -0.9978854 -0.9948523 -0.83344524
## 15   -0.9999542 -0.9998784 -0.98827605 -0.9934181 -0.9929427 -0.45547940
## 16   -0.9999874 -0.9999723 -0.99309174 -0.9960602 -0.9968937 -0.68634223
## 17   -0.9999882 -0.9999573 -0.99422771 -0.9973953 -0.9960203 -0.69602120
## 18   -0.9999901 -0.9999408 -0.99524940 -0.9976857 -0.9921705 -0.76498586
## 19   -0.9999950 -0.9999686 -0.99458493 -0.9983591 -0.9954686 -0.76047545
## 20   -0.9999980 -0.9999797 -0.99485406 -0.9989153 -0.9967953 -0.75068914
## 21   -0.9999966 -0.9999681 -0.99686163 -0.9986342 -0.9951928 -0.80113720
## 22   -0.9999951 -0.9999678 -0.99691113 -0.9985191 -0.9951448 -0.77252396
## 23   -0.9999955 -0.9999727 -0.99776686 -0.9987536 -0.9949545 -0.80113720
## 24   -0.9999944 -0.9999667 -0.99851692 -0.9985422 -0.9934486 -0.81074740
## 25   -0.9999936 -0.9999478 -0.99675976 -0.9983271 -0.9910222 -0.78730969
## 26   -0.9999931 -0.9999529 -0.99514451 -0.9976920 -0.9924281 -0.76498586
## 27   -0.9999910 -0.9999629 -0.99522013 -0.9973820 -0.9947703 -0.74268758
## 28   -0.9998777 -0.9997194 -0.99265037 -0.9952872 -0.9895044 -0.60168722
## 29   -0.9999924 -0.9999748 -0.99644147 -0.9980463 -0.9953441 -0.76682565
## 30   -0.9999935 -0.9999875 -0.99803963 -0.9981111 -0.9971742 -0.83538000
## 31   -0.9927041 -0.9892122 -0.99205852 -0.9935545 -0.9882023 -0.30840433
```

```
## 32   -0.9917997 -0.9876571 -0.93067841 -0.9281618 -0.9126758 -0.05274419
## 33   -0.9990277 -0.9983845 -0.98765252 -0.9757217 -0.9785348 -0.54290727
## 34   -0.9999126 -0.9999382 -0.99713366 -0.9908442 -0.9957456 -0.86349227
## 35   -0.9999684 -0.9999808 -0.99814062 -0.9952582 -0.9980109 -0.87355610
## 36   -0.9999726 -0.9999763 -0.99785046 -0.9961801 -0.9967459 -0.85378588
## 37   -0.9999723 -0.9999622 -0.99781132 -0.9969649 -0.9949308 -0.87355610
## 38   -0.9999740 -0.9999536 -0.99726570 -0.9956342 -0.9938598 -0.87355610
## 39   -0.9999534 -0.9998950 -0.99387947 -0.9949337 -0.9940073 -0.57320200
## 40   -0.9999678 -0.9999358 -0.99716891 -0.9955096 -0.9962544 -0.66860959
## 41   -0.9999775 -0.9999603 -0.99701687 -0.9963309 -0.9958981 -0.69797019
## 42   -0.9999748 -0.9999832 -0.99613869 -0.9966698 -0.9973623 -0.73108763
## 43   -0.9999810 -0.9999767 -0.99868962 -0.9958979 -0.9965572 -0.80547794
## 44   -0.9999874 -0.9999655 -0.99878328 -0.9957145 -0.9954894 -0.93000492
## 45   -0.9999859 -0.9999585 -0.99798228 -0.9957698 -0.9946263 -0.87355610
## 46   -0.9999832 -0.9999611 -0.99703075 -0.9965715 -0.9932535 -0.79463707
## 47   -0.9999867 -0.9999657 -0.99597679 -0.9969419 -0.9946679 -0.81822431
## 48   -0.9999883 -0.9999597 -0.99635830 -0.9970382 -0.9938269 -0.84442011
## 49   -0.9999884 -0.9999518 -0.99804976 -0.9975735 -0.9924711 -0.81822431
## 50   -0.9999837 -0.9999559 -0.99787114 -0.9969609 -0.9939022 -0.83538000
## 51   -0.9999817 -0.9999604 -0.99683412 -0.9963495 -0.9950960 -0.79186853
## 52   -0.9987909 -0.9994214 -0.98897950 -0.9918291 -0.9920622 -0.44985567
## 53   -0.9999895 -0.9999685 -0.99534781 -0.9970135 -0.9973710 -0.81008570
## 54   -0.9999938 -0.9999461 -0.99680100 -0.9976798 -0.9934227 -0.78023657
## 55   -0.9999950 -0.9999544 -0.99830729 -0.9977144 -0.9953024 -0.81822431
## 56   -0.9999937 -0.9999817 -0.99854762 -0.9975202 -0.9982816 -0.88399635
## 57   -0.9999935 -0.9999778 -0.99809639 -0.9973980 -0.9967053 -0.83538000
## 58   -0.9999906 -0.9999772 -0.99792820 -0.9971746 -0.9963720 -0.81822431
## 59   -0.9999930 -0.9999749 -0.99882732 -0.9981567 -0.9968042 -0.91780782
## 60   -0.9999969 -0.9999653 -0.99901605 -0.9986097 -0.9951136 -1.00000000
## 61   -0.9999955 -0.9999651 -0.99921769 -0.9980125 -0.9941411 -0.94272650
## 62   -0.9999941 -0.9999769 -0.99789208 -0.9975683 -0.9963082 -0.84346162
## 63   -0.9999942 -0.9999754 -0.99687598 -0.9980683 -0.9958356 -0.85385484
## 64   -0.9999917 -0.9999679 -0.99749791 -0.9970632 -0.9950205 -0.93000492
## 65   -0.9979168 -0.9975131 -0.97915157 -0.9637693 -0.9721431 -0.30486308
## 66   -0.9998854 -0.9998787 -0.99322434 -0.9873391 -0.9911287 -0.72043003
## 67   -0.9946988 -0.9822341 -0.96474037 -0.9700365 -0.9744885 -0.04629660
## 68   -0.9940897 -0.9813794 -0.83930720 -0.9080283 -0.8884896  0.44568592
## 69   -0.9992595 -0.9989341 -0.93262744 -0.9726439 -0.9640644  0.09399343
## 70   -0.9924854 -0.9892139 -0.91268656 -0.9592934 -0.9360927 -0.06636707
## 71   -0.9610903 -0.9583654 -0.72094189 -0.7780686 -0.7637335  0.23659732
## 72   -0.9657803 -0.9674076 -0.86124455 -0.8600275 -0.9198791  0.43062641
## 73   -0.9972327 -0.9983873 -0.97064055 -0.9753646 -0.9813205  0.07501675
## 74   -0.9998405 -0.9999165 -0.98002172 -0.9857704 -0.9898290 -0.34772331
## 75   -0.9998790 -0.9999456 -0.98855237 -0.9931817 -0.9939829 -0.58672004
## 76   -0.9999823 -0.9999704 -0.99240093 -0.9963919 -0.9948173 -0.76498586
## 77   -0.9999806 -0.9999779 -0.99411556 -0.9960014 -0.9957472 -0.72816269
## 78   -0.9999802 -0.9999769 -0.99380599 -0.9963123 -0.9975272 -0.72119438
## 79   -0.8670645 -0.8302985 -0.44202462 -0.6437845 -0.4608486  0.74342518
## 80   -0.8498588 -0.7989612 -0.28566695 -0.5711718 -0.3799361  0.71957445
## 81   -0.8335275 -0.7812541 -0.29615586 -0.4946297 -0.4064064  0.79423450
```

```
## 82   -0.7124698 -0.7603122 -0.31762051 -0.3191343 -0.3848310  0.62654775
## 83   -0.6708405 -0.8283687 -0.25778828 -0.2799276 -0.4937727  0.47944502
## 84   -0.7483645 -0.8636627 -0.29903709 -0.2629728 -0.4098482  0.51997579
## 85   -0.7993212 -0.8233232 -0.27662202 -0.3572322 -0.3644728  0.62379192
## 86   -0.7829290 -0.7821580 -0.23360445 -0.3850273 -0.4673854  0.73964462
## 87   -0.8729707 -0.8963348 -0.45450534 -0.5496905 -0.5055503  0.64361994
## 88   -0.8552157 -0.8329147 -0.23570534 -0.5446088 -0.4005007  0.70262671
## 89   -0.8547305 -0.8115140 -0.30896366 -0.5392348 -0.3255062  0.70992802
## 90   -0.7904526 -0.8138423 -0.28647233 -0.3381523 -0.2850159  0.67342150
## 91   -0.7582100 -0.8077646 -0.06430867 -0.3287549 -0.2606037  0.71774071
## 92   -0.7322739 -0.7938202 -0.29170988 -0.3493651 -0.3231578  0.59479066
## 93   -0.7644700 -0.7336946 -0.35325674 -0.3575353 -0.3336048  0.55651780
## 94   -0.7697755 -0.7300889 -0.25358113 -0.3520890 -0.2525590  0.53006842
## 95   -0.7438223 -0.7822456 -0.28329620 -0.3869600 -0.2937334  0.54187970
## 96   -0.7167484 -0.8049978 -0.25856834 -0.3034842 -0.3575704  0.59945905
## 97   -0.6724987 -0.7972432 -0.26664017 -0.2578607 -0.3674074  0.59394739
## 98   -0.7425352 -0.8200766 -0.28915146 -0.3305618 -0.5543322  0.65092125
## 99   -0.7663683 -0.7696955 -0.25530865 -0.3301919 -0.2861845  0.66856594
## 100  -0.8124092 -0.7796562 -0.22867637 -0.3914969 -0.3076129  0.65881889
## 101  -0.7606871 -0.7933198 -0.22128883 -0.4010756 -0.4058911  0.50980570
## 102  -0.6077883 -0.7348694 -0.18169873 -0.2753034 -0.3728846  0.54366934
## 103  -0.6300601 -0.7977490 -0.23692845 -0.2778288 -0.4189239  0.60643348
## 104  -0.6890460 -0.8542310 -0.22050248 -0.3187602 -0.3651663  0.56186342
## 105  -0.7396078 -0.8675397 -0.32472518 -0.3766293 -0.3606796  0.68302383
## 106  -0.8122077 -0.8506866 -0.40614789 -0.4311716 -0.3954357  0.64049426
## 107  -0.7719485 -0.7863931 -0.35998524 -0.4323510 -0.4487233  0.55371885
## 108  -0.7821258 -0.7408963 -0.19780042 -0.4291244 -0.4193127  0.63109323
## 109  -0.7807301 -0.7681117 -0.17613478 -0.3358832 -0.3565478  0.53182256
## 110  -0.7344907 -0.8292388 -0.29987407 -0.2941629 -0.4397762  0.56653944
## 111  -0.7456006 -0.8405252 -0.30998811 -0.3461430 -0.5149216  0.63936072
## 112  -0.7161060 -0.8137203 -0.29005936 -0.3693868 -0.3193640  0.55468504
## 113  -0.8201927 -0.8612358 -0.37149059 -0.4115826 -0.3269933  0.50429404
## 114  -0.7721231 -0.8772768 -0.35808133 -0.3086934 -0.4155290  0.62654775
## 115  -0.7528015 -0.8780894 -0.27924023 -0.3258865 -0.4288552  0.75153549
## 116  -0.7665569 -0.8331449 -0.29146420 -0.3485487 -0.4209944  0.69493108
## 117  -0.7799406 -0.7702435 -0.32646471 -0.4274064 -0.3918909  0.58018805
## 118  -0.8149312 -0.8061492 -0.31878306 -0.4540831 -0.4061451  0.61924645
## 119  -0.8202463 -0.8729393 -0.41185407 -0.5101886 -0.4411907  0.63384906
## 120  -0.8185398 -0.8534788 -0.55488777 -0.4564849 -0.4663992  0.65345404
## 121  -0.8412072 -0.8599433 -0.40554992 -0.4803232 -0.5598256  0.65503979
## 122  -0.8298024 -0.8619584 -0.17257492 -0.5165093 -0.5428272  0.66663158
## 123  -0.8133116 -0.8325581 -0.08904461 -0.4807397 -0.4217947  0.63384906
## 124  -0.8213487 -0.8528035 -0.27023255 -0.4608734 -0.3751624  0.60711343
## 125  -0.7955750 -0.8531623 -0.38213096 -0.5057591 -0.4276290  0.60711343
## 126  -0.8677230 -0.7623388 -0.47920955 -0.4799214 -0.4995591  0.49351878
## 127  -0.6997021 -0.8400690 -0.46250244 -0.4714377 -0.4667001  0.47435536
## 128  -0.6019275 -0.7750631 -0.44978633 -0.3573318 -0.4506690  0.45952003
## 129  -0.7489296 -0.7715627 -0.39049175 -0.3693059 -0.4574007  0.67296670
## 130  -0.8174309 -0.7689376 -0.52926309 -0.3718291 -0.2644873  0.66512424
## 131  -0.7039527 -0.6524539 -0.59065569 -0.3130670 -0.2378865  0.54547117
```

```
## 132 -0.7098772 -0.6307288 -0.54328707 -0.3996541 -0.4078536  0.65069821
## 133 -0.8127776 -0.7348593 -0.60239500 -0.4280057 -0.3844106  0.55334277
## 134 -0.7610089 -0.7992731 -0.58695332 -0.4414400 -0.3287290  0.43654104
## 135 -0.5358746 -0.6697160 -0.53056419 -0.3364168 -0.2020061  0.64009993
## 136 -0.6297945 -0.6730386 -0.56640882 -0.3093237 -0.3147440  0.49445635
## 137 -0.5720501 -0.6324965 -0.46378211 -0.3167040 -0.1865107  0.58245368
## 138 -0.6061722 -0.5011905 -0.55785873 -0.2050588 -0.1693921  0.69179872
## 139 -0.5821584 -0.5456302 -0.69127132 -0.2488512 -0.1141771  0.22528165
## 140 -0.6294855 -0.7521980 -0.52415813 -0.3537529 -0.2808804  0.40072868
## 141 -0.7299318 -0.7806515 -0.41758710 -0.2320108 -0.3310704  0.64197184
## 142 -0.7787941 -0.7466493 -0.55162803 -0.3018753 -0.3072444  0.48430491
## 143 -0.8057727 -0.7531033 -0.44233702 -0.3126652 -0.2974639  0.77060845
## 144 -0.7796225 -0.7639645 -0.42370419 -0.2850349 -0.4033948  0.59728806
## 145 -0.6964330 -0.7099908 -0.43903981 -0.3652883 -0.3358176  0.66111992
## 146 -0.5864457 -0.6724198 -0.38170035 -0.2545939 -0.1687996  0.57467639
## 147 -0.7344377 -0.7792621 -0.44875457 -0.4016306 -0.3559218  0.57515238
## 148 -0.7731523 -0.8389758 -0.46848348 -0.3941594 -0.4146626  0.66609043
## 149 -0.7453885 -0.7927868 -0.51687574 -0.3529976 -0.3915840  0.59540819
## 150 -0.8452652 -0.7497244 -0.52862134 -0.4886266 -0.3394966  0.61464650
## 151 -0.8770518 -0.9403100 -0.66993666 -0.4985491 -0.7100153  0.33852334
## 152 -0.8924730 -0.9399260 -0.70270830 -0.5470319 -0.7198676  0.39319210
## 153 -0.9173825 -0.9377547 -0.65241625 -0.6316844 -0.7120502  0.45329786
## 154 -0.9086882 -0.9047699 -0.60029429 -0.6504073 -0.6042640  0.51997579
## 155 -0.9101426 -0.8988917 -0.65846405 -0.6385377 -0.6140264  0.46610321
## 156 -0.9228556 -0.9292448 -0.66569964 -0.6289151 -0.6704223  0.48961263
## 157 -0.8823138 -0.9368579 -0.60780332 -0.5339510 -0.7003791  0.59407742
## 158 -0.8806817 -0.9343884 -0.58343617 -0.5571130 -0.7313976  0.51541119
## 159 -0.9137406 -0.9362326 -0.47834025 -0.5500224 -0.6257813  0.62961368
## 160 -0.9100666 -0.9365831 -0.44926192 -0.5575912 -0.6318355  0.65467522
## 161 -0.9065263 -0.8747648 -0.47118256 -0.5099878 -0.5179077  0.66989039
## 162 -0.9180796 -0.8996163 -0.54130680 -0.5893582 -0.6318968  0.60316837
## 163 -0.9444009 -0.9488951 -0.62088782 -0.6857873 -0.6771453  0.73134610
## 164 -0.9289166 -0.9353219 -0.64941801 -0.6454163 -0.6147258  0.45843733
## 165 -0.9400060 -0.9258045 -0.70081997 -0.6664422 -0.5830835  0.22644588
## 166 -0.9498034 -0.9363612 -0.71178847 -0.6817068 -0.6590258  0.49662768
## 167 -0.9454213 -0.9648043 -0.65271124 -0.6655403 -0.7690265  0.62089138
## 168 -0.9537541 -0.9360644 -0.62917769 -0.6946793 -0.6672926  0.46578175
## 169 -0.9381657 -0.9191818 -0.62493017 -0.7056785 -0.6533179  0.46890216
## 170 -0.9331061 -0.9077587 -0.57775377 -0.7134379 -0.6017454  0.46682133
## 171 -0.9484283 -0.9173533 -0.58026440 -0.6949814 -0.6364697  0.44197231
## 172 -0.9452835 -0.9361609 -0.61943644 -0.6923287 -0.6691231  0.48800712
## 173 -0.9463951 -0.9431094 -0.58227525 -0.6805829 -0.6916842  0.44927361
## 174 -0.9405381 -0.9121761 -0.56528834 -0.6819922 -0.6366755  0.36422216
## 175 -0.9495156 -0.9082623 -0.68253459 -0.7153098 -0.5708004  0.44148658
## 176 -0.9499487 -0.9096835 -0.73339544 -0.7379970 -0.5929355  0.45296878
## 177 -0.9998631 -0.9998809 -0.98327012 -0.9916350 -0.9902747 -0.47761835
##            NA          NA          NA          NA          NA          NA
## 1   -0.68845905 -0.57210686  0.292376340 -0.361998020  0.4055426900
## 2   -0.74824724 -0.60893213 -0.193307570 -0.067406458  0.1856190700
## 3   -0.67295733 -0.58841044 -0.241150980 -0.011377283  0.1161336300
```

```
## 4     -0.73133214 -0.66143445   0.009894985 -0.137571470   0.1259651700
## 5     -0.68309318 -0.63292721  -0.025678521 -0.188139160   0.2309495700
## 6     -0.68059049 -0.54189712  -0.265496090   0.055804091  -0.0456353260
## 7     -0.66607491 -0.49959526   0.009593592 -0.131075300   0.1079137800
## 8     -0.66798651 -0.56541558   0.075953007 -0.224295140   0.2377372300
## 9     -0.76525671 -0.68840598   0.086642266 -0.109513620   0.2431568600
## 10    -0.55926549 -0.46244733  -0.133233590 -0.024706337   0.0001514843
## 11    -0.55926549 -0.48215253  -0.197138820   0.009657765  -0.0654972900
## 12    -0.79954780 -0.75811504   0.213457870 -0.091160697   0.2620830700
## 13    -0.86976546 -0.79748966   0.182419110   0.002061251   0.3352682800
## 14    -0.82741747 -0.69551767   0.136456110 -0.048112315   0.3500781000
## 15    -0.64118064 -0.38148945  -0.029870244 -0.156227930   0.2768992000
## 16    -0.76525671 -0.61888215   0.213704080 -0.175548570   0.2635717300
## 17    -0.78065453 -0.62773070   0.207623260 -0.131889640   0.2400657100
## 18    -0.79441256 -0.62283903   0.156718470 -0.130886130   0.3032145400
## 19    -0.87806589 -0.73424522   0.168669750 -0.248424530   0.2618766000
## 20    -0.91049251 -0.74130965   0.229967640 -0.232703710   0.1318572300
## 21    -0.86636479 -0.69551767   0.361649320 -0.173832170   0.3917040600
## 22    -0.87458441 -0.69845039   0.386883460 -0.106590150   0.5546597600
## 23    -0.87458441 -0.69551767   0.289748910 -0.067733904   0.5216522700
## 24    -0.83715581 -0.69205130   0.326642020 -0.113156520   0.3172236300
## 25    -0.82003995 -0.62567501   0.164930270 -0.005106808   0.1409367900
## 26    -0.78925481 -0.64538512  -0.048893029 -0.051458208   0.1129441200
## 27    -0.75063691 -0.67493629   0.079621508 -0.143556570   0.2495988100
## 28    -0.55881560 -0.38181579  -0.056538458   0.051589501  -0.0359952990
## 29    -0.73064813 -0.76697230   0.277335760   0.082815109   0.3391737000
## 30    -0.74259173 -0.85816765   0.250433750   0.150451380   0.2218598300
## 31    -0.22562196 -0.27641826  -0.290495660 -0.054030839   0.2238646200
## 32     0.16641340   0.23512630  -0.286245770 -0.052398035   0.2738159000
## 33    -0.07737097 -0.10009125  -0.071351685 -0.200487740   0.6541307200
## 34    -0.35839636 -0.65840352   0.189509140 -0.184696340   0.2361983100
## 35    -0.54100260 -0.74395672   0.483111290 -0.102352920   0.7266248600
## 36    -0.60774142 -0.75811504   0.334474130   0.072286801   0.4652510500
## 37    -0.63884347 -0.68840598   0.450818290 -0.074086308   0.5538796400
## 38    -0.62445851 -0.62109683   0.477197270 -0.114639310   0.5198176300
## 39    -0.50507616 -0.37118670   0.308026790 -0.482510760   0.2459694200
## 40    -0.63590760 -0.45440491  -0.024447902 -0.131168130  -0.0296648430
## 41    -0.61426810 -0.53455580  -0.036260178 -0.068205268   0.1789788500
## 42    -0.63484893 -0.72752467   0.157120670 -0.029902354   0.2490954200
## 43    -0.65008925 -0.72104379   0.225148180   0.004073671   0.2896429500
## 44    -0.67191552 -0.68299855   0.314753010 -0.104237010   0.4127848900
## 45    -0.68993419 -0.68299855   0.595893650 -0.087765785   0.5790684900
## 46    -0.70658528 -0.65652486   0.513310860   0.106929460   0.5369023400
## 47    -0.69549850 -0.68840598   0.268378050   0.168164550   0.3527252400
## 48    -0.71026959 -0.68154770   0.306174300   0.021199564   0.3876319200
## 49    -0.75153136 -0.61224672   0.519576800 -0.191014050   0.5511199200
## 50    -0.69352383 -0.68001339   0.551480000 -0.256866990   0.5449805400
## 51    -0.68811686 -0.69845039   0.295981140 -0.021656148   0.3399979600
## 52    -0.26119397 -0.63927702   0.011492413 -0.288772640   0.2507667400
## 53    -0.71121080 -0.92061236   0.245717930 -0.212358500   0.2734952300
```

```
## 54    -0.80680232 -0.73334022  0.194289510  0.051210206  0.1868716200
## 55    -0.81192678 -0.68299855  0.379034880  0.056717373  0.4089920700
## 56    -0.79738245 -0.72665087  0.429685300  0.030442609  0.4875716500
## 57    -0.81240400 -0.70414354  0.432976950 -0.104701380  0.4732056900
## 58    -0.75846383 -0.68840598  0.446681270 -0.159568600  0.4676137300
## 59    -0.83715581 -0.71822156  0.398998590 -0.079360826  0.3730880500
## 60    -0.94096391 -0.69551767  0.195635790  0.045690855  0.2302071200
## 61    -0.86976546 -0.67493629  0.554995290 -0.299332230  0.5304068700
## 62    -0.80409718 -0.73424522  0.480169330 -0.148660130  0.4742972700
## 63    -0.82741747 -0.72564701  0.363892390 -0.082333067  0.3357235700
## 64    -0.76781584 -0.68840598  0.401193440 -0.222540490  0.4241480500
## 65    -0.05174969 -0.26557788 -0.173765900  0.114473660 -0.0341436180
## 66    -0.36129161 -0.71871724 -0.100997430 -0.352996670  0.2426532700
## 67     0.17164829 -0.10799852 -0.767376190  0.445215510 -0.3828454500
## 68     0.29713984  0.18643571 -0.709727560  0.373478310 -0.3246018300
## 69    -0.02008505 -0.26519558 -0.352369150  0.035557501 -0.0416693090
## 70     0.30110407  0.02505958 -0.621017310  0.194766890 -0.0615385300
## 71     0.49314187  0.42804737 -0.570937760  0.211563010 -0.2708181500
## 72     0.34167737  0.24707206 -0.466089230  0.104510320 -0.2387776000
## 73     0.02445236 -0.27198686 -0.250810480 -0.190310320  0.2553316100
## 74    -0.23599739 -0.55860673  0.148156900 -0.141952450  0.4286121000
## 75    -0.41157247 -0.64563269  0.270991730 -0.128886070  0.4561283500
## 76    -0.63936823 -0.73334022  0.109880590 -0.105682650  0.0891090720
## 77    -0.64347062 -0.77998096  0.154170320 -0.026005825  0.1798019900
## 78    -0.61935224 -0.76254225  0.159919300 -0.052046949  0.3740643200
## 79     0.63553150  0.54849775 -0.518213250  0.454758430 -0.2839352100
## 80     0.56042014  0.60908839 -0.318589960  0.098378446  0.2561622000
## 81     0.50171219  0.68495024 -0.240585430  0.039929960  0.3372839600
## 82     0.62789555  0.69901170 -0.455302220  0.351248740 -0.0783146240
## 83     0.54947566  0.76685358 -0.328345690  0.142928390  0.2022270500
## 84     0.56112608  0.68457277 -0.189099470 -0.103271320  0.4281636300
## 85     0.66607531  0.60093118 -0.239220070  0.024554998  0.3310359800
## 86     0.64286809  0.60374371 -0.167957610 -0.035899689  0.3675559500
## 87     0.53646469  0.67613516 -0.224751440  0.026941594  0.3182494700
## 88     0.59943672  0.66752675 -0.168463080  0.022761523  0.2335273100
## 89     0.80918148  0.63856097 -0.248988550  0.102018500  0.1964704700
## 90     0.67371126  0.66160953 -0.410000820  0.255496670  0.1048538400
## 91     0.50003848  0.66645470 -0.521099560  0.446777340 -0.2877966500
## 92     0.60911798  0.78482230 -0.452242320  0.406619940 -0.2175877100
## 93     0.78702475  0.75868576 -0.356220910  0.318603320 -0.0612345870
## 94     0.79941451  0.70510094 -0.377351430  0.318291060 -0.1012095000
## 95     0.54110037  0.65465828 -0.406573260  0.268511650  0.0129029390
## 96     0.43134727  0.51941670 -0.434934990  0.310062380  0.0150471830
## 97     0.56042014  0.54253682 -0.252194150  0.174235180  0.1500139300
## 98     0.57569204  0.48660481 -0.219187340  0.088073892  0.3254980800
## 99     0.54873632  0.63144302 -0.379632820  0.272875000 -0.0248186680
## 100    0.53038432  0.75621742 -0.391171080  0.228527780  0.0046695761
## 101    0.41751630  0.71614717 -0.191346750  0.161772730 -0.0347654690
## 102    0.58006456  0.77174568 -0.085937450  0.116338650  0.0435977820
## 103    0.67653642  0.65195945 -0.109489070  0.062485158  0.1654993400
```

```
## 104   0.64979293   0.57675008  -0.231063080   0.179058430   0.1581270100
## 105   0.72513990   0.64867736  -0.243594640   0.151345470   0.2027111800
## 106   0.61195503   0.61091486  -0.375818230   0.237472020   0.1036759700
## 107   0.43458365   0.62863049  -0.389855060   0.346104570  -0.1342709400
## 108   0.68494046   0.77919722  -0.172271040  -0.005718466   0.2806085400
## 109   0.74905823   0.70327863  -0.319960080   0.076097155   0.3350011700
## 110   0.58332799   0.52405571  -0.332252670   0.249795970   0.1623094100
## 111   0.55937254   0.47915327  -0.377128640   0.346351820  -0.0341817880
## 112   0.90865034   0.56229950  -0.196110190   0.146524470   0.1035492600
## 113   0.75572983   0.57267107  -0.184854550   0.050773756   0.2769121800
## 114   0.67947554   0.68454240  -0.310490870   0.100095210   0.3638568800
## 115   0.52582847   0.73975569  -0.390402430   0.297330690   0.0006661611
## 116   0.49695838   0.68509468  -0.278593960   0.162009950   0.1505886000
## 117   0.59859989   0.62949111  -0.266160950   0.152127960   0.2000885400
## 118   0.65101670   0.57834015  -0.329169070   0.304232330  -0.0351450040
## 119   0.60148203   0.55781199  -0.219182890   0.060813054   0.2430486400
## 120   0.50767443   0.58016662  -0.159080890  -0.049147360   0.4790720100
## 121   0.35433140   0.42573642  -0.244043830   0.028632741   0.2962790200
## 122   0.56513682   0.45090359  -0.117960980  -0.139694510   0.5739999100
## 123   0.68494046   0.63636243  -0.125224360  -0.084002447   0.5620300500
## 124   0.48644028   0.63209550  -0.273103850   0.044933147   0.2653824500
## 125   0.42694770   0.54009636  -0.295689790   0.129871120   0.2654914000
## 126   0.58621013   0.51904463  -0.148476870   0.200107220   0.2526420000
## 127   0.76144799   0.57267885  -0.108198850   0.106005340   0.4130108700
## 128   0.78589235   0.64137351  -0.348410900   0.204101080   0.2189549700
## 129   0.68930746   0.58761816  -0.251443310   0.084060624   0.2814465800
## 130   0.71001934   0.58001512  -0.208084110   0.105635430   0.2361434800
## 131   0.66340646   0.56522731  -0.222316930   0.214669370   0.1560952000
## 132   0.62722693   0.51017027  -0.060086228   0.030359713   0.3619437000
## 133   0.68422935   0.56229950  -0.020539518  -0.011798699   0.4572187100
## 134   0.68494046   0.62183142  -0.211351710   0.167087290   0.2435774500
## 135   0.71797960   0.49428111  -0.318140080   0.183878720   0.2525209600
## 136   0.74905823   0.62863049  -0.302095480   0.186195380   0.1602499600
## 137   0.72083062   0.72713910  -0.458565190   0.409535100  -0.2052578100
## 138   0.78414261   0.53876562  -0.355064840   0.327307410  -0.1417989100
## 139   0.70223205   0.57256358  -0.377921290   0.199649510   0.0800756580
## 140   0.60995481   0.50868948  -0.541974140   0.356270450  -0.0083526111
## 141   0.68969427   0.51359845  -0.414188420   0.250118300  -0.0181238570
## 142   0.69438286   0.67680476  -0.085903873   0.162968980   0.1757627400
## 143   0.74142228   0.72278619  -0.146187970   0.157987220   0.2678433500
## 144   0.78627363   0.64206744  -0.157143400   0.182156040   0.2044206900
## 145   0.82733553   0.59784602  -0.396594570   0.277315780   0.1735869900
## 146   0.71985127   0.72925166  -0.466420360   0.326949840   0.1406759200
## 147   0.70021236   0.66920553  -0.266150790   0.170675400   0.0506268190
## 148   0.65577051   0.52040277  -0.272179160   0.176641260   0.0527066230
## 149   0.63486288   0.63595658  -0.292451850   0.179538370   0.1826486400
## 150   0.67730451   0.61653994  -0.248698170   0.141936860   0.3407010000
## 151   0.60148203   0.57159131  -0.268485450   0.121902480   0.1405037600
## 152   0.49816681   0.54293379  -0.155331630  -0.057412194   0.2065839000
## 153   0.47116838   0.46289203  -0.261689420   0.054487908   0.2026780000
```

```
## 154   0.54986492   0.33434564 -0.394341650  0.166274960   0.1507927100
## 155   0.35144926   0.53545736 -0.394117940  0.129061580   0.1140376600
## 156   0.34914775   0.57781609 -0.217006740 -0.038092525   0.2511171900
## 157   0.54598506   0.50415735 -0.136821400 -0.044917715   0.2443577400
## 158   0.63286266   0.53053082 -0.251008150  0.114361350   0.2138656100
## 159   0.54934711   0.63109276 -0.187494660 -0.017902947   0.2174404500
## 160   0.64536894   0.54087079 -0.201723580  0.030935512   0.2106897200
## 161   0.54985695   0.67529476 -0.218907600  0.104167000  -0.0001392358
## 162   0.54990204   0.68671307 -0.190918940  0.110528730  -0.0183662160
## 163   0.52694910   0.54299760 -0.337165550  0.243689040  -0.1364706500
## 164   0.63009152   0.58869294 -0.408399340  0.277164560  -0.1395434200
## 165   0.57089313   0.53747000 -0.440254540  0.327949040  -0.0002760416
## 166   0.37306607   0.52137089 -0.266328300  0.114564660   0.0722357900
## 167   0.43933746   0.39186966 -0.352740130  0.182740320  -0.1147606200
## 168   0.40843942   0.59515425 -0.300952730  0.191152180  -0.0162862290
## 169   0.55837482   0.64064566 -0.396481160  0.290487150  -0.0425065620
## 170   0.44946896   0.65856937 -0.306922120  0.140940320   0.0037374258
## 171   0.57813577   0.54471159 -0.347980360  0.196642960  -0.0469308380
## 172   0.61924913   0.44672773 -0.476659020  0.356740870  -0.0420789900
## 173   0.50015660   0.44847930 -0.333255010  0.150927090   0.1232968800
## 174   0.67799568   0.59843511 -0.344281270  0.115518620   0.0815666990
## 175   0.54000748   0.66364216 -0.268921200  0.096970817   0.2070913700
## 176   0.48742268   0.67671878 -0.191552270  0.082226084   0.2433851400
## 177  -0.51422823  -0.40145485  0.612293440 -0.868083400   0.3853334100
##               NA           NA           NA           NA            NA
## 1   -0.0390069510  0.9892838100 -0.414560480  0.3916025100  2.822509e-01
## 2    0.0415218110  0.0723525490 -0.035377727  0.1776063600  2.749805e-02
## 3    0.0896298790  0.0959860270  0.009604215  0.0951261410  2.528870e-01
## 4    0.3161197000  0.0943329520  0.026171325  0.0696609900  2.466532e-01
## 5    0.2002583800 -0.1494002800  0.271977090 -0.2715154700 -9.937466e-03
## 6    0.2362762500 -0.1221989500  0.268114140 -0.1936924600 -5.319577e-03
## 7    0.4165105400 -0.0524902690  0.051215149 -0.0397855910  3.690164e-01
## 8    0.3349742600 -0.0869685160  0.073873000 -0.1384707800  3.206576e-01
## 9    0.4608707600 -0.1342637200 -0.013461528  0.1989779700 -3.707039e-02
## 10   0.4426286900 -0.2453279500  0.010301495  0.0811790270  1.096627e-01
## 11   0.3608675700 -0.2428414800  0.042217792 -0.0042892968  1.971729e-01
## 12   0.1463807000  0.0206379530  0.085306285  0.1205812000  2.794445e-01
## 13   0.2790814900  0.2376564200  0.022329962  0.3590552000  3.000507e-01
## 14   0.0860723960  0.2525088000 -0.039367741  0.4021406600  2.849337e-01
## 15  -0.0098690263  0.1643198000 -0.228627950  0.1071100200 -2.289570e-01
## 16   0.0945860020  0.0433669940  0.053957247  0.2205105700 -4.492381e-01
## 17   0.3869634800 -0.0954629950  0.119091910  0.0795095910 -2.181467e-01
## 18   0.3681561000 -0.1551533000  0.186575300 -0.1824569800  3.240207e-01
## 19   0.2203120100 -0.1386967800  0.186435040 -0.0743844530  3.200621e-01
## 20   0.1524167200  0.1152164000  0.008607366  0.1971679600  3.191143e-01
## 21   0.2278121500  0.2837815400  0.033291668  0.4129916400  2.635347e-01
## 22   0.3092624700  0.3266678900  0.011687289  0.5065634100  3.555433e-01
## 23   0.2828589000  0.1984172800  0.061793202  0.2810235800  3.833196e-01
## 24   0.5181384000  0.2295515300  0.083068182  0.3584837700  2.093110e-01
## 25   0.3065811800  0.2206258000  0.156851670  0.3789367100  1.780614e-01
```

```
## 26    0.0022817043   0.1471672000   0.223553800   0.1986822600   4.110308e-01
## 27   -0.0002587135   0.2908773900   0.123990190   0.3156028300   3.639400e-01
## 28    0.6822312100  -0.2584177100   0.128835660   0.3238014400  -3.874802e-01
## 29    0.5038955300  -0.1425582100   0.185001130   0.0579905770   3.276492e-02
## 30    0.4260899000   0.1949004800   0.035550725   0.3913671600   6.385217e-02
## 31   -0.2854838800  -0.6744398700   0.310329580  -0.0262931850  -3.183613e-01
## 32   -0.3667721200  -0.5762530700   0.212499820   0.0633297960  -3.833503e-01
## 33   -0.6584603900  -0.0551409370  -0.027378330   0.4149922500  -3.639714e-01
## 34    0.4759535300   0.0524891210  -0.039626307   0.2910873500   2.054737e-02
## 35    0.4248624600   0.3125402000   0.231659590   0.4632686300   4.471743e-01
## 36    0.3661360500   0.2505962000   0.219041180   0.2606386300   3.261340e-01
## 37    0.2529934400   0.1595061100   0.199091360   0.1937785500   2.835193e-01
## 38    0.3976918200   0.0482052160   0.323106700   0.0843009390   7.113517e-01
## 39    0.0743598690   0.0998939150   0.009770678   0.1895816700   4.626051e-03
## 40   -0.1612333200  -0.0665151580   0.253405870   0.0920699390   1.053763e-01
## 41   -0.1391565000   0.0005898095   0.165153750   0.1678889400   5.222139e-02
## 42    0.0529736230   0.2546377100   0.141653950   0.4360569200   2.741993e-01
## 43    0.0564880910   0.3113908200   0.138808760   0.4227345200   2.818629e-01
## 44    0.0163562800   0.1824034800   0.240353720   0.1978723000   1.227688e-01
## 45    0.2186965500   0.1021376300   0.226660280   0.2205357700   2.427641e-01
## 46    0.2146627900   0.1831856700   0.052778539   0.3651690400   1.337303e-01
## 47    0.0561106550   0.1691351500   0.056598066   0.1608926000  -3.675160e-04
## 48    0.0529009920   0.0457514900   0.271036890   0.0291967540   2.283432e-01
## 49    0.3008050900   0.1233790500   0.280907570   0.2463889300   3.440855e-01
## 50    0.2022138700   0.1040435700   0.348141240   0.1017788300   2.075847e-01
## 51    0.1851276200  -0.0733806690   0.247161050  -0.1156977700   2.035569e-02
## 52   -0.2211062200  -0.5550873000   0.607752460  -0.4046372200   4.462295e-01
## 53    0.2310013500   0.1365581900   0.091509236   0.0765657050   3.171148e-01
## 54    0.3974537400   0.2654528000   0.035163678   0.2672824500   7.585868e-02
## 55    0.1573218800   0.0758803570  -0.008638627   0.1779729000   1.867622e-01
## 56    0.0992800710   0.0107900510   0.054128643   0.1839411500   2.245817e-01
## 57    0.2869919800   0.0798121890  -0.083658334   0.1969434600   1.888999e-01
## 58    0.4874790400   0.0694056410   0.031322040   0.0961239250   3.787362e-02
## 59    0.3949923800  -0.0075596214   0.151249670  -0.0680018610   1.537244e-01
## 60    0.2458171000   0.1070640600   0.021476080   0.0560115550   1.146568e-01
## 61    0.3657627100   0.1170982800   0.127597650   0.1829406400   8.682785e-02
## 62    0.4537545200  -0.0315163630   0.238767600  -0.1167253800   4.924110e-01
## 63    0.4421967700   0.1517293200  -0.060068251   0.0983644420   4.418835e-01
## 64    0.3505580000   0.0587465750   0.029052303   0.1987890100  -1.415402e-01
## 65   -0.6586325300   0.0790254830   0.382057690   0.1112307600   1.448664e-01
## 66   -0.1162864300  -0.0777769140   0.262785850   0.0519766070  -1.368632e-01
## 67    0.3913258200  -0.4162108400   0.373651310   0.0675674010  -2.531985e-01
## 68    0.3670387100  -0.3757149700   0.344360400   0.0869973130  -2.293972e-01
## 69    0.0070230248  -0.1520982500   0.220868530   0.1097450900  -8.491305e-02
## 70   -0.0703090860  -0.0838455520   0.153747470   0.2105552900  -4.837244e-01
## 71    0.3830565900  -0.1468421800   0.290344830   0.2522087300   1.174281e-01
## 72    0.4869832500  -0.1895253200   0.274012490   0.2818701300   9.382417e-02
## 73   -0.0328955940  -0.3419819700   0.111353070   0.2694576400  -3.983607e-01
## 74   -0.1297256300   0.0538645230   0.306499500   0.3731840000   1.423427e-01
## 75   -0.1254136400   0.0943161900   0.222415150   0.5634328200   3.703642e-02
```

```
## 76    0.2188107000   0.2487930900   0.243037240   0.3483660200    3.610882e-01
## 77    0.3868327100   0.2205841800   0.269192830   0.2599141200    4.845238e-01
## 78    0.2058698000   0.1249101100   0.198678640   0.2466205700    4.954713e-01
## 79    0.5563338200  -0.4731002900   0.545427820  -0.1994344400    4.483689e-02
## 80    0.2488857200  -0.4148182400   0.420640130  -0.0878431470   -4.195984e-02
## 81    0.1906035900  -0.2172204600   0.252575400   0.0120045620   -4.047139e-02
## 82    0.3566691400  -0.1689628600   0.190128650   0.2189255600   -4.520572e-02
## 83    0.2968496200  -0.1987170700   0.244109660   0.1746139600   -4.592401e-02
## 84    0.2421255500  -0.2178342700   0.317330220   0.0325531140   -1.171053e-01
## 85    0.2749327400  -0.2467128600   0.370798790  -0.0406879890   -1.170667e-01
## 86    0.3322787100  -0.0617365390   0.195630450   0.1904204300   -7.276678e-02
## 87    0.3253255000  -0.4444300000   0.460984980  -0.1724978000    6.638531e-02
## 88    0.5007453800  -0.3543940200   0.411090190  -0.2287227600    7.342000e-02
## 89    0.3984001300  -0.0931421220   0.112898380   0.1636103300   -2.070438e-01
## 90    0.2812001300  -0.2151205300   0.241242890   0.1253445100   -2.494860e-01
## 91    0.5720188500  -0.3620498900   0.469981530  -0.2649937600    1.378241e-01
## 92    0.5260163600  -0.3151529800   0.463084700  -0.1802464500    5.476415e-02
## 93    0.4736648200  -0.4167348900   0.585144200  -0.3179919400    8.969584e-02
## 94    0.5351001900  -0.3673156900   0.504783050  -0.1798353800    1.670559e-01
## 95    0.3908445900  -0.3097716300   0.381844560   0.0139290620    7.494409e-02
## 96    0.3494545000  -0.3359696800   0.458979900  -0.1764290500    1.845109e-01
## 97    0.4432964100  -0.3041718700   0.492887720  -0.1997624800    3.821857e-01
## 98    0.2477394500  -0.2052326100   0.308886290   0.0960303570    1.176233e-01
## 99    0.4703259400  -0.2304579400   0.210355480   0.2051550200   -1.829715e-01
## 100   0.4694292100  -0.3224438200   0.288731870   0.0666882800   -2.143440e-01
## 101   0.6656574200  -0.3777820300   0.482162500  -0.1813770400   -8.649037e-02
## 102   0.6720670100  -0.1115023500   0.354395860   0.0114693590    3.044425e-02
## 103   0.4544627400  -0.1542850000   0.380967670  -0.0391585110    7.570834e-02
## 104   0.3655195100  -0.2526385200   0.328417200   0.0213574990   -3.598580e-02
## 105   0.3173396600  -0.1457341900   0.203059480   0.1297318400   -5.391489e-02
## 106   0.2300621900  -0.2024711700   0.261229190  -0.0008214068   -1.564247e-01
## 107   0.5559108100  -0.1423516400   0.201324520   0.0559294970   -1.357776e-01
## 108   0.4819614900  -0.1129580100   0.108517520   0.1421014400   -8.086759e-02
## 109   0.1302705400  -0.3343284300   0.335691350  -0.0768316390   -6.512095e-02
## 110   0.2505627100  -0.4176694000   0.489720330  -0.1912520100    3.943515e-02
## 111   0.4357144900  -0.3415171100   0.412775620   0.0156873280   -3.915153e-02
## 112   0.5398617900  -0.1429081800   0.248973410   0.1164895300   -2.871379e-01
## 113   0.3422905500  -0.1687906900   0.251492780  -0.0702677800   -1.866581e-01
## 114   0.0641665650  -0.2036564900   0.205325250   0.1225330700   -3.248156e-01
## 115   0.3841488400  -0.1714104600   0.239572440   0.0863843810   -5.407343e-02
## 116   0.3590599900  -0.1056840400   0.245277400   0.1071516100    1.067350e-01
## 117   0.3026599800  -0.2032438400   0.295776990   0.0431305740   -1.039602e-02
## 118   0.4679907500  -0.2662042600   0.383769890  -0.1255073600   -5.967613e-02
## 119   0.3313401300  -0.1796047800   0.289762040   0.0169835430    7.725777e-02
## 120   0.1824461200  -0.2431465800   0.253966060   0.1239968500   -2.631659e-02
## 121   0.3037087900  -0.2638026500   0.270142400   0.0716910370   -1.106658e-01
## 122   0.2053917800  -0.4112295900   0.440067100  -0.1335056600   -1.227253e-01
## 123   0.1461278000  -0.3867049300   0.414949130  -0.0316853620   -1.069631e-01
## 124   0.2356328000  -0.2755340100   0.283729690   0.0997434910   -1.085370e-01
## 125   0.2052593300  -0.2715315400   0.295870750   0.0612123400   -1.938660e-02
```

```
## 126   0.2086091400   0.0236012680   0.140746710   0.1848338200   1.239175e-01
## 127   0.1099072000  -0.0448605880   0.380782770  -0.0734677490   3.750586e-01
## 128  -0.1096321300   0.1575484400   0.325733700   0.1916986600   3.108775e-01
## 129   0.0553945730   0.1757541600   0.179395780   0.3365724400   8.316416e-02
## 130   0.2101256100  -0.1718633600   0.318009290   0.0586592140   8.628786e-02
## 131   0.0863448680  -0.1445030500   0.380910590   0.1477138000   9.727176e-02
## 132   0.0469399530   0.0540801990   0.243092820   0.3279964700   1.295591e-01
## 133   0.0399221700   0.1587098700   0.067187968   0.3575303000   3.802252e-02
## 134   0.0297176480   0.1246709900   0.143668980   0.3749815800  -1.368713e-01
## 135   0.0259841550  -0.0300651800   0.330365560   0.1408363500   1.581234e-01
## 136   0.0626586990  -0.0651988070   0.317810860   0.0867858940   1.432789e-01
## 137   0.2089809000  -0.1290810100   0.298974050   0.1928637400  -5.244406e-02
## 138   0.3139743000  -0.0724689550   0.359850660   0.1100730200   1.153841e-01
## 139  -0.1045730500  -0.0672594960   0.357440210   0.1117466300   2.748724e-06
## 140   0.0212239680   0.0936806190   0.195404380   0.3542228600   1.336035e-01
## 141   0.2327415800   0.0741395770   0.095210601   0.2971461700  -2.210338e-02
## 142   0.3056637100  -0.2271290500   0.241373730   0.0937490090  -1.062329e-01
## 143   0.3047007300  -0.2117626100   0.249492470   0.0673608780   5.776977e-02
## 144   0.3478666900  -0.1766810100   0.257795310   0.0292743150  -9.673779e-03
## 145   0.0335390840  -0.0749402620   0.351265030   0.0679461640   3.019848e-01
## 146  -0.0476144350   0.0337427690   0.375438180   0.0317068300   2.976472e-01
## 147   0.2394968000  -0.0260456120   0.307505120  -0.0688660090   1.673102e-02
## 148   0.1100783800  -0.3266817500   0.438638510   0.0142088220   1.708966e-02
## 149  -0.1402280500  -0.2797187500   0.411129960   0.0633483010  -1.885373e-02
## 150  -0.1006839800  -0.2023128700   0.223589110   0.2301976100  -3.276916e-01
## 151   0.1492540400  -0.3537764800   0.217510810   0.3407031300  -3.034877e-01
## 152   0.2813895800  -0.2515726800   0.077399418   0.4290642100  -2.367396e-01
## 153   0.0894729110  -0.4230672500   0.192766250   0.1317180500  -2.025021e-01
## 154  -0.0462624230  -0.5244950400   0.370278450  -0.0766951170  -9.574796e-03
## 155   0.1061512100  -0.4390818500   0.276629280   0.2223729300  -2.511860e-01
## 156   0.2319842800  -0.4691513300   0.341238730   0.1080626700  -2.201419e-01
## 157   0.2803095700  -0.4387475800   0.303223230   0.2268788700  -2.763602e-01
## 158   0.1300918500  -0.3622455200   0.168779040   0.4182937200  -3.922646e-01
## 159   0.3196033300  -0.2734204600   0.139088530   0.3530320500  -4.340731e-01
## 160   0.2549167200  -0.3524285300   0.153209180   0.3033898300  -2.582354e-01
## 161   0.3855623700  -0.5447702300   0.410548870   0.0229793810  -1.812256e-01
## 162   0.3596698100  -0.4311151500   0.368595920   0.0243511930  -3.710276e-02
## 163   0.4221609000  -0.3996764200   0.251517430   0.1343301100  -2.661065e-01
## 164   0.3828584600  -0.3405523300   0.321697080  -0.0316351790  -4.014357e-02
## 165   0.0559334470  -0.3426905900   0.305381230  -0.0892402820   9.264987e-02
## 166   0.2387659700  -0.5264826900   0.337538990   0.0240876360  -1.158389e-01
## 167   0.4538089500  -0.4376850800   0.280714930   0.0386676300  -3.214088e-02
## 168   0.3387926400  -0.5632345600   0.416061920  -0.1341788900  -1.649895e-01
## 169   0.2637530700  -0.6137377100   0.537708450  -0.2213849400  -9.944143e-02
## 170   0.3409233700  -0.7298194000   0.703289320  -0.3828200200  -2.975112e-03
## 171   0.3164385500  -0.6216355500   0.540570290  -0.2082438500  -1.511701e-01
## 172   0.1669205500  -0.3355671300   0.225311040   0.0961059090  -2.670493e-01
## 173   0.0998082780  -0.2337480600   0.186011960   0.1454575700  -1.456706e-01
## 174   0.3308799200  -0.4438054500   0.358853800  -0.0048951848  -1.463863e-01
## 175   0.3034511400  -0.4950992600   0.282069720   0.1004099800  -3.103794e-01
```

```
## 176   0.2618057200 -0.5069707400  0.288902290  0.2274540600 -5.569210e-01
## 177   0.2414528100  0.8330094400 -0.475813530  0.4800520000  4.296292e-01
##              NA           NA           NA           NA           NA
## 1       0.927269840 -0.572370010  0.691619200  0.468289820 -0.131076970
## 2       0.182702720 -0.167457400  0.253251030  0.132333860  0.293855350
## 3       0.181648850 -0.169308380  0.132009060  0.008197317  0.193328560
## 4       0.257355350 -0.136808750  0.087315569  0.149095580  0.196657250
## 5       0.235128480 -0.340967050 -0.085712880  0.163956800  0.120590380
## 6       0.203405930 -0.296747890  0.069933579 -0.012261880  0.017912065
## 7       0.020758661 -0.111629620 -0.110855520  0.212635260  0.218221050
## 8       0.206185830 -0.304111500  0.005190615  0.100645570  0.264243460
## 9       0.295217900 -0.265697000  0.239541230  0.186680400  0.284818290
## 10     -0.087741216  0.058122607 -0.008123615  0.203450970  0.009446005
## 11     -0.102797900  0.086862526 -0.047250111  0.161176660 -0.073903955
## 12      0.283651810 -0.076352380  0.165325300  0.011728162  0.080788387
## 13      0.507744240 -0.057540119  0.374357530 -0.080493024 -0.045589931
## 14      0.366410020  0.023658944  0.348529450  0.010344127  0.058147651
## 15      0.101274400 -0.168370620 -0.016545988  0.087689576  0.127074090
## 16      0.170922040 -0.160093130 -0.055963724  0.025715226  0.343780710
## 17      0.283978980 -0.197545740 -0.034790591 -0.033737723  0.334375650
## 18      0.329285130 -0.166038680  0.179427780 -0.096468609  0.166848360
## 19      0.338814890 -0.107716340  0.296541030 -0.033004482  0.025284475
## 20      0.273790260  0.085494592  0.140145380  0.203427740 -0.099332595
## 21      0.614087640 -0.040620128  0.482526590  0.086505004  0.176420540
## 22      0.727324830 -0.153742450  0.557416940 -0.181567240  0.040840352
## 23      0.571472540 -0.173567370  0.378263520 -0.072192700 -0.071531292
## 24      0.668538900 -0.319853190  0.341817560  0.245373530  0.251113310
## 25      0.828480440 -0.389929520  0.492920140  0.243480660  0.212685220
## 26      0.864349650 -0.302270350  0.598239790  0.086549498  0.261707630
## 27      0.692711640 -0.119381130  0.530067780 -0.083921209  0.313089550
## 28      0.015597544 -0.343872090  0.168389230 -0.057665195  0.082029223
## 29      0.616345660 -0.453662080  0.504477610  0.133239450 -0.164524290
## 30      0.209066670 -0.184699740  0.229052540 -0.052303203 -0.057772651
## 31     -0.721559520  0.144920360  0.243296720 -0.546418500  0.705052540
## 32     -0.537089570  0.024254977  0.164802040 -0.457890810  0.602768620
## 33     -0.017106841 -0.232704810  0.202240470 -0.391172150 -0.168186660
## 34      0.289496290 -0.360755370  0.082854611 -0.046252009 -0.224094370
## 35      0.403479790 -0.068244209  0.139329680  0.031097462 -0.270756050
## 36      0.413593130  0.055737247  0.209433090  0.041010091 -0.328258840
## 37      0.368238450  0.271117060  0.145469210  0.222672200 -0.192210140
## 38      0.447881350  0.093384967  0.273445040  0.115528360 -0.215648750
## 39     -0.039385401 -0.159813850  0.023413983 -0.524619470  0.034285135
## 40      0.008679629 -0.408688700  0.277538170 -0.600621470 -0.245714740
## 41      0.158330590 -0.351740980  0.273155850 -0.496489660 -0.358072890
## 42      0.315911410 -0.015142741  0.372797190  0.099816160 -0.456394590
## 43      0.294892910 -0.199282120  0.338297070  0.218877680 -0.331641620
## 44      0.435182540 -0.207895180  0.189213830  0.219894260 -0.092866021
## 45      0.472381720 -0.024856590  0.204561060  0.383866730 -0.230642770
## 46      0.439017510 -0.133864300  0.243213660  0.260327830 -0.320468410
## 47      0.486979420 -0.173308980  0.318806430 -0.008363215 -0.246733980
```

```
## 48    0.239345990  0.150724740  0.167689880  0.344745290 -0.105517070
## 49    0.405632430 -0.048799614  0.354142630  0.334864110  0.056008694
## 50    0.450288340 -0.117092020  0.226707790  0.114640440 -0.013073733
## 51    0.237611610 -0.080704578  0.035481656  0.192312890 -0.035597245
## 52   -0.395866570  0.382718350  0.006754116 -0.315831300 -0.172207970
## 53   -0.009635697 -0.146068990  0.057660671 -0.588616090  0.215675370
## 54    0.216651370 -0.002249422  0.184064710 -0.082840860  0.286653870
## 55    0.311045750 -0.055168951  0.243423230 -0.033946138  0.214805630
## 56    0.523746850 -0.215601470  0.274903780 -0.001496952  0.115314670
## 57    0.470700130 -0.182329190  0.234931590  0.188947640  0.096316585
## 58    0.297126910 -0.159521600  0.213413660  0.066573858  0.050215345
## 59    0.518776520 -0.158513590  0.343771730 -0.082531683 -0.052710276
## 60    0.563018950 -0.047993495  0.388197720 -0.034699168  0.046112103
## 61    0.515808520 -0.038158717  0.315723240  0.005390769  0.322907730
## 62    0.486161480 -0.157005850  0.327994120  0.003755141  0.462981110
## 63    0.391056700 -0.065372372  0.365259300 -0.008708822  0.339670950
## 64    0.392626720  0.055523513  0.153047500  0.129233010 -0.022218521
## 65    0.074670399  0.057650162  0.079868301 -0.380609620 -0.466071480
## 66    0.097154704 -0.154308910  0.187217440 -0.339239160  0.297840580
## 67   -0.328162660  0.078443848  0.020310387 -0.195463250  0.160429560
## 68   -0.319535590  0.087308050  0.012521041 -0.196153080  0.153158890
## 69   -0.037726871  0.113815660  0.084992674 -0.145309400  0.104052650
## 70   -0.402501410  0.286508210 -0.125452350 -0.310171160 -0.267694000
## 71   -0.308820050  0.161942290 -0.005266690 -0.077588079  0.049985709
## 72   -0.281113350  0.121192750  0.010217660  0.031360614  0.136818750
## 73   -0.360260830  0.077538779 -0.102780250 -0.442995190 -0.226886100
## 74    0.148655170 -0.181111520  0.203858030 -0.197237280 -0.366075950
## 75    0.425610490 -0.240329200  0.377141850 -0.322785990 -0.474418220
## 76    0.513547270 -0.364553700  0.395126070 -0.284780500 -0.029408814
## 77    0.444816140 -0.381353800  0.345868980 -0.368750050 -0.168341540
## 78    0.508678930 -0.353283580  0.329763640  0.306386920 -0.396890460
## 79    0.032874739  0.230055300 -0.051348219  0.172813770  0.450552720
## 80   -0.016419745  0.254320760 -0.160777110  0.209088750  0.442382180
## 81   -0.076637194  0.247252870 -0.173617130  0.158756350  0.564137480
## 82   -0.046939991  0.220720550 -0.120050210  0.182411960  0.624270800
## 83   -0.240489740  0.298704310 -0.181942910  0.034787760  0.568315240
## 84   -0.394868930  0.370754820 -0.377612440  0.056406685  0.464588670
## 85   -0.317576230  0.404843890 -0.393978450  0.048422866  0.447199860
## 86   -0.195886110  0.331582320 -0.197634840 -0.042433027  0.415218800
## 87   -0.435469630  0.476943410 -0.460657940  0.133593700  0.584331640
## 88   -0.156713690  0.314620160 -0.255530590  0.157654330  0.488532650
## 89   -0.009500576  0.101824400 -0.037689660 -0.028094645  0.353201150
## 90   -0.030503484  0.109876870  0.019959078 -0.065515183  0.583150970
## 91   -0.060526213  0.099600444 -0.041364750  0.047242573  0.582391020
## 92   -0.075039475  0.071901676  0.037105569  0.031377927  0.441032180
## 93   -0.136523930  0.260234670 -0.121943800  0.170437660  0.376828830
## 94   -0.123353470  0.240305920 -0.162418710  0.174788260  0.430630520
## 95   -0.074408890  0.155215610 -0.021906435 -0.077183388  0.441962440
## 96   -0.023308095  0.080220406  0.042523385 -0.110392940  0.431361620
## 97   -0.185923440  0.087350826  0.138986020 -0.198160870  0.465579010
```

```
## 98  -0.375486100  0.248768180  0.010173145 -0.183678590  0.492086120
## 99  -0.155284240  0.205479090 -0.089359670  0.073307638  0.471411680
## 100 -0.071162669  0.154436980 -0.066623036  0.060730560  0.378185180
## 101 -0.183685090  0.341561910 -0.267497390  0.127725140  0.423412360
## 102  0.025134370  0.189832480 -0.084785615  0.126281460  0.393898340
## 103 -0.002229288  0.095892084 -0.095980182 -0.086828060  0.446891430
## 104 -0.437170050  0.371719280 -0.199660760 -0.150807450  0.621174940
## 105 -0.270441050  0.152855680  0.043655345 -0.209957890  0.553713330
## 106  0.018856560 -0.066103229  0.261429850 -0.239633710  0.473351870
## 107 -0.015817969  0.180503040 -0.156533280  0.120265580  0.363578660
## 108 -0.050126740  0.284773190 -0.254332330  0.330554550  0.292787390
## 109  0.022512387  0.063956784  0.101317940  0.065369180  0.476983620
## 110 -0.104497030 -0.010795664  0.263469260 -0.201169400  0.598762020
## 111 -0.400867750  0.403591990 -0.363445620  0.146433750  0.642139670
## 112 -0.106831470  0.096584418 -0.034861735 -0.146758970  0.319793510
## 113  0.037292094 -0.186686100  0.180554540 -0.134213830  0.330296080
## 114 -0.207752150  0.012289794  0.031750662 -0.177626070  0.464772200
## 115 -0.130424520 -0.032707612  0.083519256 -0.219910690  0.530452250
## 116  0.049420740 -0.042235459  0.106209960 -0.093636967  0.481483350
## 117 -0.095988555  0.173631740 -0.064463464  0.033161110  0.409897840
## 118 -0.217467840  0.294073750 -0.271844220  0.079557388  0.402765900
## 119 -0.111676570 -0.081154084  0.149895720 -0.279664220  0.480128840
## 120 -0.211825200  0.072157975  0.183435640 -0.327791890  0.535859910
## 121 -0.253143450  0.164358760  0.097968225 -0.391636990  0.468603310
## 122 -0.181519040  0.208534950 -0.268955760 -0.149216720  0.557016410
## 123 -0.328928750  0.312604450 -0.419579360  0.237922730  0.577890530
## 124 -0.627351330  0.488728660 -0.340943960  0.081746311  0.464385050
## 125 -0.418872980  0.324750790 -0.159770900 -0.022415821  0.546605820
## 126  0.249883860  0.093612159  0.008720489  0.051567031  0.385306600
## 127 -0.071774907  0.025903840  0.141358140  0.016624159  0.393723850
## 128 -0.158093220  0.277214450 -0.112432230  0.130656960  0.394003690
## 129 -0.120220410  0.263467760 -0.131552130  0.039448964  0.205157000
## 130 -0.306267240  0.329847490 -0.169177830  0.019895143  0.123911780
## 131 -0.087821954  0.024261861  0.317021440 -0.095054240  0.538698120
## 132 -0.146745670  0.243368980  0.046194292 -0.039994435  0.570983380
## 133 -0.249518920  0.389480390 -0.261597940  0.046467260  0.559539480
## 134 -0.066113836  0.035029040  0.126781050 -0.066008424  0.593230250
## 135 -0.310872080  0.196091520  0.093186083 -0.189596960  0.452897720
## 136 -0.351832290  0.345708540 -0.110379600 -0.023822280  0.397552130
## 137 -0.327598370  0.328637600 -0.122524650 -0.019585805  0.475744940
## 138 -0.213980720  0.292919400 -0.082342945 -0.020711661  0.571207170
## 139 -0.239914520  0.272934040 -0.148989980  0.039528904  0.272710180
## 140 -0.346487550  0.276339170 -0.198587650  0.197004840  0.133321560
## 141 -0.473032150  0.412987200 -0.340639400  0.106737960  0.194071590
## 142 -0.318398830  0.180215810 -0.061337221  0.034715102  0.180161350
## 143 -0.291124500  0.138056430  0.253598820 -0.299811770  0.560577450
## 144 -0.252437040  0.235522210  0.048029436 -0.109756050  0.552834370
## 145 -0.278193210  0.302531690 -0.103099950 -0.089657768  0.606620990
## 146 -0.223303900  0.187764710  0.027005809 -0.197074200  0.472046960
## 147 -0.176042460  0.057645524 -0.006528238 -0.012488547  0.109473580
```

```
## 148 -0.393537040  0.211882410 -0.151771240  0.064760380  0.210085850
## 149 -0.286798450  0.332740550 -0.064766087 -0.118661960  0.442470350
## 150 -0.141108240  0.166668790  0.115224000 -0.203162280  0.415471450
## 151 -0.356022240  0.297884720 -0.054468727 -0.138900660  0.341485250
## 152 -0.409803960  0.351953750 -0.168299600 -0.075001023  0.416792540
## 153 -0.357357760  0.172276310 -0.137061220  0.216483210  0.404886180
## 154 -0.347373490  0.247351800 -0.177496760  0.300390950  0.364533470
## 155 -0.456376420  0.395066390 -0.115092320  0.087323575  0.468819580
## 156 -0.536713140  0.273989120  0.241798910 -0.383973070  0.477290320
## 157 -0.269184570  0.222799430 -0.099373747  0.030791109  0.507256860
## 158 -0.271181320  0.280731010 -0.119219190 -0.017349056  0.535801680
## 159 -0.231440980  0.159511040  0.051040538  0.229148010  0.310848130
## 160 -0.355606290  0.350195970 -0.160239700  0.141968620  0.464656830
## 161 -0.492359710  0.451958780 -0.263915860  0.104402420  0.429690690
## 162 -0.361030420  0.230355840  0.079096362 -0.245255500  0.208231770
## 163 -0.183678660  0.052749503  0.256451890 -0.238739800  0.054240479
## 164 -0.159126790  0.107094900  0.116091600  0.048393560  0.244736570
## 165 -0.169396270  0.215784240  0.070804209  0.133675510  0.417105630
## 166 -0.357899180  0.310242170 -0.005635818 -0.011379657  0.265201150
## 167 -0.423739570  0.372883680 -0.058592254 -0.204793970  0.231147740
## 168 -0.336213620  0.278102570 -0.016831905  0.013434384  0.119418960
## 169 -0.193120820  0.180072320  0.176066630 -0.035467163  0.438048590
## 170 -0.169861620 -0.013832336  0.411644000 -0.331325590  0.410507000
## 171 -0.283502840  0.021044465  0.423905820 -0.381674150  0.345443350
## 172 -0.382060430  0.272496060  0.024041809 -0.051173963  0.340895620
## 173 -0.403470850  0.234457240  0.096120618 -0.233426100  0.313532560
## 174 -0.552306660  0.547110460 -0.251738170  0.151424260  0.509460370
## 175 -0.297012740  0.334577630 -0.082679471  0.252617030  0.518457490
## 176 -0.087415982  0.119317740  0.269853840  0.040388071  0.490878060
## 177  0.088815749 -0.173715820 -0.146452200 -0.082714482 -0.388145150
##              NA           NA           NA           NA           NA
NA
## 1   -0.087159695  0.3362474800 -0.959433880 -0.95055150 -0.95799295 -
0.94630524
## 2   -0.018075169 -0.3433367800 -0.979289150 -0.97605707 -0.97824725 -
0.97871147
## 3    0.073717859 -0.3148577600 -0.983703130 -0.98801962 -0.98832678 -
0.98649613
## 4    0.140451880 -0.3058976600 -0.986541760 -0.98642135 -0.98643053 -
0.98649613
## 5    0.107489230 -0.2825893300 -0.992827150 -0.99127536 -0.99117030 -
0.99096187
## 6    0.186672890 -0.3211694300 -0.994294990 -0.99524897 -0.99500944 -
0.99574572
## 7    0.203931430 -0.4160378200 -0.987465700 -0.98274603 -0.98675558 -
0.97819083
## 8    0.208030260 -0.3848070900 -0.977457660 -0.97599674 -0.97650361 -
0.97819083
## 9   -0.141098890 -0.2580433900 -0.983630870 -0.97751373 -0.97897119 -
0.97844904
```

```
## 10    0.089193195 -0.4559168400 -0.986771970 -0.98670243 -0.98837827 -
0.98774589
## 11    0.196205570 -0.4367329200 -0.988040330 -0.98590171 -0.98753995 -
0.98774589
## 12    0.148466620 -0.0995246870 -0.994775630 -0.99611776 -0.99579871 -
0.99541508
## 13    0.151243670 -0.3335909600 -0.995325010 -0.99656707 -0.99609128 -
0.99541508
## 14    0.174676810 -0.2313846700 -0.996700130 -0.99839240 -0.99807005 -
0.99736644
## 15   -0.009150338 -0.3145308500 -0.904587780 -0.83989567 -0.83587056 -
0.90351446
## 16   -0.118085490 -0.1211127400 -0.984463810 -0.98754846 -0.98798809 -
0.98472462
## 17   -0.292231360 -0.2874990700 -0.989043070 -0.99093187 -0.99117062 -
0.99169252
## 18   -0.162088280 -0.4119398300 -0.995071550 -0.99268417 -0.99358148 -
0.99093326
## 19    0.033951002 -0.2827178000 -0.998726810 -0.99741361 -0.99816625 -
0.99093326
## 20    0.027449021 -0.0412248780 -0.997972370 -0.99879494 -0.99841011 -
0.99704606
## 21   -0.045200558 -0.1683809400 -0.998441330 -0.99798984 -0.99759806 -
0.99542945
## 22   -0.062697352 -0.2416965400 -0.997891000 -0.99752775 -0.99753235 -
0.99406371
## 23   -0.130271390 -0.1620945600 -0.995893460 -0.99728461 -0.99694728 -
0.99406371
## 24   -0.137157170 -0.1955739800 -0.995215340 -0.99651065 -0.99592005 -
0.99414104
## 25   -0.095972924 -0.2304727200 -0.994193440 -0.99494985 -0.99542435 -
0.99299264
## 26   -0.100661360 -0.1991633900 -0.995749400 -0.99441625 -0.99487387 -
0.99299264
## 27   -0.140665610 -0.3633945500 -0.998552500 -0.99776154 -0.99771410 -
0.99436847
## 28   -0.546175510 -0.2050798400 -0.554369200 -0.18717165 -0.20730115 -
0.46830669
## 29    0.141775640 -0.1703139800 -0.934593770 -0.93195422 -0.93254518 -
0.94554244
## 30    0.041450094  0.0647425640 -0.976994980 -0.97105963 -0.97628471 -
0.97032910
## 31    0.735040240  0.6316674600 -0.815758640 -0.50812531 -0.54741684 -
0.64463597
## 32    0.644532900  0.5622806700 -0.507396680 -0.49055481 -0.52291840 -
0.62415949
## 33    0.073007022  0.0405061330 -0.621027250 -0.48451097 -0.47032362 -
0.62415949
## 34   -0.160377700  0.0930123700 -0.915953840 -0.89361999 -0.91435450 -
0.89982042
```

```
## 35    0.067666144   0.1293186800 -0.974805040 -0.95660840 -0.96145787 -
0.96576109
## 36    0.038395593   0.0973691990 -0.995238360 -0.99550157 -0.99534349 -
0.99294196
## 37    0.070602607   0.1181873200 -0.999067440 -0.99906531 -0.99911184 -
0.99708483
## 38    0.050836317   0.0762418010 -0.998011800 -0.99559420 -0.99635346 -
0.99266963
## 39   -0.106320450  -0.0679121130 -0.926233340 -0.94594716 -0.95459778 -
0.93281186
## 40    0.221656250  -0.1314091700 -0.968162890 -0.94767986 -0.94899636 -
0.96328599
## 41    0.134570440  -0.2322391400 -0.992951060 -0.99577426 -0.99602927 -
0.99315619
## 42   -0.010997664  -0.3562870700 -0.993437900 -0.99387550 -0.99477500 -
0.99211327
## 43    0.049079987  -0.1553287200 -0.990914070 -0.99281205 -0.99267801 -
0.99211327
## 44    0.270689650   0.0097742127 -0.987547310 -0.99324099 -0.99400937 -
0.98932754
## 45    0.162274620  -0.2376674800 -0.990122640 -0.99402631 -0.99500811 -
0.98932754
## 46    0.110421200  -0.2445733900 -0.993024120 -0.99767465 -0.99779467 -
0.99355314
## 47    0.150150280  -0.0912044230 -0.994146360 -0.99825604 -0.99843348 -
0.99355314
## 48    0.165573490  -0.1940195100 -0.993548920 -0.99653821 -0.99632057 -
0.99420648
## 49    0.030428480  -0.2873640600 -0.992640980 -0.99490770 -0.99460938 -
0.99420648
## 50   -0.106717370  -0.1633092400 -0.992051450 -0.99486796 -0.99490685 -
0.99454562
## 51   -0.003969884  -0.2425856200 -0.991474710 -0.99536861 -0.99525420 -
0.99426681
## 52    0.542698680  -0.1256170700 -0.905122910 -0.83169609 -0.85064507 -
0.82506078
## 53   -0.222662270  -0.3892414800 -0.987446090 -0.97847045 -0.98200551 -
0.97853805
## 54   -0.032468776  -0.3152402300 -0.997987630 -0.99609738 -0.99610625 -
0.99577738
## 55    0.092350509  -0.1709437000 -0.999504490 -0.99870535 -0.99821243 -
0.99713065
## 56   -0.064241338  -0.1951488700 -0.999057730 -0.99827359 -0.99801754 -
0.99556295
## 57    0.123477940  -0.1623527100 -0.997429450 -0.99587294 -0.99603295 -
0.99077011
## 58    0.094284886  -0.1321011600 -0.997419660 -0.99633327 -0.99644580 -
0.99077011
## 59    0.124630170  -0.1563931400 -0.997282120 -0.99472458 -0.99583865 -
0.98814262
```

```
## 60    0.342387810 -0.1440971800 -0.995770500 -0.99389022 -0.99488439 -
0.98814262
## 61    0.148154430 -0.1500695400 -0.995868300 -0.99579684 -0.99556074 -
0.99496674
## 62   -0.189609080 -0.2391598400 -0.997588190 -0.99701193 -0.99709265 -
0.99500397
## 63   -0.286001560 -0.1049360000 -0.997867250 -0.99868238 -0.99857225 -
0.99655929
## 64   -0.095367911 -0.1535490400 -0.997318800 -0.99877904 -0.99819081 -
0.99717872
## 65    0.105021390  0.0934457940 -0.721626990 -0.41726279 -0.52045757 -
0.48141557
## 66   -0.083262047 -0.1114028100 -0.942902620 -0.92188864 -0.92012779 -
0.94678892
## 67   -0.502767270 -0.4034450300 -0.518427790  0.06407340  0.07546684 -
0.36572046
## 68   -0.466419910 -0.3514961500 -0.362108240 -0.12667840 -0.15732077 -
0.36572046
## 69    0.053507012  0.2296821400 -0.676364250 -0.77805010 -0.80626838 -
0.72070646
## 70   -0.034639664 -0.2449897100 -0.634960060 -0.70007559 -0.77151305 -
0.66795693
## 71   -0.395139670 -0.1284020000 -0.062945893  0.30788151  0.14688483
0.15370675
## 72   -0.520796770 -0.0900264090  0.294838960 -0.04090274 -0.18837723
0.15370675
## 73    0.241322880 -0.0355356190 -0.331015760 -0.05341762 -0.04651580 -
0.37138266
## 74    0.101040460  0.1300470200 -0.849351620 -0.74996890 -0.81281361 -
0.77393981
## 75    0.004694372  0.0646371190 -0.950780660 -0.91348682 -0.91488144 -
0.94248758
## 76   -0.108003240 -0.0592322470 -0.989813350 -0.99013960 -0.99138237 -
0.98458674
## 77   -0.119435680  0.1089470900 -0.990560140 -0.99211327 -0.99265755 -
0.99190346
## 78   -0.028322030  0.0575302200 -0.992300700 -0.99519865 -0.99470055 -
0.99342968
## 79   -0.138384740 -0.2165999800 -0.224559620 -0.23798068 -0.29045891 -
0.23274851
## 80   -0.084550249 -0.0908667800 -0.126502690 -0.21339031 -0.26605200 -
0.23274851
## 81   -0.054343056  0.0306195890 -0.160100010 -0.25757110 -0.32122499 -
0.32191904
## 82   -0.085322666 -0.0054474726 -0.073513080 -0.19511453 -0.26850021 -
0.21590597
## 83   -0.078473636 -0.0274131800 -0.049492050 -0.21102536 -0.28710281 -
0.21590597
## 84   -0.064472054 -0.0178539680 -0.077394435 -0.23776722 -0.31537169 -
0.24153742
```

```
## 85   -0.127145820 -0.0826676200 -0.095493110 -0.23418525 -0.30637325 -
0.24153742
## 86   -0.277533760 -0.0929077530 -0.113443280 -0.23084634 -0.29711074 -
0.21974984
## 87   -0.234870230 -0.1435431000 -0.169629600 -0.32073899 -0.37802238 -
0.27682438
## 88   -0.171551860 -0.1675892400 -0.107472340 -0.24223487 -0.31288324 -
0.24253563
## 89   -0.149167730 -0.1159476000 -0.129802930 -0.25904260 -0.34964022 -
0.24253563
## 90   -0.127164010  0.0616401150 -0.104808760 -0.25305003 -0.33831010 -
0.20045673
## 91   -0.182130180  0.0329431850 -0.063225767 -0.21278856 -0.28830479 -
0.20045673
## 92   -0.097347471 -0.0237259210 -0.017610633 -0.14299831 -0.23922406 -
0.03033792
## 93   -0.071128029 -0.0594289480 -0.035592505 -0.15547409 -0.24692408 -
0.03033792
## 94   -0.275427090 -0.1914485700 -0.062178356 -0.22499279 -0.28693811 -
0.24192138
## 95   -0.299744340 -0.1399305100 -0.072821245 -0.20792297 -0.28529385 -
0.24192138
## 96   -0.198981390 -0.1768320900 -0.089840429 -0.20806055 -0.28236481 -
0.26952037
## 97   -0.375855350 -0.3158446100 -0.113136280 -0.24002292 -0.29370596 -
0.24174021
## 98   -0.549081520 -0.3198922500 -0.206715790 -0.26627391 -0.31070564 -
0.24174021
## 99   -0.242885820 -0.0123356590 -0.046277939 -0.20362526 -0.25324615 -
0.20148023
## 100 -0.235222350 -0.0003765442 -0.006788252 -0.18330520 -0.25083821 -
0.20148023
## 101 -0.293745290 -0.1955716000 -0.044258164 -0.24087174 -0.31213000 -
0.26385898
## 102 -0.254145690 -0.3095968200 -0.041734145 -0.16345806 -0.27968264
0.13897527
## 103 -0.062586672 -0.1734564100 -0.083892745 -0.13550100 -0.25299801
0.13897527
## 104 -0.094197144  0.0325953000 -0.070705961 -0.12111633 -0.20222280 -
0.04061396
## 105 -0.228277230 -0.0848486030 -0.069540692 -0.15742320 -0.23944008 -
0.04061396
## 106 -0.336618580 -0.1907250400 -0.086942954 -0.22519670 -0.29003163 -
0.27193724
## 107 -0.304021190 -0.2087298600 -0.064423256 -0.15965905 -0.22839559 -
0.19668882
## 108 -0.267938580 -0.1511025700 -0.046465246 -0.18637060 -0.27651813 -
0.16560060
## 109 -0.251776820 -0.0510117960 -0.066594317 -0.25965723 -0.34352688 -
0.16560060
```

```
## 110 -0.257271120 -0.0860541590 -0.104721850 -0.24911625 -0.30926911 -
0.28404903
## 111 -0.356048920 -0.2310324200 -0.146100560 -0.25310151 -0.30466500 -
0.28404903
## 112 -0.295576030 -0.2475766100 -0.028582068 -0.07785658 -0.12926112 -
0.11211325
## 113 -0.197575740  0.0380328310 -0.111311720 -0.24041740 -0.32352886 -
0.19677282
## 114  0.007708963  0.2542070800 -0.126372480 -0.27993018 -0.36773754 -
0.19677282
## 115 -0.067881689  0.1220840900 -0.105686140 -0.22777514 -0.32129452 -
0.23349994
## 116 -0.275214580 -0.1413558400 -0.083591000 -0.20178048 -0.28886360 -
0.23349994
## 117 -0.332031560 -0.1875077800 -0.067429345 -0.24842236 -0.30375279 -
0.24135290
## 118 -0.364749910 -0.2155912300 -0.120646470 -0.28608766 -0.33750557 -
0.32411282
## 119 -0.322736210 -0.1708344100 -0.237415250 -0.31617456 -0.38291508 -
0.32411282
## 120 -0.380721790 -0.1889281800 -0.250393640 -0.30732494 -0.36309957 -
0.33813247
## 121 -0.317245180 -0.1845669900 -0.243371870 -0.29851218 -0.35443167 -
0.22557446
## 122 -0.230502660 -0.1047774600 -0.246311570 -0.31235944 -0.39845031 -
0.22557446
## 123 -0.338129330 -0.0385661200 -0.193292510 -0.26403135 -0.35608264 -
0.17206864
## 124 -0.338955900 -0.0269215400 -0.164874500 -0.25321409 -0.32557912 -
0.17206864
## 125 -0.352127200 -0.1613173300 -0.206492270 -0.30455573 -0.37520242 -
0.26855770
## 126 -0.198286040 -0.4136818900 -0.170440850 -0.18820842 -0.28297761 -
0.08137791
## 127 -0.247678780 -0.5498618700 -0.048825749 -0.11708516 -0.22520739 -
0.11500651
## 128 -0.273987070 -0.4661380100 -0.088540677 -0.04725246 -0.16053937 -
0.08326230
## 129 -0.135436090 -0.2106117000 -0.098690394  0.01331304 -0.13351500
0.01380348
## 130 -0.109633560 -0.2408893500  0.028422451  0.18395782  0.04183441
0.09272293
## 131 -0.396752260 -0.5148989100  0.080265708  0.19543705  0.04646651
0.09272293
## 132 -0.428655410 -0.5242874700 -0.025681958  0.04566343 -0.13681732
0.11707969
## 133 -0.373851450 -0.4020747300 -0.070359730 -0.09866979 -0.18366501
0.11707969
## 134 -0.360612310 -0.3482773100 -0.077787454 -0.13898659 -0.19484350 -
0.08875289
```

```
## 135  0.004839296 -0.5566460600  0.133358580  0.24274736  0.09033096
0.31830179
## 136 -0.164310080 -0.5668624400  0.122205780  0.15024177  0.00711470
0.31830179
## 137 -0.383106090 -0.4564501700  0.147554430  0.12467351 -0.04875205
0.35030630
## 138 -0.232098910 -0.3400835200  0.100149980  0.10625082 -0.08941795
0.35030630
## 139  0.035537385 -0.2427448700  0.120906110  0.01273850 -0.09839103
0.04523200
## 140 -0.116577790 -0.0086578772  0.073107976 -0.04265889 -0.12214145
0.04059968
## 141 -0.182744730 -0.1473968600  0.089121500  0.07281668 -0.03792351
0.19634252
## 142  0.005812635 -0.3536019100  0.172161270  0.13627899  0.04403008
0.19634252
## 143 -0.215034980 -0.4662232000  0.060417914 -0.02614713 -0.07142112 -
0.16471617
## 144 -0.159812410 -0.4890434700  0.059491854 -0.06165703 -0.14301226 -
0.02226829
## 145 -0.465072020 -0.3124144100 -0.018090242 -0.11528655 -0.26029716 -
0.02226829
## 146 -0.502894130 -0.2432737200  0.071970206  0.05147785 -0.06823661 -
0.03044878
## 147 -0.285967440 -0.2334775400  0.040168399  0.15527003  0.08253412 -
0.03044878
## 148 -0.153618230 -0.1111774700 -0.059902458 -0.05868036 -0.16454407 -
0.10074212
## 149 -0.183882430 -0.0697943240 -0.017039858 -0.17464507 -0.25757843 -
0.13983673
## 150 -0.294925720 -0.1849250300 -0.015987782 -0.07911266 -0.16948944 -
0.12993093
## 151 -0.075353813 -0.1144931800 -0.144521220 -0.33477144 -0.39005033 -
0.30861601
## 152 -0.156465640 -0.1555795400 -0.180750290 -0.38786699 -0.44338655 -
0.39007875
## 153 -0.314209730  0.1989702300 -0.142457910 -0.43158019 -0.48256832 -
0.44804840
## 154 -0.399647450  0.0334318480 -0.114722580 -0.31243126 -0.37859081 -
0.27314860
## 155 -0.506116600 -0.2849733100 -0.113543410 -0.29191192 -0.36092488 -
0.27314860
## 156 -0.508577940 -0.2838076300 -0.160903100 -0.40943463 -0.48031258 -
0.35548786
## 157 -0.340880510 -0.1833033000 -0.155446530 -0.39053748 -0.44471209 -
0.35657241
## 158 -0.266586050 -0.1076188700 -0.136595560 -0.38608182 -0.42944529 -
0.35794686
## 159  0.041433882 -0.2855407300 -0.088105584 -0.22682976 -0.29976337 -
0.26594667
```

```
## 160 -0.014214487 -0.2084604900 -0.153568090 -0.32198846 -0.38277796 -
0.26594667
## 161 -0.222488400 -0.1007749000 -0.127183700 -0.40264720 -0.44559954 -
0.40421796
## 162 -0.214371480 -0.1094693900 -0.132582130 -0.42796573 -0.48824642 -
0.38027151
## 163 -0.109360170 -0.3062820100 -0.210910600 -0.44135997 -0.50670457 -
0.38027151
## 164 -0.207615050 -0.4049180000 -0.162489970 -0.38761003 -0.47137383 -
0.27519434
## 165 -0.254806690 -0.4324657300 -0.193785910 -0.31894997 -0.38322132 -
0.27519434
## 166 -0.174077470 -0.3135523700 -0.264245800 -0.34058163 -0.38035727 -
0.45270541
## 167 -0.189810990 -0.2219319200 -0.235804510 -0.37432701 -0.42164670 -
0.48705416
## 168 -0.051801233 -0.2338838400 -0.119610400 -0.33466647 -0.43530140 -
0.27078335
## 169 -0.169499550 -0.2421752600 -0.143934940 -0.28395851 -0.36372265 -
0.14008918
## 170 -0.326116660 -0.1490063300 -0.115904040 -0.31906248 -0.36403715 -
0.14008918
## 171 -0.345472910 -0.1067881000 -0.113249470 -0.36831475 -0.41604265 -
0.36404429
## 172 -0.414253350 -0.2262965300 -0.170195260 -0.42279772 -0.48813865 -
0.36404429
## 173 -0.423913520 -0.3328639600 -0.199625810 -0.37187814 -0.41054840 -
0.36874191
## 174 -0.598607620 -0.3992111500 -0.150632800 -0.26536176 -0.28104803 -
0.32074187
## 175 -0.368034400 -0.3357923700 -0.185247830 -0.29472130 -0.36443687 -
0.23733876
## 176 -0.088076547 -0.3892200300 -0.192335010 -0.27083037 -0.37727645 -
0.07138243
## 177  0.182260700 -0.2731554400 -0.924606850 -0.92697005 -0.93661920 -
0.92198951
##              NA          NA          NA          NA          NA
NA
## 1    -0.9925557 -0.959433880 -0.9984928 -0.95763740 -0.23258164 -
0.173178740
## 2    -0.9953329 -0.979289150 -0.9994880 -0.98124826 -0.44187611
0.081568632
## 3    -0.9953329 -0.983703130 -0.9996821 -0.98576690 -0.59993932
0.038049101
## 4    -0.9970448 -0.986541760 -0.9997374 -0.98350880 -0.58900633 -
0.092855878
## 5    -0.9970448 -0.992827150 -0.9998807 -0.98960814 -0.70459880
0.180441050
## 6    -0.9941746 -0.994294990 -0.9999199 -0.99346324 -0.78527148
0.370338620
```

```
## 7    -0.9931460 -0.987465700 -0.9997342 -0.99123713 -0.58617597
0.155920000
## 8    -0.9875975 -0.977457660 -0.9994359 -0.97476126 -0.44777480
0.049663704
## 9    -0.9941501 -0.983630870 -0.9996110 -0.98001684 -0.49538336
0.382673960
## 10   -0.9941501 -0.986771970 -0.9997439 -0.99133543 -0.61329295
0.430694650
## 11   -0.9925091 -0.988040330 -0.9997656 -0.98958642 -0.61463968
0.373112800
## 12   -0.9925091 -0.994775630 -0.9999301 -0.99407242 -0.84520103
0.415857260
## 13   -0.9915173 -0.995325010 -0.9999395 -0.99413589 -0.86991263
0.479832760
## 14   -0.9994408 -0.996700130 -0.9999638 -0.99629721 -0.92744189
0.471040190
## 15   -0.9756005 -0.904587780 -0.9917899 -0.79512503  0.02351577 -
0.520530440
## 16   -0.9900188 -0.984463810 -0.9996974 -0.98792482 -0.61242297
0.028785268
## 17   -0.9904929 -0.989043070 -0.9998118 -0.99046331 -0.70013106
0.071744981
## 18   -0.9950441 -0.995071550 -0.9999213 -0.99364019 -0.76520087
0.088873196
## 19   -0.9950441 -0.998726810 -0.9999856 -0.99782077 -0.91164086
0.235037670
## 20   -0.9960469 -0.997972370 -0.9999808 -0.99724024 -0.90050551
0.258864600
## 21   -0.9960469 -0.998441330 -0.9999840 -0.99554592 -0.89308352
0.379181520
## 22   -0.9950034 -0.997891000 -0.9999761 -0.99507095 -0.92305351
0.491834070
## 23   -0.9955760 -0.995893460 -0.9999497 -0.99404911 -0.90350711
0.562489510
## 24   -0.9955760 -0.995215340 -0.9999377 -0.99324706 -0.84348671
0.514524520
## 25   -0.9952074 -0.994193440 -0.9999173 -0.99462698 -0.79617070
0.368455600
## 26   -0.9938545 -0.995749400 -0.9999378 -0.99489936 -0.80723755
0.375532870
## 27   -0.9941725 -0.998552500 -0.9999846 -0.99597318 -0.91034855
0.566921660
## 28   -0.8741391 -0.554369200 -0.8320549 -0.26658477  0.50515047 -
0.680112990
## 29   -0.9833129 -0.934593770 -0.9968400 -0.91046872 -0.14265732 -
0.204337880
## 30   -0.9833129 -0.976994980 -0.9993789 -0.98868228 -0.54095570
0.054501730
## 31   -0.9919874 -0.815758640 -0.9538560 -0.70688322  0.05976542 -
0.504479270
```

```
## 32   -0.9919874 -0.507396680 -0.8621489 -0.54944598   0.66630239 -
0.596584650
## 33   -0.8500062 -0.621027250 -0.9035508 -0.45441637   0.49703540 -
0.815434730
## 34   -0.9910566 -0.915953840 -0.9945993 -0.93457224   0.06007779 -
0.464710860
## 35   -0.9910566 -0.974805040 -0.9991517 -0.97121710 -0.35975545 -
0.042807522
## 36   -0.9947166 -0.995238360 -0.9999346 -0.99429674 -0.81601335
0.391776180
## 37   -0.9956285 -0.999067440 -0.9999942 -0.99714322 -0.89046364
0.485173750
## 38   -0.9973361 -0.998011800 -0.9999712 -0.99665824 -0.84569950
0.289682210
## 39   -0.9799299 -0.926233340 -0.9965117 -0.96212264 -0.16387595 -
0.268993640
## 40   -0.9911172 -0.968162890 -0.9988021 -0.95465736 -0.30477008
0.062678045
## 41   -0.9941288 -0.992951060 -0.9999008 -0.99551693 -0.78870165
0.173412120
## 42   -0.9974381 -0.993437900 -0.9999015 -0.99541072 -0.75696481
0.159987040
## 43   -0.9974381 -0.990914070 -0.9998549 -0.99038875 -0.73894443
0.124903260
## 44   -0.9965481 -0.987547310 -0.9997920 -0.99411719 -0.74299519
0.126192870
## 45   -0.9916659 -0.990122640 -0.9998455 -0.99502728 -0.76779236
0.153920260
## 46   -0.9916659 -0.993024120 -0.9999082 -0.99715909 -0.84819404
0.259591460
## 47   -0.9978503 -0.994146360 -0.9999274 -0.99732715 -0.87549047
0.510861400
## 48   -0.9978503 -0.993548920 -0.9999129 -0.99533715 -0.85250968
0.466102920
## 49   -0.9939445 -0.992640980 -0.9998927 -0.99179797 -0.80832684
0.319715110
## 50   -0.9939445 -0.992051450 -0.9998827 -0.99256639 -0.78311216
0.231662460
## 51   -0.9922420 -0.991474710 -0.9998747 -0.99385354 -0.82233554
0.321446470
## 52   -0.9916650 -0.905122910 -0.9914947 -0.87122077   0.14110184 -
0.567937960
## 53   -0.9960341 -0.987446090 -0.9997034 -0.98641994 -0.55813971
0.303159730
## 54   -0.9960341 -0.997987630 -0.9999727 -0.99525244 -0.82835121
0.473281380
## 55   -0.9958402 -0.999504490 -0.9999979 -0.99601814 -0.87317390
0.667267880
## 56   -0.9973261 -0.999057730 -0.9999918 -0.99630612 -0.86877896
0.523870750
```

```
## 57   -0.9978719 -0.997429450 -0.9999651 -0.99449106 -0.84523817
0.423354660
## 58   -0.9978719 -0.997419660 -0.9999665 -0.99591501 -0.86644394
0.476707270
## 59   -0.9976524 -0.997282120 -0.9999591 -0.99600836 -0.83114529
0.266163450
## 60   -0.9965835 -0.995770500 -0.9999360 -0.99340605 -0.79190157
0.153347500
## 61   -0.9963627 -0.995868300 -0.9999444 -0.99420648 -0.84504869
0.403171960
## 62   -0.9968143 -0.997588190 -0.9999708 -0.99656948 -0.91233781
0.468275280
## 63   -0.9968143 -0.997867250 -0.9999792 -0.99736677 -0.94405478
0.517299330
## 64   -0.9943586 -0.997318800 -0.9999728 -0.99576141 -0.96402265
0.663835640
## 65   -0.9422942 -0.721626990 -0.9229399 -0.74231718  0.40202058 -
0.267282640
## 66   -0.9872940 -0.942902620 -0.9971456 -0.91019487 -0.12782387 -
0.169693680
## 67   -0.9872940 -0.518427790 -0.7607672  0.12828636  0.30829357 -
0.660835940
## 68   -0.8334220 -0.362108240 -0.7314856 -0.13567442  0.77204404 -
0.689010700
## 69   -0.8334220 -0.676364250 -0.9468752 -0.82980516  0.40518679 -
0.847696490
## 70   -0.7739760 -0.634960060 -0.9295791 -0.84057402  0.41994029 -
0.322171670
## 71   -0.7739760 -0.062945893 -0.4187506 -0.08467829  0.86177315 -
0.367481340
## 72    0.1281318  0.294838960 -0.1801745 -0.33463273  0.81506713 -
0.374984730
## 73   -0.9311519 -0.331015760 -0.6981911  0.12301778  0.76441710 -
0.499823740
## 74   -0.9337380 -0.849351620 -0.9809547 -0.90267392  0.16193509 -
0.614294560
## 75   -0.9902052 -0.950780660 -0.9973868 -0.89622326 -0.16277211 -
0.032125526
## 76   -0.9902052 -0.989813350 -0.9998227 -0.99189064 -0.68876959
0.360751700
## 77   -0.9923951 -0.990560140 -0.9998456 -0.99143035 -0.71536080
0.358199120
## 78   -0.9923951 -0.992300700 -0.9998881 -0.99225600 -0.76472242
0.409205830
## 79   -0.6833015 -0.224559620 -0.6716960 -0.30212121  0.80179191
0.071633848
## 80   -0.7392301 -0.126502690 -0.5991428 -0.25306176  0.87403064
0.046100766
## 81   -0.7392301 -0.160100010 -0.6315176 -0.38995894  0.85755800
0.139415920
```

```
## 82   -0.6532344 -0.073513080 -0.5555910 -0.38127494  0.84006762
0.089020914
## 83   -0.8714943 -0.049492050 -0.5397611 -0.39003755  0.87430946 -
0.013517842
## 84   -0.8714943 -0.077394435 -0.5667160 -0.40764808  0.87852461 -
0.080544239
## 85   -0.5405676 -0.095493110 -0.5799239 -0.45362780  0.85545042 -
0.060648025
## 86   -0.5405676 -0.113443280 -0.5927925 -0.39806079  0.80867228
0.099839719
## 87   -0.6355853 -0.169629600 -0.6491203 -0.43840012  0.76189413 -
0.097309240
## 88   -0.7318147 -0.107472340 -0.5904463 -0.38935066  0.80902321
0.053010495
## 89   -0.7636373 -0.129802930 -0.6100275 -0.46726061  0.81425610
0.138224870
## 90   -0.7636373 -0.104808760 -0.5904248 -0.46297058  0.83072874
0.075965531
## 91   -0.6579724 -0.063225767 -0.5509673 -0.37800569  0.83174647 -
0.059955099
## 92   -0.6799817 -0.017610633 -0.5003433 -0.30633808  0.88867452 -
0.090948792
## 93   -0.6799817 -0.035592505 -0.5175916 -0.24437273  0.87266198 -
0.031004900
## 94   -0.6724106 -0.062178356 -0.5524586 -0.28440942  0.85864784
0.113852830
## 95   -0.4721525 -0.072821245 -0.5575357 -0.37913677  0.82268641
0.152759740
## 96   -0.5822961 -0.089840429 -0.5706794 -0.38301423  0.84712927
0.046200262
## 97   -0.5822961 -0.113136280 -0.5942681 -0.36187624  0.83072874
0.045146890
## 98   -0.7415082 -0.206715790 -0.6650678 -0.38718964  0.85060551
0.061571107
## 99   -0.5906801 -0.046277939 -0.5357709 -0.28097580  0.84217520
0.137906330
## 100 -0.6000234 -0.006788252 -0.4995660 -0.32123201  0.85271309
0.212545490
## 101 -0.6000234 -0.044258164 -0.5411881 -0.39214696  0.85654027
0.097592246
## 102 -0.7157385 -0.041734145 -0.5241700 -0.37722858  0.81956110
0.095621340
## 103 -0.7157385 -0.083892745 -0.5515416 -0.41836919  0.81159089
0.115020050
## 104 -0.6824306 -0.070705961 -0.5382937 -0.31588417  0.80234954
0.098589622
## 105 -0.6892662 -0.069540692 -0.5449636 -0.30256306  0.81050104
0.006834123
## 106 -0.6892662 -0.086942954 -0.5717225 -0.37276888  0.81077985 -
0.040788209
```

```
## 107 -0.5682228 -0.064423256 -0.5414150 -0.34037110  0.84400396
0.062276461
## 108 -0.5682228 -0.046465246 -0.5325493 -0.41305240  0.88200086
0.128398240
## 109 -0.6631846 -0.066594317 -0.5623039 -0.47338847  0.81214852
0.144790360
## 110 -0.8445580 -0.104721850 -0.5896438 -0.36738822  0.81050104
0.124954490
## 111 -0.8445580 -0.146100560 -0.6207508 -0.34477838  0.80867228
0.048119737
## 112 -0.7908270 -0.028582068 -0.4952801 -0.18059732  0.82816106 -
0.006818309
## 113 -0.7908270 -0.111311720 -0.5929813 -0.37101137  0.80793336
0.136859180
## 114 -0.7221899 -0.126372480 -0.6112246 -0.51659928  0.78742684
0.185515700
## 115 -0.7221899 -0.105686140 -0.5864203 -0.44152930  0.81921017 -
0.041971185
## 116 -0.6260679 -0.083591000 -0.5646785 -0.38444870  0.87567812 -
0.079602956
## 117 -0.7417828 -0.067429345 -0.5609211 -0.41629830  0.87989328
0.018552979
## 118 -0.7417828 -0.120646470 -0.6080845 -0.40900608  0.84052772
0.166493110
## 119 -0.6925189 -0.237415250 -0.6937517 -0.44505594  0.76087640
0.124422640
## 120 -0.6687929 -0.250393640 -0.7005265 -0.37588244  0.77625920 -
0.038122982
## 121 -0.6687929 -0.243371870 -0.6945828 -0.35438276  0.81983992 -
0.012179873
## 122 -0.9453941 -0.246311570 -0.6987898 -0.51385409  0.83026864
0.064252784
## 123 -0.9453941 -0.193292510 -0.6556402 -0.47684229  0.81608486 -
0.019925406
## 124 -0.7436093 -0.164874500 -0.6340885 -0.38800369  0.84986660 -
0.146720510
## 125 -0.6858984 -0.206492270 -0.6715690 -0.50602103  0.81425610 -
0.018326819
## 126 -0.8386508 -0.170440850 -0.6256801 -0.38149936  0.83768123 -
0.107065640
## 127 -0.7607802 -0.048825749 -0.5201784 -0.40741363  0.88309070
0.013205649
## 128 -0.7607802 -0.088540677 -0.5356710 -0.35702374  0.83209741 -
0.035541180
## 129 -0.6582115 -0.098690394 -0.5289727 -0.34735850  0.81745352 -
0.122338270
## 130 -0.5902169  0.028422451 -0.3807923 -0.23521446  0.85334284 -
0.125334910
## 131 -0.4374004  0.080265708 -0.3317116 -0.28282889  0.86770791 -
0.180221550
```

```
## 132 -0.4228904 -0.025681958 -0.4634847 -0.52606061  0.78144738 -
0.129588420
## 133 -0.4552679 -0.070359730 -0.5331801 -0.23458871  0.79757675 -
0.078638364
## 134 -0.6172783 -0.077787454 -0.5475629 -0.19767115  0.77980756
0.013183617
## 135 -0.6665270  0.133358580 -0.2685841 -0.13747175  0.90222856
0.039330651
## 136 -0.6665270  0.122205780 -0.3058638 -0.20151491  0.89316850 -
0.210100720
## 137 -0.6187571  0.147554430 -0.2888230 -0.26860703  0.89288968
0.105546000
## 138 -0.6187571  0.100149980 -0.3383805 -0.34261161  0.85334284
0.003873213
## 139 -0.4708229  0.120906110 -0.3430612 -0.24183760  0.89316850 -
0.414867330
## 140 -0.5763110  0.073107976 -0.4001708 -0.23795653  0.87852461 -
0.024157120
## 141 -0.6715788  0.089121500 -0.3572993 -0.16880815  0.93994664 -
0.024928480
## 142 -0.6715788  0.172161270 -0.2617723 -0.01379041  0.85836903 -
0.201153530
## 143 -0.6778196  0.060417914 -0.4076453 -0.03909150  0.88547710 -
0.230445540
## 144 -0.8273492  0.059491854 -0.4166914 -0.21732432  0.86844682 -
0.189027480
## 145 -0.8273492 -0.018090242 -0.4948863 -0.44554993  0.83237622 -
0.045035181
## 146 -0.5376172  0.071970206 -0.3783008 -0.24193132  0.83768123 -
0.160231850
## 147 -0.6880067  0.040168399 -0.3787271 -0.05513545  0.89106092 -
0.324404340
## 148 -0.7218762 -0.059902458 -0.5160520 -0.29475051  0.87989328 -
0.156721390
## 149 -0.7218762 -0.017039858 -0.5063309 -0.38071862  0.84775902 -
0.069460974
## 150 -0.5615621 -0.015987782 -0.4852382 -0.26215046  0.87009430 -
0.189500570
## 151 -0.7204184 -0.144521220 -0.6336381 -0.48481176  0.80179191 -
0.253645770
## 152 -0.7204184 -0.180750290 -0.6673806 -0.52618944  0.76618141 -
0.236702910
## 153 -0.7066149 -0.142457910 -0.6467035 -0.55048733  0.79273185 -
0.384452860
## 154 -0.7427597 -0.114722580 -0.6081861 -0.42607659  0.78668793 -
0.484930070
## 155 -0.7427597 -0.113543410 -0.6038271 -0.40367948  0.80024196 -
0.348736980
## 156 -0.8859642 -0.160903100 -0.6567155 -0.55078135  0.77938451 -
0.170423230
```

```
## 157 -0.8859642 -0.155446530 -0.6500931 -0.45098118  0.80480805 -
0.236987830
## 158 -0.7270043 -0.136595560 -0.6359094 -0.45774228  0.78816576 -
0.206294380
## 159 -0.8552684 -0.088105584 -0.5729196 -0.36462838  0.85545042 -
0.355097980
## 160 -0.9066088 -0.153568090 -0.6380147 -0.43512972  0.82834235 -
0.473742990
## 161 -0.9066088 -0.127183700 -0.6314945 -0.51387210  0.79027333 -
0.272370510
## 162 -0.7430410 -0.132582130 -0.6390484 -0.56317340  0.79648690 -
0.214547080
## 163 -0.7583853 -0.210910600 -0.6954040 -0.59851983  0.78633699 -
0.320336450
## 164 -0.8077118 -0.162489970 -0.6546332 -0.58837641  0.80308845 -
0.363553310
## 165 -0.9624766 -0.193785910 -0.6654351 -0.43076617  0.81921017 -
0.427555560
## 166 -0.9624766 -0.264245800 -0.7146550 -0.31842945  0.81425610 -
0.611956730
## 167 -0.9246065 -0.235804510 -0.7019856 -0.39217224  0.75392392 -
0.651123370
## 168 -0.7029865 -0.119610400 -0.6154678 -0.53201964  0.76168744 -
0.476238020
## 169 -0.7189665 -0.143934940 -0.6246812 -0.40799087  0.82166868 -
0.278903460
## 170 -0.7189665 -0.115904040 -0.6101672 -0.38866974  0.82331616 -
0.287346860
## 171 -0.6138716 -0.113249470 -0.6160625 -0.45323750  0.80445712 -
0.464660740
## 172 -0.6138716 -0.170195260 -0.6651323 -0.59316047  0.74935783 -
0.380613940
## 173 -0.5302577 -0.199625810 -0.6778120 -0.46065368  0.77067538 -
0.490032810
## 174 -0.6294169 -0.150632800 -0.6261992 -0.26454682  0.79164200 -
0.378494160
## 175 -0.6929543 -0.185247830 -0.6555346 -0.41118583  0.83385405 -
0.331605530
## 176 -0.6929543 -0.192335010 -0.6562010 -0.46182542  0.79996315 -
0.309904850
## 177 -0.9906604 -0.924606850 -0.9960587 -0.94448576 -0.01592767 -
0.111925050
##              NA             NA             NA            NA           NA
## 1   -0.0228966600  0.0948315680  0.1918171500 -0.959433880 -0.95055150
## 2   -0.1093660600  0.3117577100 -0.4116748000 -0.979289150 -0.97605707
## 3   -0.0742122710  0.2540759900 -0.2961296600 -0.983703130 -0.98801962
## 4    0.0463961670 -0.0004664473  0.0371425090 -0.986541760 -0.98642135
## 5   -0.2776567200  0.5155624300 -0.3558507600 -0.992827150 -0.99127536
## 6   -0.3934519000  0.5634830200 -0.4815456900 -0.994294990 -0.99524897
## 7   -0.2399421600  0.2930264600 -0.0627012180 -0.987465700 -0.98274603
```

```
## 8    -0.1400816800   0.1503584300   0.0351372050  -0.977457660  -0.97599674
## 9    -0.3370736400   0.2192151300  -0.1617669300  -0.983630870  -0.97751373
## 10   -0.3973414300   0.2667853500  -0.0903310960  -0.986771970  -0.98670243
## 11   -0.3430332100   0.3449071300  -0.2767495300  -0.988040330  -0.98590171
## 12   -0.2762635500   0.3496341900  -0.5999291400  -0.994775630  -0.99611776
## 13   -0.3739670000   0.4152130200  -0.5343058200  -0.995325010  -0.99656707
## 14   -0.3623790600   0.4075726400  -0.5267360600  -0.996700130  -0.99839240
## 15    0.4330236000  -0.4526969700   0.3813480500  -0.904587780  -0.83989567
## 16   -0.1342421800   0.2464529500  -0.1058780900  -0.984463810  -0.98754846
## 17   -0.1896596300   0.3401255700  -0.1601039800  -0.989043070  -0.99093187
## 18   -0.0875747550   0.2307962300  -0.2997783300  -0.995071550  -0.99268417
## 19   -0.1593994200   0.3072472200  -0.4611155600  -0.998726810  -0.99741361
## 20   -0.2432917800   0.5054627700  -0.6077512400  -0.997972370  -0.99879494
## 21   -0.4114213700   0.8416637800  -0.8810286700  -0.998441330  -0.99798984
## 22   -0.4733726100   0.6948749200  -0.6693707700  -0.997891000  -0.99752775
## 23   -0.3807686500   0.1120085400  -0.1604592800  -0.995893460  -0.99728461
## 24   -0.3543013900   0.1550630100  -0.2212084700  -0.995215340  -0.99651065
## 25   -0.3247492600   0.3950831100  -0.4074392800  -0.994193440  -0.99494985
## 26   -0.3203405300   0.4365874500  -0.4865988600  -0.995749400  -0.99441625
## 27   -0.4827341300   0.5396608300  -0.5079206500  -0.998552500  -0.99776154
## 28    0.3151620100   0.0854901480   0.1764438700  -0.554369200  -0.18717165
## 29    0.0657635450  -0.0823802700   0.2613751000  -0.934593770  -0.93195422
## 30   -0.0926288500   0.1704182100  -0.1827282800  -0.976994980  -0.97105963
## 31    0.4242733200  -0.5528966500   0.5664656700  -0.815758640  -0.50812531
## 32    0.5148715500  -0.5602065200   0.4693108700  -0.507396680  -0.49055481
## 33    0.7941846400  -0.8282780600   0.4882381100  -0.621027250  -0.48451097
## 34    0.3602128900  -0.2734398100   0.1989857300  -0.915953840  -0.89361999
## 35    0.0247153770  -0.1027109300   0.1024307800  -0.974805040  -0.95660840
## 36   -0.4255955700   0.6364977300  -0.5670037100  -0.995238360  -0.99550157
## 37   -0.4730411000   0.7442852400  -0.7573272100  -0.999067440  -0.99906531
## 38   -0.3088169500   0.4674343700  -0.3879327200  -0.998011800  -0.99559420
## 39    0.1880795900  -0.1713020800   0.1674457200  -0.926233340  -0.94594716
## 40   -0.0020708403  -0.1305923900   0.0089512310  -0.968162890  -0.94767986
## 41   -0.0958165940  -0.0555705220   0.0040910928  -0.992951060  -0.99577426
## 42   -0.0996125580   0.0681908180  -0.1453462200  -0.993437900  -0.99387550
## 43   -0.0898207140   0.1588796800  -0.2741697100  -0.990914070  -0.99281205
## 44   -0.2440781900   0.4887438200  -0.3524958800  -0.987547310  -0.99324099
## 45   -0.2491693800   0.4074736400  -0.2537942000  -0.990122640  -0.99402631
## 46   -0.2177301200   0.3518555400  -0.4915183000  -0.993024120  -0.99767465
## 47   -0.4257495800   0.3573448100  -0.3583436600  -0.994146360  -0.99825604
## 48   -0.4071317500   0.2436612400  -0.1106279900  -0.993548920  -0.99653821
## 49   -0.2889422300   0.0785383330   0.0968399040  -0.992640980  -0.99490770
## 50   -0.1580392400  -0.0558554500   0.0644771830  -0.992051450  -0.99486796
## 51   -0.2112775800   0.2033330400  -0.3894865000  -0.991474710  -0.99536861
## 52    0.5682121000  -0.6235346600   0.3751150300  -0.905122910  -0.83169609
## 53   -0.1840101400   0.1234679600  -0.3148711000  -0.987446090  -0.97847045
## 54   -0.3456974300   0.2008235400  -0.2074679200  -0.997987630  -0.99609738
## 55   -0.5625668500   0.2800821700  -0.0733077290  -0.999504490  -0.99870535
## 56   -0.3918436500   0.3020344000  -0.3417707700  -0.999057730  -0.99827359
## 57   -0.3209596600   0.2857265500  -0.3060576600  -0.997429450  -0.99587294
```

```
## 58   -0.3867187800    0.4099740300   -0.4282028600   -0.997419660  -0.99633327
## 59   -0.2158199200    0.4897887000   -0.6673749100   -0.997282120  -0.99472458
## 60   -0.0732730160    0.1965975600   -0.3818056200   -0.995770500  -0.99389022
## 61   -0.2790765700    0.3002725100   -0.4304058700   -0.995868300  -0.99579684
## 62   -0.3290873300    0.3073202600   -0.4254652700   -0.997588190  -0.99701193
## 63   -0.3739047500    0.3177228300   -0.4220692500   -0.997867250  -0.99868238
## 64   -0.5156883200    0.3264662700   -0.3026222400   -0.997318800  -0.99877904
## 65    0.1347799200   -0.0653521190    0.1534597100   -0.721626990  -0.41726279
## 66    0.0623277130   -0.1477402300    0.3153021900   -0.942902620  -0.92188864
## 67    0.5235404200   -0.2317880200    0.0299870750   -0.518427790   0.06407340
## 68    0.5554357200   -0.2910512000    0.0872920890   -0.362108240  -0.12667840
## 69    0.7562588000   -0.6939885400    0.4537469000   -0.676364250  -0.77805010
## 70    0.3889797800   -0.5215201600    0.2418041100   -0.634960060  -0.70007559
## 71    0.2947559400   -0.4290546400    0.4839886400   -0.062945893   0.30788151
## 72    0.2772406900   -0.4263176800    0.5397004600    0.294838960  -0.04090274
## 73    0.3224840800   -0.4351279300    0.6507668700   -0.331015760  -0.05341762
## 74    0.4280927100   -0.4137084000    0.5261945100   -0.849351620  -0.74996890
## 75   -0.0943210640    0.1900809600   -0.0416419860   -0.950780660  -0.91348682
## 76   -0.3526190800    0.1239879400    0.0980526030   -0.989813350  -0.99013960
## 77   -0.2965263000    0.1380617600   -0.0870704530   -0.990560140  -0.99211327
## 78   -0.3190879500    0.3247483800   -0.4123654000   -0.992300700  -0.99519865
## 79   -0.0883988450   -0.1029951900    0.2954388800   -0.224559620  -0.23798068
## 80   -0.0907421630    0.0071522924    0.1819491400   -0.126502690  -0.21339031
## 81   -0.2013803800    0.1037466900    0.1712586700   -0.160100010  -0.25757110
## 82   -0.1859417900    0.2028466900    0.0508401810   -0.073513080  -0.19511453
## 83   -0.0540982190    0.0400232160    0.1155762900   -0.049492050  -0.21102536
## 84    0.0024097269   -0.0141241580    0.1667527600   -0.077394435  -0.23776722
## 85    0.0008663825   -0.0892763880    0.2606428700   -0.095493110  -0.23418525
## 86   -0.1350929200    0.0301422910    0.1661456600   -0.113443280  -0.23084634
## 87    0.0251930850    0.0310416080    0.0432281050   -0.169629600  -0.32073899
## 88   -0.1342250900    0.0370927930    0.2455446200   -0.107472340  -0.24223487
## 89   -0.2917465800    0.4383373700   -0.1217470600   -0.129802930  -0.25904260
## 90   -0.2264421000    0.4952526900   -0.2934405700   -0.104808760  -0.25305003
## 91   -0.0638210000    0.2491876000   -0.1075521600   -0.063225767  -0.21278856
## 92    0.0308085340    0.0479809220   -0.0039278620   -0.017610633  -0.14299831
## 93   -0.0010291740   -0.0779892470    0.1866496500   -0.035592505  -0.15547409
## 94   -0.1577004900    0.0295989210    0.1939898700   -0.062178356  -0.22499279
## 95   -0.1871141300    0.0809887060    0.1222142400   -0.072821245  -0.20792297
## 96   -0.1045319900   -0.0045539705    0.2250433700   -0.089840429  -0.20806055
## 97   -0.0530253300   -0.1464996400    0.3030140000   -0.113136280  -0.24002292
## 98   -0.0594000590   -0.0515903710    0.1420375400   -0.206715790  -0.26627391
## 99   -0.1794015800    0.2255724800   -0.1053918200   -0.046277939  -0.20362526
## 100  -0.2224129600    0.2058445500   -0.1012639400   -0.006788252  -0.18330520
## 101  -0.1454620700    0.1163081800    0.0361582410   -0.044258164  -0.24087174
## 102  -0.1255720000   -0.0615520560    0.2970981000   -0.041734145  -0.16345806
## 103  -0.1488498500   -0.0453046760    0.3101344000   -0.083892745  -0.13550100
## 104  -0.1270805900   -0.0446466880    0.2702427100   -0.070705961  -0.12111633
## 105  -0.0436560950   -0.0970995550    0.2736902500   -0.069540692  -0.15742320
## 106  -0.1056936700    0.3285722200   -0.1580925200   -0.086942954  -0.22519670
## 107  -0.1806585500    0.3508136300   -0.1554904800   -0.064423256  -0.15965905
```

```
## 108 -0.1884978400  0.2531159000 -0.1138964700 -0.046465246 -0.18637060
## 109 -0.1976774600  0.1741133400 -0.0004288831 -0.066594317 -0.25965723
## 110 -0.2004172300  0.1547626900  0.0945863680 -0.104721850 -0.24911625
## 111 -0.1338544500  0.1033381000  0.1409750500 -0.146100560 -0.25310151
## 112 -0.0543022810  0.1797838500 -0.1237375200 -0.028582068 -0.07785658
## 113 -0.2239722300  0.2827849800 -0.0596085490 -0.111311720 -0.24041740
## 114 -0.2739934200  0.4144561200 -0.2355117300 -0.126372480 -0.27993018
## 115 -0.1248941500  0.5325160100 -0.4284699500 -0.105686140 -0.22777514
## 116 -0.0455629660  0.2926979900 -0.1964519000 -0.083591000 -0.20178048
## 117 -0.1590239800  0.3270656600 -0.1102036400 -0.067429345 -0.24842236
## 118 -0.3113485300  0.3338459900  0.0647956020 -0.120646470 -0.28608766
## 119 -0.2599674500  0.4081230600 -0.1186443000 -0.237415250 -0.31617456
## 120 -0.0147438990 -0.0297562830  0.1726016200 -0.250393640 -0.30732494
## 121  0.0070245367 -0.0881377610  0.1387999400 -0.243371870 -0.29851218
## 122 -0.1285504400  0.2511330000 -0.1701097800 -0.246311570 -0.31235944
## 123 -0.0817949940  0.3383315400 -0.2896677700 -0.193292510 -0.26403135
## 124  0.0540527520  0.1631646300 -0.1566150400 -0.164874500 -0.25321409
## 125 -0.1089683600  0.2658048800 -0.0748110990 -0.206492270 -0.30455573
## 126  0.1403910200 -0.1978032100  0.0928935800 -0.170440850 -0.18820842
## 127 -0.0234932050  0.1920615000 -0.2944071100 -0.048825749 -0.11708516
## 128  0.0284556230  0.2530427400 -0.4564709300 -0.088540677 -0.04725246
## 129  0.0498619600  0.2607489300 -0.3400734100 -0.098690394  0.01331304
## 130 -0.0212167770  0.2401811000 -0.0586543930  0.028422451  0.18395782
## 131  0.1200142600 -0.0523288450  0.0888055580  0.080265708  0.19543705
## 132  0.1195109400 -0.0335084080 -0.0502844890 -0.025681958  0.04566343
## 133  0.0695137230  0.0438808530 -0.1419560000 -0.070359730 -0.09866979
## 134 -0.0100746120  0.2863528100 -0.4977955700 -0.077787454 -0.13898659
## 135 -0.1894231400  0.5420097400 -0.3648770800  0.133358580  0.24274736
## 136  0.1993501000 -0.1710985800  0.0987230850  0.122205780  0.15024177
## 137 -0.1465551900  0.1304313500  0.0285706910  0.147554430  0.12467351
## 138 -0.0660119580  0.1537331500 -0.0493292460  0.100149980  0.10625082
## 139  0.3705447400 -0.2214157300  0.0440720220  0.120906110  0.01273850
## 140 -0.0375554310  0.1980244600 -0.1842745000  0.073107976 -0.04265889
## 141 -0.0714817640  0.2220311400 -0.0781723220  0.089121500  0.07281668
## 142  0.0583814670  0.1423225700  0.0099049523  0.172161270  0.13627899
## 143  0.1814680500 -0.0165579260 -0.0728242360  0.060417914 -0.02614713
## 144  0.1559889900 -0.0472556660 -0.0285426580  0.059491854 -0.06165703
## 145 -0.0051142644  0.0800440820 -0.0295470060 -0.018090242 -0.11528655
## 146  0.0396655520  0.0915984750  0.0439197290  0.071970206  0.05147785
## 147  0.0934692840  0.2686026400 -0.0766338630  0.040168399  0.15527003
## 148  0.0824854450  0.0807386950 -0.0677115370 -0.059902458 -0.05868036
## 149  0.0345638620  0.1811355200 -0.2832371800 -0.017039858 -0.17464507
## 150  0.0564644910  0.3012755000 -0.3042996700 -0.015987782 -0.07911266
## 151  0.0734071330  0.3101355600 -0.2781555900 -0.144521220 -0.33477144
## 152  0.0856744780  0.1049482500 -0.0077893914 -0.180750290 -0.38786699
## 153  0.2713783700 -0.0644815440 -0.0108982860 -0.142457910 -0.43158019
## 154  0.4201914600 -0.2838411300  0.1027917500 -0.114722580 -0.31243126
## 155  0.3151011900 -0.1913532100  0.0050357642 -0.113543410 -0.29191192
## 156  0.1326931400 -0.1001700800  0.0498378620 -0.160903100 -0.40943463
## 157  0.1343724500 -0.0430911980  0.0833157880 -0.155446530 -0.39053748
```

```
## 158   0.1088719700   0.0171455510   0.0007366699 -0.136595560 -0.38608182
## 159   0.2222409400  -0.1517912500   0.2473766800 -0.088105584 -0.22682976
## 160   0.3316101300  -0.0916016650   0.0383749640 -0.153568090 -0.32198846
## 161   0.1164457300   0.0736356600   0.0124476280 -0.127183700 -0.40264720
## 162   0.1245499200  -0.1155334700   0.1850548600 -0.132582130 -0.42796573
## 163   0.2748793000  -0.2398919400   0.1399805200 -0.210910600 -0.44135997
## 164   0.3213510000  -0.1974104300   0.0087408448 -0.162489970 -0.38761003
## 165   0.3233789800  -0.1983491000   0.1444285400 -0.193785910 -0.31894997
## 166   0.4275846300  -0.1109613800   0.0505178260 -0.264245800 -0.34058163
## 167   0.4732497900  -0.0403929140  -0.1369637800 -0.235804510 -0.37432701
## 168   0.3260327900  -0.1467862100   0.1452215500 -0.119610400 -0.33466647
## 169   0.2369866800  -0.2133677200   0.1419728700 -0.143934940 -0.28395851
## 170   0.2505250200  -0.2156539400   0.1197375700 -0.115904040 -0.31906248
## 171   0.3618292400  -0.0682658760  -0.1223225400 -0.113249470 -0.36831475
## 172   0.3175043700  -0.0547894920  -0.1757717400 -0.170195260 -0.42279772
## 173   0.4281176900  -0.2537839500   0.0363053910 -0.199625810 -0.37187814
## 174   0.2546173900  -0.1437065500   0.1707895200 -0.150632800 -0.26536176
## 175   0.1705426000   0.0392080460   0.0332499200 -0.185247830 -0.29472130
## 176   0.3301168000  -0.4827936100   0.3704445800 -0.192335010 -0.27083037
## 177  -0.0749834020   0.1817093700   0.0778883840 -0.924606850 -0.92697005
##                NA             NA             NA           NA           NA           NA
## 1     -0.95799295    -0.94630524    -0.9925557 -0.959433880 -0.9984928 -0.95763740
## 2     -0.97824725    -0.97871147    -0.9953329 -0.979289150 -0.9994880 -0.98124826
## 3     -0.98832678    -0.98649613    -0.9953329 -0.983703130 -0.9996821 -0.98576690
## 4     -0.98643053    -0.98649613    -0.9970448 -0.986541760 -0.9997374 -0.98350880
## 5     -0.99117030    -0.99096187    -0.9970448 -0.992827150 -0.9998807 -0.98960814
## 6     -0.99500944    -0.99574572    -0.9941746 -0.994294990 -0.9999199 -0.99346324
## 7     -0.98675558    -0.97819083    -0.9931460 -0.987465700 -0.9997342 -0.99123713
## 8     -0.97650361    -0.97819083    -0.9875975 -0.977457660 -0.9994359 -0.97476126
## 9     -0.97897119    -0.97844904    -0.9941501 -0.983630870 -0.9996110 -0.98001684
## 10    -0.98837827    -0.98774589    -0.9941501 -0.986771970 -0.9997439 -0.99133543
## 11    -0.98753995    -0.98774589    -0.9925091 -0.988040330 -0.9997656 -0.98958642
## 12    -0.99579871    -0.99541508    -0.9925091 -0.994775630 -0.9999301 -0.99407242
## 13    -0.99609128    -0.99541508    -0.9915173 -0.995325010 -0.9999395 -0.99413589
## 14    -0.99807005    -0.99736644    -0.9994408 -0.996700130 -0.9999638 -0.99629721
## 15    -0.83587056    -0.90351446    -0.9756005 -0.904587780 -0.9917899 -0.79512503
## 16    -0.98798809    -0.98472462    -0.9900188 -0.984463810 -0.9996974 -0.98792482
## 17    -0.99117062    -0.99169252    -0.9904929 -0.989043070 -0.9998118 -0.99046331
## 18    -0.99358148    -0.99093326    -0.9950441 -0.995071550 -0.9999213 -0.99364019
## 19    -0.99816625    -0.99093326    -0.9950441 -0.998726810 -0.9999856 -0.99782077
## 20    -0.99841011    -0.99704606    -0.9960469 -0.997972370 -0.9999808 -0.99724024
## 21    -0.99759806    -0.99542945    -0.9960469 -0.998441330 -0.9999840 -0.99554592
## 22    -0.99753235    -0.99406371    -0.9950034 -0.997891000 -0.9999761 -0.99507095
## 23    -0.99694728    -0.99406371    -0.9955760 -0.995893460 -0.9999497 -0.99404911
## 24    -0.99592005    -0.99414104    -0.9955760 -0.995215340 -0.9999377 -0.99324706
## 25    -0.99542435    -0.99299264    -0.9952074 -0.994193440 -0.9999173 -0.99462698
## 26    -0.99487387    -0.99299264    -0.9938545 -0.995749400 -0.9999378 -0.99489936
## 27    -0.99771410    -0.99436847    -0.9941725 -0.998552500 -0.9999846 -0.99597318
## 28    -0.20730115    -0.46830669    -0.8741391 -0.554369200 -0.8320549 -0.26658477
## 29    -0.93254518    -0.94554244    -0.9833129 -0.934593770 -0.9968400 -0.91046872
```

```
## 30    -0.97628471  -0.97032910  -0.9833129  -0.976994980  -0.9993789  -0.98868228
## 31    -0.54741684  -0.64463597  -0.9919874  -0.815758640  -0.9538560  -0.70688322
## 32    -0.52291840  -0.62415949  -0.9919874  -0.507396680  -0.8621489  -0.54944598
## 33    -0.47032362  -0.62415949  -0.8500062  -0.621027250  -0.9035508  -0.45441637
## 34    -0.91435450  -0.89982042  -0.9910566  -0.915953840  -0.9945993  -0.93457224
## 35    -0.96145787  -0.96576109  -0.9910566  -0.974805040  -0.9991517  -0.97121710
## 36    -0.99534349  -0.99294196  -0.9947166  -0.995238360  -0.9999346  -0.99429674
## 37    -0.99911184  -0.99708483  -0.9956285  -0.999067440  -0.9999942  -0.99714322
## 38    -0.99635346  -0.99266963  -0.9973361  -0.998011800  -0.9999712  -0.99665824
## 39    -0.95459778  -0.93281186  -0.9799299  -0.926233340  -0.9965117  -0.96212264
## 40    -0.94899636  -0.96328599  -0.9911172  -0.968162890  -0.9988021  -0.95465736
## 41    -0.99602927  -0.99315619  -0.9941288  -0.992951060  -0.9999008  -0.99551693
## 42    -0.99477500  -0.99211327  -0.9974381  -0.993437900  -0.9999015  -0.99541072
## 43    -0.99267801  -0.99211327  -0.9974381  -0.990914070  -0.9998549  -0.99038875
## 44    -0.99400937  -0.98932754  -0.9965481  -0.987547310  -0.9997920  -0.99411719
## 45    -0.99500811  -0.98932754  -0.9916659  -0.990122640  -0.9998455  -0.99502728
## 46    -0.99779467  -0.99355314  -0.9916659  -0.993024120  -0.9999082  -0.99715909
## 47    -0.99843348  -0.99355314  -0.9978503  -0.994146360  -0.9999274  -0.99732715
## 48    -0.99632057  -0.99420648  -0.9978503  -0.993548920  -0.9999129  -0.99533715
## 49    -0.99460938  -0.99420648  -0.9939445  -0.992640980  -0.9998927  -0.99179797
## 50    -0.99490685  -0.99454562  -0.9939445  -0.992051450  -0.9998827  -0.99256639
## 51    -0.99525420  -0.99426681  -0.9922420  -0.991474710  -0.9998747  -0.99385354
## 52    -0.85064507  -0.82506078  -0.9916650  -0.905122910  -0.9914947  -0.87122077
## 53    -0.98200551  -0.97853805  -0.9960341  -0.987446090  -0.9997034  -0.98641994
## 54    -0.99610625  -0.99577738  -0.9960341  -0.997987630  -0.9999727  -0.99525244
## 55    -0.99821243  -0.99713065  -0.9958402  -0.999504490  -0.9999979  -0.99601814
## 56    -0.99801754  -0.99556295  -0.9973261  -0.999057730  -0.9999918  -0.99630612
## 57    -0.99603295  -0.99077011  -0.9978719  -0.997429450  -0.9999651  -0.99449106
## 58    -0.99644580  -0.99077011  -0.9978719  -0.997419660  -0.9999665  -0.99591501
## 59    -0.99583865  -0.98814262  -0.9976524  -0.997282120  -0.9999591  -0.99600836
## 60    -0.99488439  -0.98814262  -0.9965835  -0.995770500  -0.9999360  -0.99340605
## 61    -0.99556074  -0.99496674  -0.9963627  -0.995868300  -0.9999444  -0.99420648
## 62    -0.99709265  -0.99500397  -0.9968143  -0.997588190  -0.9999708  -0.99656948
## 63    -0.99857225  -0.99655929  -0.9968143  -0.997867250  -0.9999792  -0.99736677
## 64    -0.99819081  -0.99717872  -0.9943586  -0.997318800  -0.9999728  -0.99576141
## 65    -0.52045757  -0.48141557  -0.9422942  -0.721626990  -0.9229399  -0.74231718
## 66    -0.92012779  -0.94678892  -0.9872940  -0.942902620  -0.9971456  -0.91019487
## 67     0.07546684  -0.36572046  -0.9872940  -0.518427790  -0.7607672   0.12828636
## 68    -0.15732077  -0.36572046  -0.8334220  -0.362108240  -0.7314856  -0.13567442
## 69    -0.80626838  -0.72070646  -0.8334220  -0.676364250  -0.9468752  -0.82980516
## 70    -0.77151305  -0.66795693  -0.7739760  -0.634960060  -0.9295791  -0.84057402
## 71     0.14688483   0.15370675  -0.7739760  -0.062945893  -0.4187506  -0.08467829
## 72    -0.18837723   0.15370675   0.1281318   0.294838960  -0.1801745  -0.33463273
## 73    -0.04651580  -0.37138266  -0.9311519  -0.331015760  -0.6981911   0.12301778
## 74    -0.81281361  -0.77393981  -0.9337380  -0.849351620  -0.9809547  -0.90267392
## 75    -0.91488144  -0.94248758  -0.9902052  -0.950780660  -0.9973868  -0.89622326
## 76    -0.99138237  -0.98458674  -0.9902052  -0.989813350  -0.9998227  -0.99189064
## 77    -0.99265755  -0.99190346  -0.9923951  -0.990560140  -0.9998456  -0.99143035
## 78    -0.99470055  -0.99342968  -0.9923951  -0.992300700  -0.9998881  -0.99225600
## 79    -0.29045891  -0.23274851  -0.6833015  -0.224559620  -0.6716960  -0.30212121
```

```
## 80   -0.26605200 -0.23274851 -0.7392301 -0.126502690 -0.5991428 -0.25306176
## 81   -0.32122499 -0.32191904 -0.7392301 -0.160100010 -0.6315176 -0.38995894
## 82   -0.26850021 -0.21590597 -0.6532344 -0.073513080 -0.5555910 -0.38127494
## 83   -0.28710281 -0.21590597 -0.8714943 -0.049492050 -0.5397611 -0.39003755
## 84   -0.31537169 -0.24153742 -0.8714943 -0.077394435 -0.5667160 -0.40764808
## 85   -0.30637325 -0.24153742 -0.5405676 -0.095493110 -0.5799239 -0.45362780
## 86   -0.29711074 -0.21974984 -0.5405676 -0.113443280 -0.5927925 -0.39806079
## 87   -0.37802238 -0.27682438 -0.6355853 -0.169629600 -0.6491203 -0.43840012
## 88   -0.31288324 -0.24253563 -0.7318147 -0.107472340 -0.5904463 -0.38935066
## 89   -0.34964022 -0.24253563 -0.7636373 -0.129802930 -0.6100275 -0.46726061
## 90   -0.33831010 -0.20045673 -0.7636373 -0.104808760 -0.5904248 -0.46297058
## 91   -0.28830479 -0.20045673 -0.6579724 -0.063225767 -0.5509673 -0.37800569
## 92   -0.23922406 -0.03033792 -0.6799817 -0.017610633 -0.5003433 -0.30633808
## 93   -0.24692408 -0.03033792 -0.6799817 -0.035592505 -0.5175916 -0.24437273
## 94   -0.28693811 -0.24192138 -0.6724106 -0.062178356 -0.5524586 -0.28440942
## 95   -0.28529385 -0.24192138 -0.4721525 -0.072821245 -0.5575357 -0.37913677
## 96   -0.28236481 -0.26952037 -0.5822961 -0.089840429 -0.5706794 -0.38301423
## 97   -0.29370596 -0.24174021 -0.5822961 -0.113136280 -0.5942681 -0.36187624
## 98   -0.31070564 -0.24174021 -0.7415082 -0.206715790 -0.6650678 -0.38718964
## 99   -0.25324615 -0.20148023 -0.5906801 -0.046277939 -0.5357709 -0.28097580
## 100  -0.25083821 -0.20148023 -0.6000234 -0.006788252 -0.4995660 -0.32123201
## 101  -0.31213000 -0.26385898 -0.6000234 -0.044258164 -0.5411881 -0.39214696
## 102  -0.27968264  0.13897527 -0.7157385 -0.041734145 -0.5241700 -0.37722858
## 103  -0.25299801  0.13897527 -0.7157385 -0.083892745 -0.5515416 -0.41836919
## 104  -0.20222280 -0.04061396 -0.6824306 -0.070705961 -0.5382937 -0.31588417
## 105  -0.23944008 -0.04061396 -0.6892662 -0.069540692 -0.5449636 -0.30256306
## 106  -0.29003163 -0.27193724 -0.6892662 -0.086942954 -0.5717225 -0.37276888
## 107  -0.22839559 -0.19668882 -0.5682228 -0.064423256 -0.5414150 -0.34037110
## 108  -0.27651813 -0.16560060 -0.5682228 -0.046465246 -0.5325493 -0.41305240
## 109  -0.34352688 -0.16560060 -0.6631846 -0.066594317 -0.5623039 -0.47338847
## 110  -0.30926911 -0.28404903 -0.8445580 -0.104721850 -0.5896438 -0.36738822
## 111  -0.30466500 -0.28404903 -0.8445580 -0.146100560 -0.6207508 -0.34477838
## 112  -0.12926112 -0.11211325 -0.7908270 -0.028582068 -0.4952801 -0.18059732
## 113  -0.32352886 -0.19677282 -0.7908270 -0.111311720 -0.5929813 -0.37101137
## 114  -0.36773754 -0.19677282 -0.7221899 -0.126372480 -0.6112246 -0.51659928
## 115  -0.32129452 -0.23349994 -0.7221899 -0.105686140 -0.5864203 -0.44152930
## 116  -0.28886360 -0.23349994 -0.6260679 -0.083591000 -0.5646785 -0.38444870
## 117  -0.30375279 -0.24135290 -0.7417828 -0.067429345 -0.5609211 -0.41629830
## 118  -0.33750557 -0.32411282 -0.7417828 -0.120646470 -0.6080845 -0.40900608
## 119  -0.38291508 -0.32411282 -0.6925189 -0.237415250 -0.6937517 -0.44505594
## 120  -0.36309957 -0.33813247 -0.6687929 -0.250393640 -0.7005265 -0.37588244
## 121  -0.35443167 -0.22557446 -0.6687929 -0.243371870 -0.6945828 -0.35438276
## 122  -0.39845031 -0.22557446 -0.9453941 -0.246311570 -0.6987898 -0.51385409
## 123  -0.35608264 -0.17206864 -0.9453941 -0.193292510 -0.6556402 -0.47684229
## 124  -0.32557912 -0.17206864 -0.7436093 -0.164874500 -0.6340885 -0.38800369
## 125  -0.37520242 -0.26855770 -0.6858984 -0.206492270 -0.6715690 -0.50602103
## 126  -0.28297761 -0.08137791 -0.8386508 -0.170440850 -0.6256801 -0.38149936
## 127  -0.22520739 -0.11500651 -0.7607802 -0.048825749 -0.5201784 -0.40741363
## 128  -0.16053937 -0.08326230 -0.7607802 -0.088540677 -0.5356710 -0.35702374
## 129  -0.13351500  0.01380348 -0.6582115 -0.098690394 -0.5289727 -0.34735850
```

```
## 130   0.04183441   0.09272293 -0.5902169   0.028422451 -0.3807923 -0.23521446
## 131   0.04646651   0.09272293 -0.4374004   0.080265708 -0.3317116 -0.28282889
## 132  -0.13681732   0.11707969 -0.4228904  -0.025681958 -0.4634847 -0.52606061
## 133  -0.18366501   0.11707969 -0.4552679  -0.070359730 -0.5331801 -0.23458871
## 134  -0.19484350  -0.08875289 -0.6172783  -0.077787454 -0.5475629 -0.19767115
## 135   0.09033096   0.31830179 -0.6665270   0.133358580 -0.2685841 -0.13747175
## 136   0.00711470   0.31830179 -0.6665270   0.122205780 -0.3058638 -0.20151491
## 137  -0.04875205   0.35030630 -0.6187571   0.147554430 -0.2888230 -0.26860703
## 138  -0.08941795   0.35030630 -0.6187571   0.100149980 -0.3383805 -0.34261161
## 139  -0.09839103   0.04523200 -0.4708229   0.120906110 -0.3430612 -0.24183760
## 140  -0.12214145   0.04059968 -0.5763110   0.073107976 -0.4001708 -0.23795653
## 141  -0.03792351   0.19634252 -0.6715788   0.089121500 -0.3572993 -0.16880815
## 142   0.04403008   0.19634252 -0.6715788   0.172161270 -0.2617723 -0.01379041
## 143  -0.07142112  -0.16471617 -0.6778196   0.060417914 -0.4076453 -0.03909150
## 144  -0.14301226  -0.02226829 -0.8273492   0.059491854 -0.4166914 -0.21732432
## 145  -0.26029716  -0.02226829 -0.8273492  -0.018090242 -0.4948863 -0.44554993
## 146  -0.06823661  -0.03044878 -0.5376172   0.071970206 -0.3783008 -0.24193132
## 147   0.08253412  -0.03044878 -0.6880067   0.040168399 -0.3787271 -0.05513545
## 148  -0.16454407  -0.10074212 -0.7218762  -0.059902458 -0.5160520 -0.29475051
## 149  -0.25757843  -0.13983673 -0.7218762  -0.017039858 -0.5063309 -0.38071862
## 150  -0.16948944  -0.12993093 -0.5615621  -0.015987782 -0.4852382 -0.26215046
## 151  -0.39005033  -0.30861601 -0.7204184  -0.144521220 -0.6336381 -0.48481176
## 152  -0.44338655  -0.39007875 -0.7204184  -0.180750290 -0.6673806 -0.52618944
## 153  -0.48256832  -0.44804840 -0.7066149  -0.142457910 -0.6467035 -0.55048733
## 154  -0.37859081  -0.27314860 -0.7427597  -0.114722580 -0.6081861 -0.42607659
## 155  -0.36092488  -0.27314860 -0.7427597  -0.113543410 -0.6038271 -0.40367948
## 156  -0.48031258  -0.35548786 -0.8859642  -0.160903100 -0.6567155 -0.55078135
## 157  -0.44471209  -0.35657241 -0.8859642  -0.155446530 -0.6500931 -0.45098118
## 158  -0.42944529  -0.35794686 -0.7270043  -0.136595560 -0.6359094 -0.45774228
## 159  -0.29976337  -0.26594667 -0.8552684  -0.088105584 -0.5729196 -0.36462838
## 160  -0.38277796  -0.26594667 -0.9066088  -0.153568090 -0.6380147 -0.43512972
## 161  -0.44559954  -0.40421796 -0.9066088  -0.127183700 -0.6314945 -0.51387210
## 162  -0.48824642  -0.38027151 -0.7430410  -0.132582130 -0.6390484 -0.56317340
## 163  -0.50670457  -0.38027151 -0.7583853  -0.210910600 -0.6954040 -0.59851983
## 164  -0.47137383  -0.27519434 -0.8077118  -0.162489970 -0.6546332 -0.58837641
## 165  -0.38322132  -0.27519434 -0.9624766  -0.193785910 -0.6654351 -0.43076617
## 166  -0.38035727  -0.45270541 -0.9624766  -0.264245800 -0.7146550 -0.31842945
## 167  -0.42164670  -0.48705416 -0.9246065  -0.235804510 -0.7019856 -0.39217224
## 168  -0.43530140  -0.27078335 -0.7029865  -0.119610400 -0.6154678 -0.53201964
## 169  -0.36372265  -0.14008918 -0.7189665  -0.143934940 -0.6246812 -0.40799087
## 170  -0.36403715  -0.14008918 -0.7189665  -0.115904040 -0.6101672 -0.38866974
## 171  -0.41604265  -0.36404429 -0.6138716  -0.113249470 -0.6160625 -0.45323750
## 172  -0.48813865  -0.36404429 -0.6138716  -0.170195260 -0.6651323 -0.59316047
## 173  -0.41054840  -0.36874191 -0.5302577  -0.199625810 -0.6778120 -0.46065368
## 174  -0.28104803  -0.32074187 -0.6294169  -0.150632800 -0.6261992 -0.26454682
## 175  -0.36443687  -0.23733876 -0.6929543  -0.185247830 -0.6555346 -0.41118583
## 176  -0.37727645  -0.07138243 -0.6929543  -0.192335010 -0.6562010 -0.46182542
## 177  -0.93661920  -0.92198951 -0.9906604  -0.924606850 -0.9960587 -0.94448576
##               NA           NA          NA            NA          NA           NA
## 1    -0.23258164  -0.173178740 -0.0228966600   0.0948315680   0.1918171500
```

```
## 2     -0.44187611   0.081568632  -0.1093660600   0.3117577100  -0.4116748000
## 3     -0.59993932   0.038049101  -0.0742122710   0.2540759900  -0.2961296600
## 4     -0.58900633  -0.092855878   0.0463961670  -0.0004664473   0.0371425090
## 5     -0.70459880   0.180441050  -0.2776567200   0.5155624300  -0.3558507600
## 6     -0.78527148   0.370338620  -0.3934519000   0.5634830200  -0.4815456900
## 7     -0.58617597   0.155920000  -0.2399421600   0.2930264600  -0.0627012180
## 8     -0.44777480   0.049663704  -0.1400816800   0.1503584300   0.0351372050
## 9     -0.49538336   0.382673960  -0.3370736400   0.2192151300  -0.1617669300
## 10    -0.61329295   0.430694650  -0.3973414300   0.2667853500  -0.0903310960
## 11    -0.61463968   0.373112800  -0.3430332100   0.3449071300  -0.2767495300
## 12    -0.84520103   0.415857260  -0.2762635500   0.3496341900  -0.5999291400
## 13    -0.86991263   0.479832760  -0.3739670000   0.4152130200  -0.5343058200
## 14    -0.92744189   0.471040190  -0.3623790600   0.4075726400  -0.5267360600
## 15     0.02351577  -0.520530440   0.4330236000  -0.4526969700   0.3813480500
## 16    -0.61242297   0.028785268  -0.1342421800   0.2464529500  -0.1058780900
## 17    -0.70013106   0.071744981  -0.1896596300   0.3401255700  -0.1601039800
## 18    -0.76520087   0.088873196  -0.0875747550   0.2307962300  -0.2997783300
## 19    -0.91164086   0.235037670  -0.1593994200   0.3072472200  -0.4611155600
## 20    -0.90050551   0.258864600  -0.2432917800   0.5054627700  -0.6077512400
## 21    -0.89308352   0.379181520  -0.4114213700   0.8416637800  -0.8810286700
## 22    -0.92305351   0.491834070  -0.4733726100   0.6948749200  -0.6693707700
## 23    -0.90350711   0.562489510  -0.3807686500   0.1120085400  -0.1604592800
## 24    -0.84348671   0.514524520  -0.3543013900   0.1550630100  -0.2212084700
## 25    -0.79617070   0.368455600  -0.3247492600   0.3950831100  -0.4074392800
## 26    -0.80723755   0.375532870  -0.3203405300   0.4365874500  -0.4865988600
## 27    -0.91034855   0.566921660  -0.4827341300   0.5396608300  -0.5079206500
## 28     0.50515047  -0.680112990   0.3151620100   0.0854901480   0.1764438700
## 29    -0.14265732  -0.204337880   0.0657635450  -0.0823802700   0.2613751000
## 30    -0.54095570   0.054501730  -0.0926288500   0.1704182100  -0.1827282800
## 31     0.05976542  -0.504479270   0.4242733200  -0.5528966500   0.5664656700
## 32     0.66630239  -0.596584650   0.5148715500  -0.5602065200   0.4693108700
## 33     0.49703540  -0.815434730   0.7941846400  -0.8282780600   0.4882381100
## 34     0.06007779  -0.464710860   0.3602128900  -0.2734398100   0.1989857300
## 35    -0.35975545  -0.042807522   0.0247153770  -0.1027109300   0.1024307800
## 36    -0.81601335   0.391776180  -0.4255955700   0.6364977300  -0.5670037100
## 37    -0.89046364   0.485173750  -0.4730411000   0.7442852400  -0.7573272100
## 38    -0.84569950   0.289682210  -0.3088169500   0.4674343700  -0.3879327200
## 39    -0.16387595  -0.268993640   0.1880795900  -0.1713020800   0.1674457200
## 40    -0.30477008   0.062678045  -0.0020708403  -0.1305923900   0.0089512310
## 41    -0.78870165   0.173412120  -0.0958165940  -0.0555705220   0.0040910928
## 42    -0.75696481   0.159987040  -0.0996125580   0.0681908180  -0.1453462200
## 43    -0.73894443   0.124903260  -0.0898207140   0.1588796800  -0.2741697100
## 44    -0.74299519   0.126192870  -0.2440781900   0.4887438200  -0.3524958800
## 45    -0.76779236   0.153920260  -0.2491693800   0.4074736400  -0.2537942000
## 46    -0.84819404   0.259591460  -0.2177301200   0.3518555400  -0.4915183000
## 47    -0.87549047   0.510861400  -0.4257495800   0.3573448100  -0.3583436600
## 48    -0.85250968   0.466102920  -0.4071317500   0.2436612400  -0.1106279900
## 49    -0.80832684   0.319715110  -0.2889422300   0.0785383330   0.0968399040
## 50    -0.78311216   0.231662460  -0.1580392400  -0.0558554500   0.0644771830
## 51    -0.82233554   0.321446470  -0.2112775800   0.2033330400  -0.3894865000
```

```
## 52    0.14110184 -0.567937960  0.5682121000 -0.6235346600  0.3751150300
## 53   -0.55813971  0.303159730 -0.1840101400  0.1234679600 -0.3148711000
## 54   -0.82835121  0.473281380 -0.3456974300  0.2008235400 -0.2074679200
## 55   -0.87317390  0.667267880 -0.5625668500  0.2800821700 -0.0733077290
## 56   -0.86877896  0.523870750 -0.3918436500  0.3020344000 -0.3417707700
## 57   -0.84523817  0.423354660 -0.3209596600  0.2857265500 -0.3060576600
## 58   -0.86644394  0.476707270 -0.3867187800  0.4099740300 -0.4282028600
## 59   -0.83114529  0.266163450 -0.2158199200  0.4897887000 -0.6673749100
## 60   -0.79190157  0.153347500 -0.0732730160  0.1965975600 -0.3818056200
## 61   -0.84504869  0.403171960 -0.2790765700  0.3002725100 -0.4304058700
## 62   -0.91233781  0.468275280 -0.3290873300  0.3073202600 -0.4254652700
## 63   -0.94405478  0.517299330 -0.3739047500  0.3177228300 -0.4220692500
## 64   -0.96402265  0.663835640 -0.5156883200  0.3264662700 -0.3026222400
## 65    0.40202058 -0.267282640  0.1347799200 -0.0653521190  0.1534597100
## 66   -0.12782387 -0.169693680  0.0623277130 -0.1477402300  0.3153021900
## 67    0.30829357 -0.660835940  0.5235404200 -0.2317880200  0.0299870750
## 68    0.77204404 -0.689010700  0.5554357200 -0.2910512000  0.0872920890
## 69    0.40518679 -0.847696490  0.7562588000 -0.6939885400  0.4537469000
## 70    0.41994029 -0.322171670  0.3889797800 -0.5215201600  0.2418041100
## 71    0.86177315 -0.367481340  0.2947559400 -0.4290546400  0.4839886400
## 72    0.81506713 -0.374984730  0.2772406900 -0.4263176800  0.5397004600
## 73    0.76441710 -0.499823740  0.3224840800 -0.4351279300  0.6507668700
## 74    0.16193509 -0.614294560  0.4280927100 -0.4137084000  0.5261945100
## 75   -0.16277211 -0.032125526 -0.0943210640  0.1900809600 -0.0416419860
## 76   -0.68876959  0.360751700 -0.3526190800  0.1239879400  0.0980526030
## 77   -0.71536080  0.358199120 -0.2965263000  0.1380617600 -0.0870704530
## 78   -0.76472242  0.409205830 -0.3190879500  0.3247483800 -0.4123654000
## 79    0.80179191  0.071633848 -0.0883988450 -0.1029951900  0.2954388800
## 80    0.87403064  0.046100766 -0.0907421630  0.0071522924  0.1819491400
## 81    0.85755800  0.139415920 -0.2013803800  0.1037466900  0.1712586700
## 82    0.84006762  0.089020914 -0.1859417900  0.2028466900  0.0508401810
## 83    0.87430946 -0.013517842 -0.0540982190  0.0400232160  0.1155762900
## 84    0.87852461 -0.080544239  0.0024097269 -0.0141241580  0.1667527600
## 85    0.85545042 -0.060648025  0.0008663825 -0.0892763880  0.2606428700
## 86    0.80867228  0.099839719 -0.1350929200  0.0301422910  0.1661456600
## 87    0.76189413 -0.097309240  0.0251930850  0.0310416080  0.0432281050
## 88    0.80902321  0.053010495 -0.1342250900  0.0370927930  0.2455446200
## 89    0.81425610  0.138224870 -0.2917465800  0.4383373700 -0.1217470600
## 90    0.83072874  0.075965531 -0.2264421000  0.4952526900 -0.2934405700
## 91    0.83174647 -0.059955099 -0.0638210000  0.2491876000 -0.1075521600
## 92    0.88867452 -0.090948792  0.0308085340  0.0479809220 -0.0039278620
## 93    0.87266198 -0.031004900 -0.0010291740 -0.0779892470  0.1866496500
## 94    0.85864784  0.113852830 -0.1577004900  0.0295989210  0.1939898700
## 95    0.82268641  0.152759740 -0.1871141300  0.0809887060  0.1222142400
## 96    0.84712927  0.046200262 -0.1045319900 -0.0045539705  0.2250433700
## 97    0.83072874  0.045146890 -0.0530253300 -0.1464996400  0.3030140000
## 98    0.85060551  0.061571107 -0.0594000590 -0.0515903710  0.1420375400
## 99    0.84217520  0.137906330 -0.1794015800  0.2255724800 -0.1053918200
## 100   0.85271309  0.212545490 -0.2224129600  0.2058445500 -0.1012639400
## 101   0.85654027  0.097592246 -0.1454620700  0.1163081800  0.0361582410
```

```
## 102    0.81956110    0.095621340 -0.1255720000 -0.0615520560   0.2970981000
## 103    0.81159089    0.115020050 -0.1488498500 -0.0453046760   0.3101344000
## 104    0.80234954    0.098589622 -0.1270805900 -0.0446466880   0.2702427100
## 105    0.81050104    0.006834123 -0.0436560950 -0.0970995550   0.2736902500
## 106    0.81077985   -0.040788209 -0.1056936700  0.3285722200  -0.1580925200
## 107    0.84400396    0.062276461 -0.1806585500  0.3508136300  -0.1554904800
## 108    0.88200086    0.128398240 -0.1884978400  0.2531159000  -0.1138964700
## 109    0.81214852    0.144790360 -0.1976774600  0.1741133400  -0.0004288831
## 110    0.81050104    0.124954490 -0.2004172300  0.1547626900   0.0945863680
## 111    0.80867228    0.048119737 -0.1338544500  0.1033381000   0.1409750500
## 112    0.82816106   -0.006818309 -0.0543022810  0.1797838500  -0.1237375200
## 113    0.80793336    0.136859180 -0.2239722300  0.2827849800  -0.0596085490
## 114    0.78742684    0.185515700 -0.2739934200  0.4144561200  -0.2355117300
## 115    0.81921017   -0.041971185 -0.1248941500  0.5325160100  -0.4284699500
## 116    0.87567812   -0.079602956 -0.0455629660  0.2926979900  -0.1964519000
## 117    0.87989328    0.018552979 -0.1590239800  0.3270656600  -0.1102036400
## 118    0.84052772    0.166493110 -0.3113485300  0.3338459900   0.0647956020
## 119    0.76087640    0.124422640 -0.2599674500  0.4081230600  -0.1186443000
## 120    0.77625920   -0.038122982 -0.0147438990 -0.0297562830   0.1726016200
## 121    0.81983992   -0.012179873  0.0070245367 -0.0881377610   0.1387999400
## 122    0.83026864    0.064252784 -0.1285504400  0.2511330000  -0.1701097800
## 123    0.81608486   -0.019925406 -0.0817949940  0.3383315400  -0.2896677700
## 124    0.84986660   -0.146720510  0.0540527520  0.1631646300  -0.1566150400
## 125    0.81425610   -0.018326819 -0.1089683600  0.2658048800  -0.0748110990
## 126    0.83768123   -0.107065640  0.1403910200 -0.1978032100   0.0928935800
## 127    0.88309070    0.013205649 -0.0234932050  0.1920615000  -0.2944071100
## 128    0.83209741   -0.035541180  0.0284556230  0.2530427400  -0.4564709300
## 129    0.81745352   -0.122338270  0.0498619600  0.2607489300  -0.3400734100
## 130    0.85334284   -0.125334910 -0.0212167770  0.2401811000  -0.0586543930
## 131    0.86770791   -0.180221550  0.1200142600 -0.0523288450   0.0888055580
## 132    0.78144738   -0.129588420  0.1195109400 -0.0335084080  -0.0502844890
## 133    0.79757675   -0.078638364  0.0695137230  0.0438808530  -0.1419560000
## 134    0.77980756    0.013183617 -0.0100746120  0.2863528100  -0.4977955700
## 135    0.90222856    0.039330651 -0.1894231400  0.5420097400  -0.3648770800
## 136    0.89316850   -0.210100720  0.1993501000 -0.1710985800   0.0987230850
## 137    0.89288968    0.105546000 -0.1465551900  0.1304313500   0.0285706910
## 138    0.85334284    0.003873213 -0.0660119580  0.1537331500  -0.0493292460
## 139    0.89316850   -0.414867330  0.3705447400 -0.2214157300   0.0440720220
## 140    0.87852461   -0.024157120 -0.0375554310  0.1980244600  -0.1842745000
## 141    0.93994664   -0.024928480 -0.0714817640  0.2220311400  -0.0781723220
## 142    0.85836903   -0.201153530  0.0583814670  0.1423225700   0.0099049523
## 143    0.88547710   -0.230445540  0.1814680500 -0.0165579260  -0.0728242360
## 144    0.86844682   -0.189027480  0.1559889900 -0.0472556660  -0.0285426580
## 145    0.83237622   -0.045035181 -0.0051142644  0.0800440820  -0.0295470060
## 146    0.83768123   -0.160231850  0.0396655520  0.0915984750   0.0439197290
## 147    0.89106092   -0.324404340  0.0934692840  0.2686026400  -0.0766338630
## 148    0.87989328   -0.156721390  0.0824854450  0.0807386950  -0.0677115370
## 149    0.84775902   -0.069460974  0.0345638620  0.1811355200  -0.2832371800
## 150    0.87009430   -0.189500570  0.0564644910  0.3012755000  -0.3042996700
## 151    0.80179191   -0.253645770  0.0734071330  0.3101355600  -0.2781555900
```

```
## 152   0.76618141 -0.236702910  0.0856744780  0.1049482500 -0.0077893914
## 153   0.79273185 -0.384452860  0.2713783700 -0.0644815440 -0.0108982860
## 154   0.78668793 -0.484930070  0.4201914600 -0.2838411300  0.1027917500
## 155   0.80024196 -0.348736980  0.3151011900 -0.1913532100  0.0050357642
## 156   0.77938451 -0.170423230  0.1326931400 -0.1001700800  0.0498378620
## 157   0.80480805 -0.236987830  0.1343724500 -0.0430911980  0.0833157880
## 158   0.78816576 -0.206294380  0.1088719700  0.0171455510  0.0007366699
## 159   0.85545042 -0.355097980  0.2222409400 -0.1517912500  0.2473766800
## 160   0.82834235 -0.473742990  0.3316101300 -0.0916016650  0.0383749640
## 161   0.79027333 -0.272370510  0.1164457300  0.0736356600  0.0124476280
## 162   0.79648690 -0.214547080  0.1245499200 -0.1155334700  0.1850548600
## 163   0.78633699 -0.320336450  0.2748793000 -0.2398919400  0.1399805200
## 164   0.80308845 -0.363553310  0.3213510000 -0.1974104300  0.0087408448
## 165   0.81921017 -0.427555560  0.3233789800 -0.1983491000  0.1444285400
## 166   0.81425610 -0.611956730  0.4275846300 -0.1109613800  0.0505178260
## 167   0.75392392 -0.651123370  0.4732497900 -0.0403929140 -0.1369637800
## 168   0.76168744 -0.476238020  0.3260327900 -0.1467862100  0.1452215500
## 169   0.82166868 -0.278903460  0.2369866800 -0.2133677200  0.1419728700
## 170   0.82331616 -0.287346860  0.2505250200 -0.2156539400  0.1197375700
## 171   0.80445712 -0.464660740  0.3618292400 -0.0682658760 -0.1223225400
## 172   0.74935783 -0.380613940  0.3175043700 -0.0547894920 -0.1757717400
## 173   0.77067538 -0.490032810  0.4281176900 -0.2537839500  0.0363053910
## 174   0.79164200 -0.378494160  0.2546173900 -0.1437065500  0.1707895200
## 175   0.83385405 -0.331605530  0.1705426000  0.0392080460  0.0332499200
## 176   0.79996315 -0.309904850  0.3301168000 -0.4827936100  0.3704445800
## 177  -0.01592767 -0.111925050 -0.0749834020  0.1817093700  0.0778883840
##              NA          NA           NA          NA          NA
NA
## 1    -0.99330586 -0.994336410 -0.994500370 -0.99278399 -0.99120847 -
0.99330586
## 2    -0.99125349 -0.991694410 -0.992716030 -0.98866062 -0.99120847 -
0.99125349
## 3    -0.98853127 -0.990396900 -0.990650490 -0.98866062 -0.99301198 -
0.98853127
## 4    -0.99307804 -0.993380800 -0.993194520 -0.99340172 -0.99301198 -
0.99307804
## 5    -0.99348000 -0.995853710 -0.996107460 -0.99328290 -0.98132454 -
0.99348000
## 6    -0.99301770 -0.995424310 -0.995527400 -0.99328290 -0.99317504 -
0.99301770
## 7    -0.99131430 -0.989447830 -0.991090730 -0.98567750 -0.99317504 -
0.99131430
## 8    -0.99085085 -0.990388320 -0.992003950 -0.98567750 -0.97601033 -
0.99085085
## 9    -0.99332542 -0.992887470 -0.994063200 -0.98965923 -0.98468412 -
0.99332542
## 10   -0.98538815 -0.983643080 -0.984627640 -0.97867202 -0.98468412 -
0.98538815
## 11   -0.98441139 -0.986025150 -0.987352770 -0.97867202 -0.98081241 -
0.98441139
```

```
## 12   -0.99279492 -0.995271440 -0.994908340 -0.99578821 -0.98789428 -
0.99279492
## 13   -0.99486033 -0.997127200 -0.996745490 -0.99675634 -0.98789428 -
0.99486033
## 14   -0.99536254 -0.996000580 -0.996308160 -0.99418254 -0.98705928 -
0.99536254
## 15   -0.99047837 -0.989126840 -0.989703990 -0.98849177 -0.98398162 -
0.99047837
## 16   -0.99628275 -0.997540460 -0.998574970 -0.99480759 -0.98398162 -
0.99628275
## 17   -0.99552049 -0.998926310 -0.999032100 -0.99723994 -0.97920399 -
0.99552049
## 18   -0.99564686 -0.996738500 -0.996957050 -0.99455144 -0.99717176 -
0.99564686
## 19   -0.99585704 -0.997312420 -0.997401830 -0.99455144 -0.99717176 -
0.99585704
## 20   -0.99645316 -0.999917210 -0.999342080 -0.99971152 -0.99113950 -
0.99645316
## 21   -0.99547632 -0.997633560 -0.997544830 -0.99674768 -0.99113950 -
0.99547632
## 22   -0.99306888 -0.994404870 -0.994067080 -0.99559974 -0.97680023 -
0.99306888
## 23   -0.99222923 -0.992841390 -0.992109190 -0.99457242 -0.98298521 -
0.99222923
## 24   -0.99337454 -0.994357930 -0.993985500 -0.99457242 -0.98298521 -
0.99337454
## 25   -0.99333286 -0.995233700 -0.995274210 -0.99506619 -0.98364338 -
0.99333286
## 26   -0.99251624 -0.994858660 -0.994565220 -0.99506619 -0.98364338 -
0.99251624
## 27   -0.99338553 -0.994561040 -0.994185380 -0.99435046 -0.99266886 -
0.99338553
## 28   -0.97526798 -0.971336980 -0.974217910 -0.97312196 -0.96536371 -
0.97526798
## 29   -0.99288968 -0.994585110 -0.994575070 -0.99273459 -0.97810861 -
0.99288968
## 30   -0.99423479 -0.994529380 -0.994858320 -0.99273459 -0.99021516 -
0.99423479
## 31   -0.91387886 -0.815977910 -0.811821840 -0.85778903 -0.99021516 -
0.91387886
## 32   -0.86678801 -0.838978440 -0.839764340 -0.85778903 -0.97528446 -
0.86678801
## 33   -0.94302661 -0.910680620 -0.912740540 -0.90968797 -0.96674921 -
0.94302661
## 34   -0.99107291 -0.989943730 -0.989181290 -0.99185081 -0.99236916 -
0.99107291
## 35   -0.99684513 -0.995909810 -0.995512990 -0.99586013 -0.99325350 -
0.99684513
## 36   -0.99763638 -0.997856910 -0.997649320 -0.99902168 -0.99325350 -
0.99763638
```

```
## 37   -0.99661376 -0.997569770 -0.997280910 -0.99888056 -0.99069119 -
0.99661376
## 38   -0.99594417 -0.997630170 -0.997183020 -0.99848136 -0.99488900 -
0.99594417
## 39   -0.98365142 -0.979543820 -0.980777700 -0.98146741 -0.98203506 -
0.98365142
## 40   -0.99236270 -0.992729340 -0.993033250 -0.99231158 -0.98574270 -
0.99236270
## 41   -0.99341850 -0.995219430 -0.995342490 -0.99655849 -0.98574270 -
0.99341850
## 42   -0.99298342 -0.993225020 -0.993600120 -0.99149703 -0.98221081 -
0.99298342
## 43   -0.99379982 -0.993499870 -0.993573740 -0.99149703 -0.98183407 -
0.99379982
## 44   -0.99413667 -0.994861230 -0.994949500 -0.99336283 -0.99030434 -
0.99413667
## 45   -0.99493458 -0.996098200 -0.996550260 -0.99336283 -0.99030434 -
0.99493458
## 46   -0.99568683 -0.997762710 -0.996997040 -0.99779134 -0.98360817 -
0.99568683
## 47   -0.99431393 -0.998161690 -0.997536180 -0.99906386 -0.98360817 -
0.99431393
## 48   -0.99348023 -0.996256490 -0.996518010 -0.99524516 -0.97371708 -
0.99348023
## 49   -0.99504090 -0.993353630 -0.993728730 -0.99255176 -0.99293812 -
0.99504090
## 50   -0.99598850 -0.995360700 -0.995833890 -0.99255176 -0.99293812 -
0.99598850
## 51   -0.99400136 -0.996161960 -0.996011690 -0.99590775 -0.99012753 -
0.99400136
## 52   -0.96035654 -0.902240920 -0.922893670 -0.89807806 -0.97808212 -
0.96035654
## 53   -0.99274198 -0.993201510 -0.993261320 -0.99184811 -0.98186428 -
0.99274198
## 54   -0.99513057 -0.994689400 -0.995206830 -0.99442355 -0.98967088 -
0.99513057
## 55   -0.99665137 -0.995649240 -0.996275710 -0.99474440 -0.99697789 -
0.99665137
## 56   -0.99626463 -0.995870630 -0.996571950 -0.99481471 -0.99697789 -
0.99626463
## 57   -0.99351031 -0.993188220 -0.994147230 -0.99169295 -0.98046610 -
0.99351031
## 58   -0.99320615 -0.993386380 -0.994086780 -0.99169295 -0.98046610 -
0.99320615
## 59   -0.99492830 -0.994531290 -0.994832190 -0.99281460 -0.98312648 -
0.99492830
## 60   -0.99327310 -0.994388560 -0.994410490 -0.99281460 -0.98312648 -
0.99327310
## 61   -0.99125179 -0.995679610 -0.995108650 -0.99708436 -0.98477935 -
0.99125179
```

```
## 62   -0.99333114 -0.996136530 -0.995847320 -0.99719509 -0.98477935 -
0.99333114
## 63   -0.99407848 -0.996600170 -0.996353320 -0.99690720 -0.99246387 -
0.99407848
## 64   -0.99366314 -0.994406370 -0.994627740 -0.99363933 -0.99246387 -
0.99366314
## 65   -0.92190280 -0.865827850 -0.881881160 -0.87666021 -0.96647414 -
0.92190280
## 66   -0.98397266 -0.980061070 -0.983448420 -0.98046353 -0.96889178 -
0.98397266
## 67   -0.85561065 -0.660853420 -0.701841430 -0.64570763 -0.96889178 -
0.85561065
## 68   -0.82366323 -0.686344750 -0.737786080 -0.64570763 -0.91694953 -
0.82366323
## 69   -0.94306581 -0.949136270 -0.950675070 -0.95207479 -0.94319292 -
0.94306581
## 70   -0.85112159 -0.791635410 -0.779187740 -0.85992928 -0.94319292 -
0.85112159
## 71   -0.56428225 -0.339621970 -0.418519700 -0.38144273 -0.79524517 -
0.56428225
## 72   -0.62540929 -0.293101240 -0.356188890 -0.38144273 -0.92438399 -
0.62540929
## 73   -0.92047767 -0.851344470 -0.869391400 -0.84450458 -0.98380991 -
0.92047767
## 74   -0.97568945 -0.980097740 -0.981414650 -0.97414465 -0.98380991 -
0.97568945
## 75   -0.98420696 -0.980542070 -0.983744890 -0.97414465 -0.98689976 -
0.98420696
## 76   -0.99420976 -0.996761980 -0.996540330 -0.99682587 -0.98689976 -
0.99420976
## 77   -0.99250833 -0.996391470 -0.996219630 -0.99190384 -0.97326518 -
0.99250833
## 78   -0.99000829 -0.994590610 -0.994585020 -0.99190384 -0.98154217 -
0.99000829
## 79   -0.28942433 -0.165000100 -0.185334480 -0.25401727 -0.76297347 -
0.28942433
## 80   -0.13850122 -0.198590300 -0.225198730 -0.25401727  0.06695507 -
0.13850122
## 81   -0.19435478 -0.219943580 -0.274387040 -0.17771560  0.06695507 -
0.19435478
## 82   -0.12948008 -0.173934610 -0.228953560 -0.17771560 -0.82091882 -
0.12948008
## 83   -0.15986860 -0.149850710 -0.193658520 -0.25127856 -0.82091882 -
0.15986860
## 84   -0.20600860 -0.199272440 -0.239370270 -0.25127856 -0.13814637 -
0.20600860
## 85   -0.14666420 -0.158368590 -0.170321420 -0.27378824 -0.13814637 -
0.14666420
## 86   -0.09706303 -0.061633391 -0.071853171 -0.22899524 -0.47943767 -
0.09706303
```

```
## 87   -0.28756092 -0.274002110 -0.331550110 -0.27509806 -0.34326231 -
0.28756092
## 88   -0.16292627 -0.169843070 -0.221496660 -0.27509806 -0.58375765 -
0.16292627
## 89   -0.20197140 -0.169959860 -0.217105450 -0.25187294 -0.58375765 -
0.20197140
## 90   -0.15146378 -0.161725640 -0.203218210 -0.17771083 -0.38522932 -
0.15146378
## 91   -0.12198932 -0.203663310 -0.257342620 -0.17771083 -0.31078654 -
0.12198932
## 92   -0.10161814 -0.100067130 -0.171185570 -0.03507538 -0.24596892 -
0.10161814
## 93   -0.05189008 -0.086472346 -0.115766800 -0.03507538 -0.24596892 -
0.05189008
## 94   -0.05564651 -0.117242140 -0.139470350 -0.13796527 -0.23592114 -
0.05564651
## 95   -0.08679676 -0.041082481 -0.072960243 -0.13239341 -0.37155150 -
0.08679676
## 96   -0.11413474 -0.105123830 -0.102383410 -0.13239341 -0.37155150 -
0.11413474
## 97   -0.09801408 -0.122121110 -0.101249210 -0.32277150 -0.16963657 -
0.09801408
## 98   -0.15230543 -0.143580440 -0.163814300 -0.32277150 -0.20005397 -
0.15230543
## 99   -0.09639143 -0.112683360 -0.159680860 -0.12605803 -0.21035548 -
0.09639143
## 100 -0.07225395 -0.076899022 -0.125688520 -0.12605803 -0.21035548 -
0.07225395
## 101 -0.10687664 -0.131724750 -0.174472580 -0.18844590 -0.15841817 -
0.10687664
## 102 -0.04904026  0.055555796 -0.041037291  0.09884526 -0.15841817 -
0.04904026
## 103 -0.11378360  0.053617929 -0.057055898  0.09884526 -0.55580906 -
0.11378360
## 104 -0.08714795  0.014729942 -0.055755027  0.05001392 -0.55580906 -
0.08714795
## 105 -0.14261311 -0.067012367 -0.141864550  0.05001392 -0.47117646 -
0.14261311
## 106 -0.20374475 -0.191534890 -0.204905900 -0.23574710 -0.47117646 -
0.20374475
## 107 -0.08847499 -0.066587764 -0.067750254 -0.23574710 -0.45133390 -
0.08847499
## 108 -0.04602888 -0.060305933 -0.097142451 -0.21020175 -0.46406246 -
0.04602888
## 109 -0.08568197 -0.116143630 -0.188722770 -0.21020175 -0.65384252 -
0.08568197
## 110 -0.11081780 -0.127267160 -0.165708280 -0.20650862 -0.65384252 -
0.11081780
## 111 -0.14944980 -0.150655600 -0.186082980 -0.20650862 -0.12548988 -
0.14944980
```

```
## 112 -0.01274344 -0.040980579 -0.069207608 -0.08299910 -0.56593837 -
0.01274344
## 113 -0.13280349 -0.148141420 -0.191745140 -0.16319687 -0.33287837 -
0.13280349
## 114 -0.16651819 -0.166133710 -0.192033820 -0.16319687 -0.26274598 -
0.16651819
## 115 -0.17747339 -0.188006800 -0.198368930 -0.24618507 -0.09022556 -
0.17747339
## 116 -0.17541493 -0.092307754 -0.129854190 -0.14689627 -0.20164468 -
0.17541493
## 117 -0.11932781 -0.051215632 -0.078825875 -0.14689627 -0.55661637 -
0.11932781
## 118 -0.13446971 -0.121219540 -0.150745770 -0.16413782 -0.55661637 -
0.13446971
## 119 -0.26565846 -0.240963630 -0.271856300 -0.25081047 -0.68560490 -
0.26565846
## 120 -0.27551773 -0.207768210 -0.253926790 -0.14005893 -0.68560490 -
0.27551773
## 121 -0.25351855 -0.215832530 -0.254075840 -0.14005893 -0.29559653 -
0.25351855
## 122 -0.23883716 -0.260964490 -0.311280300 -0.23547976 -0.56649125 -
0.23883716
## 123 -0.15097398 -0.216206020 -0.256222790 -0.23547976 -0.56649125 -
0.15097398
## 124 -0.16853477 -0.252847400 -0.273011900 -0.34061466 -0.42314420 -
0.16853477
## 125 -0.24507052 -0.202018020 -0.254472290 -0.11362644 -0.34740536 -
0.24507052
## 126 -0.31348196 -0.169969590 -0.273364950 -0.09120241 -0.71212709 -
0.31348196
## 127 -0.18847274 -0.157002850 -0.255930670 -0.12601089 -0.32947415 -
0.18847274
## 128 -0.16234534 -0.070654570 -0.134793390 -0.12601089 -0.54329793 -
0.16234534
## 129 -0.14837988 -0.061243742 -0.113274090 -0.13460586 -0.54329793 -
0.14837988
## 130 -0.05100376 -0.029108804 -0.099487124 -0.05703120 -0.42762018 -
0.05100376
## 131 -0.01073734  0.141957030  0.081884797  0.09368617 -0.30317564 -
0.01073734
## 132 -0.11114242  0.155922420  0.109119900  0.09368617 -0.69032928 -
0.11114242
## 133 -0.20389863 -0.038613066 -0.081719331  0.01308984 -0.69032928 -
0.20389863
## 134 -0.19375257 -0.062550634 -0.101422610 -0.16943893 -0.46434148 -
0.19375257
## 135  0.03256585  0.323700150  0.194710360  0.28879916 -0.85962379
0.03256585
## 136  0.01997872  0.163680110  0.141930450 -0.04256866 -0.57565930
0.01997872
```

```
## 137  0.04193894  0.203088000  0.213279540 -0.08888889 -0.46264138
0.04193894
## 138 -0.02984070  0.102921120  0.061160742 -0.08888889 -0.61218002 -
0.02984070
## 139 -0.09100216 -0.057355763 -0.087093346 -0.15984634 -0.61218002 -
0.09100216
## 140 -0.12276729 -0.050212589 -0.048892158 -0.16841979 -0.67880231 -
0.12276729
## 141 -0.01036468  0.018851956  0.003675882 -0.13353161 -0.67880231 -
0.01036468
## 142 -0.02617416 -0.018873206 -0.039654553 -0.13353161 -0.40978857 -
0.02617416
## 143 -0.10010991 -0.207377910 -0.245249120 -0.22581868 -0.39535470 -
0.10010991
## 144 -0.12778860 -0.128884390 -0.167836470 -0.22581868 -0.39535470 -
0.12778860
## 145 -0.06094852 -0.005088398 -0.016841043 -0.19061799 -0.34997859 -
0.06094852
## 146  0.01436136 -0.030411140 -0.033521368 -0.19061799 -0.46049856
0.01436136
## 147 -0.14787360 -0.193152030 -0.182863490 -0.33022536 -0.46049856 -
0.14787360
## 148 -0.16677550 -0.259381350 -0.266912380 -0.33022536 -0.53450002 -
0.16677550
## 149 -0.12028331 -0.250956630 -0.245017010 -0.35897625 -0.53450002 -
0.12028331
## 150 -0.14706335 -0.198365890 -0.194029810 -0.33871055 -0.33688658 -
0.14706335
## 151 -0.46148363 -0.541884790 -0.557210410 -0.55612271 -0.52091655 -
0.46148363
## 152 -0.49228098 -0.591207690 -0.604488600 -0.59970022 -0.51334925 -
0.49228098
## 153 -0.52451544 -0.591735170 -0.606086740 -0.59970022 -0.83283214 -
0.52451544
## 154 -0.48636301 -0.526271990 -0.539527610 -0.50344618 -0.83283214 -
0.48636301
## 155 -0.44091353 -0.427651520 -0.475981120 -0.41771176 -0.38142698 -
0.44091353
## 156 -0.50226961 -0.453297860 -0.514401190 -0.41771176 -0.70834453 -
0.50226961
## 157 -0.47607678 -0.466865710 -0.506317450 -0.42066916 -0.77903633 -
0.47607678
## 158 -0.44451070 -0.441120420 -0.470323230 -0.42066916 -0.77903633 -
0.44451070
## 159 -0.39356298 -0.476386370 -0.525917290 -0.38803686 -0.36858322 -
0.39356298
## 160 -0.48220575 -0.521607750 -0.551855250 -0.43637886 -0.58260103 -
0.48220575
## 161 -0.46139921 -0.500861870 -0.513078500 -0.48428105 -0.69586388 -
0.46139921
```

```
## 162 -0.44888610 -0.513085980 -0.543470560 -0.47136605 -0.69586388 -
0.44888610
## 163 -0.53499132 -0.567537070 -0.604249020 -0.47136605 -0.54928921 -
0.53499132
## 164 -0.50257789 -0.486147960 -0.540431570 -0.38519493 -0.54928921 -
0.50257789
## 165 -0.51236760 -0.519518960 -0.581983420 -0.38519493 -0.73718218 -
0.51236760
## 166 -0.58322676 -0.683751770 -0.671257990 -0.69934050 -0.74422783 -
0.58322676
## 167 -0.59545240 -0.685442890 -0.681801580 -0.71836147 -0.79923696 -
0.59545240
## 168 -0.50544032 -0.559743700 -0.589726680 -0.54545083 -0.52069796 -
0.50544032
## 169 -0.46105393 -0.410170930 -0.492024170 -0.29600059 -0.72917379 -
0.46105393
## 170 -0.46484668 -0.434780630 -0.511030270 -0.29600059 -0.72917379 -
0.46484668
## 171 -0.49928274 -0.550383390 -0.557482390 -0.62948591 -0.52445743 -
0.49928274
## 172 -0.49347618 -0.502227600 -0.537067180 -0.47799941 -0.51484455 -
0.49347618
## 173 -0.51460481 -0.489870880 -0.544638100 -0.47799941 -0.57642288 -
0.51460481
## 174 -0.46366681 -0.477039320 -0.505100840 -0.50520919 -0.57642288 -
0.46366681
## 175 -0.50570964 -0.499732680 -0.529401150 -0.50520919 -0.81638777 -
0.50570964
## 176 -0.50538152 -0.291814560 -0.435737940 -0.20521549 -0.81638777 -
0.50538152
## 177 -0.98762595 -0.987385360 -0.988070170 -0.98746475 -0.98390436 -
0.98762595
##              NA           NA           NA           NA           NA
NA
## 1   -0.9998919 -0.99293370 -0.86341476  0.283085220 -0.2373086900 -
0.1054321900
## 2   -0.9998454 -0.99348508 -0.81992830  0.458812050 -0.2449413400
0.0561392720
## 3   -0.9997899 -0.98998375 -0.79488418  0.649703800 -0.2600880000 -
0.1284159800
## 4   -0.9998836 -0.99173608 -0.79232145  0.661603400 -0.2474511500 -
0.2303149100
## 5   -0.9999016 -0.99684631 -0.85002565  0.311603900 -0.1701208800
0.1343703500
## 6   -0.9998927 -0.99502233 -0.87130303  0.072707273  0.0178166200 -
0.0685881670
## 7   -0.9998330 -0.99334625 -0.79510756  0.178115990  0.0615532280 -
0.1870773400
## 8   -0.9998310 -0.99246264 -0.83086271  0.261357930  0.0351286680 -
0.1699285700
```

```
## 9    -0.9998848 -0.99653685 -0.85054030  0.160697050 -0.3146113100
0.0354792080
## 10   -0.9996808 -0.98881652 -0.70457476  0.232132300 -0.2576121700 -
0.1620321800
## 11   -0.9996782 -0.99103548 -0.72053655  0.496394450 -0.3876922500 -
0.1101021100
## 12   -0.9998885 -0.99360861 -0.87366019  0.712926610 -0.5028343300 -
0.0603996540
## 13   -0.9999271 -0.99639639 -0.91003285  0.432868120 -0.3056199000 -
0.1186193000
## 14   -0.9999292 -0.99803912 -0.85091994  0.359856600 -0.4756359200
0.1111185900
## 15   -0.9998169 -0.99154879 -0.79068728  0.182031780  0.0305899910 -
0.2188647300
## 16   -0.9999479 -0.99968354 -0.91222498  0.348241280 -0.2847240800 -
0.0757784650
## 17   -0.9999430 -0.99858467 -0.98949309  0.411880380 -0.1963074200 -
0.0738308760
## 18   -0.9999362 -0.99675477 -0.94296457  0.426100240 -0.3417449300 -
0.0233632540
## 19   -0.9999414 -0.99747695 -0.95929863  0.419342660 -0.2464760300 -
0.1099074000
## 20   -0.9999588 -0.99851709 -0.99629250  0.307774290 -0.0840964260 -
0.2180544100
## 21   -0.9999376 -0.99857710 -0.92646561  0.279546260 -0.3455238200
0.2028560600
## 22   -0.9998886 -0.99321594 -0.87490707  0.223967810 -0.4642347300
0.1693721100
## 23   -0.9998675 -0.99155110 -0.83438212  0.319446210 -0.1786983700 -
0.1767237900
## 24   -0.9998930 -0.99302343 -0.84549161  0.351136870 -0.1083192700 -
0.0935778950
## 25   -0.9998966 -0.99393548 -0.88324640  0.296395990 -0.3377966600 -
0.0064306353
## 26   -0.9998822 -0.99315864 -0.87366019  0.259553330 -0.3254526000 -
0.0681662120
## 27   -0.9998942 -0.99368545 -0.83461996  0.367346120 -0.4066063600 -
0.0774767720
## 28   -0.9993133 -0.97912720 -0.57560394 -0.165433580 -0.3056004500
0.5977630900
## 29   -0.9998867 -0.99360875 -0.87062782  0.223211430 -0.2856379000 -
0.1363600500
## 30   -0.9999065 -0.99486713 -0.85780706  0.122641340 -0.0979174550 -
0.0099195714
## 31   -0.9909928 -0.84041528 -0.14704815  0.287970600  0.0126228680 -
0.0379436860
## 32   -0.9879785 -0.85632515  0.13508202  0.251622960 -0.0146733020 -
0.0317518200
## 33   -0.9968080 -0.92882864 -0.23865941  0.330803410 -0.2709267500
0.1134374800
```

```
## 34   -0.9998321 -0.98867836 -0.77251065  0.377962030 -0.2128891500 -
0.1512899300
## 35   -0.9999482 -0.99470799 -0.86572364  0.173622750 -0.2833072000
0.1490555100
## 36   -0.9999660 -0.99757650 -0.88927761 -0.010506893 -0.0593035430
0.1934313000
## 37   -0.9999523 -0.99725991 -0.90935752  0.322581800 -0.4084978000 -
0.0918124510
## 38   -0.9999438 -0.99608161 -0.92073714  0.432273820 -0.3990243700 -
0.1213676300
## 39   -0.9996085 -0.98262558 -0.63017965  0.358460420 -0.2309328000 -
0.3919940500
## 40   -0.9998691 -0.99364804 -0.83080179  0.322229120 -0.3309565800 -
0.0157332510
## 41   -0.9998978 -0.99598235 -0.88324640  0.397054000 -0.2773495200
0.1716335900
## 42   -0.9998814 -0.99460639 -0.84865931  0.337378440 -0.2396170400 -
0.0399936020
## 43   -0.9998951 -0.99388952 -0.82189636  0.193342600 -0.1295068500 -
0.1583452000
## 44   -0.9999067 -0.99409551 -0.83870609  0.374924940 -0.3019672500
0.0536864310
## 45   -0.9999237 -0.99629920 -0.89044830  0.566582270 -0.4543292600 -
0.0063449592
## 46   -0.9999409 -0.99551353 -0.90757561  0.422608830 -0.3635384600
0.1311700100
## 47   -0.9999234 -0.99606896 -0.94628423  0.355519370 -0.2323289900
0.1290119900
## 48   -0.9999034 -0.99641087 -0.92773193  0.302659760 -0.3716858800 -
0.3098163500
## 49   -0.9999121 -0.99372450 -0.81346763  0.316750490 -0.3232846100 -
0.4390465900
## 50   -0.9999347 -0.99626005 -0.84583324  0.380282650 -0.2539580600 -
0.4854115300
## 51   -0.9999107 -0.99685278 -0.89291811  0.371332990 -0.2722665200 -
0.2198236100
## 52   -0.9973391 -0.97540257 -0.42474467 -0.069470802  0.1360093100 -
0.6424289200
## 53   -0.9998775 -0.99436836 -0.81650160  0.310682660 -0.2062956600 -
0.1568874400
## 54   -0.9999200 -0.99682581 -0.82953202  0.462366510 -0.3167775300 -
0.0846096990
## 55   -0.9999446 -0.99749458 -0.86079994  0.119796240 -0.2325659000
0.0626982390
## 56   -0.9999406 -0.99741583 -0.87196728  0.217941710 -0.0910101610 -
0.1553531100
## 57   -0.9998891 -0.99432967 -0.82314991  0.150663820 -0.1245451700 -
0.2811997400
## 58   -0.9998856 -0.99350348 -0.81590899 -0.008104048 -0.0799148490 -
0.3000448500
```

```
## 59   -0.9999164 -0.99355290 -0.84693873  0.457587370 -0.0712525340 -
0.3428878100
## 60   -0.9998916 -0.99322629 -0.87901129  0.642653660 -0.2200386800 -
0.4115062500
## 61   -0.9998656 -0.99468783 -0.91620825  0.188220800 -0.1578747700
0.0482224010
## 62   -0.9999006 -0.99435782 -0.89942197  0.057762299 -0.0205678110
0.2230749600
## 63   -0.9999137 -0.99534212 -0.90834436  0.221347810  0.0051175226 -
0.1700558100
## 64   -0.9998976 -0.99486883 -0.85953915  0.256848110 -0.1819507200
0.0339938550
## 65   -0.9939801 -0.91474438 -0.09801030  0.507114330 -0.2293688300
0.1044686900
## 66   -0.9996203 -0.98989641 -0.69490363  0.048666761 -0.2622423000
0.3085276500
## 67   -0.9734378 -0.79072154 -0.02499361 -0.325641050  0.4060059600 -
0.3018548400
## 68   -0.9718596 -0.84244775  0.13827868 -0.305092650  0.3739458300 -
0.2263154000
## 69   -0.9977057 -0.95964421 -0.32750005  0.020529256  0.0812890970
0.0506811690
## 70   -0.9835660 -0.79686264  0.12353851  0.154354920 -0.3477384700
0.0871234450
## 71   -0.8623760 -0.68579331  0.50716138  0.475436070 -0.4500843600 -
0.1209723800
## 72   -0.8717019 -0.63685698  0.47821300  0.586767770 -0.3989220100 -
0.2247562100
## 73   -0.9932519 -0.93609176 -0.13556151  0.165735020  0.2555035600 -
0.0677931090
## 74   -0.9994146 -0.98338927 -0.63284063  0.332692510 -0.1714038900 -
0.0413983680
## 75   -0.9996297 -0.98846945 -0.69314424  0.538636210 -0.4053874300 -
0.0878773850
## 76   -0.9999163 -0.99631641 -0.89472336  0.386767450 -0.3831792300 -
0.2115536200
## 77   -0.9998890 -0.99553977 -0.92031804  0.316979060 -0.2814297100 -
0.0092785396
## 78   -0.9998393 -0.99357744 -0.87375972  0.208404310 -0.1244241800
0.0114833850
## 79   -0.7076458 -0.28621765  0.76891201 -0.002443760  0.1137420600 -
0.6479729600
## 80   -0.6281619 -0.36707734  0.76029218  0.084943598 -0.0874459300 -
0.6341925400
## 81   -0.6673352 -0.42245052  0.68884301  0.251164970 -0.2661200700 -
0.4060209500
## 82   -0.6166038 -0.34727720  0.73080107  0.159746070 -0.1383354800 -
0.0853902290
## 83   -0.6298925 -0.29621967  0.74302548 -0.103144590  0.1341027200
0.0177731230
```

```
## 84   -0.6694708 -0.36965020  0.67134959 -0.138399260  0.0331533640
0.0651914660
## 85   -0.6237471 -0.23723004  0.69530366 -0.097617000  0.0734737930 -
0.4666056800
## 86   -0.5668036 -0.16129301  0.73981781  0.102191800 -0.0932671050 -
0.4857008700
## 87   -0.7313146 -0.41583906  0.69045091  0.008750081  0.0001222529 -
0.2017903300
## 88   -0.6366417 -0.41828443  0.74320734  0.108836840 -0.1521563200 -
0.3146911100
## 89   -0.6601824 -0.40378679  0.71278540 -0.027611190 -0.0805614090 -
0.0252122140
## 90   -0.6275694 -0.39241540  0.79092963  0.061838976 -0.1002985600
0.0008455707
## 91   -0.6187682 -0.43899880  0.75497018  0.197637400 -0.1960412900 -
0.1037343600
## 92   -0.5800329 -0.40991438  0.75908933  0.068091365 -0.2202587600 -
0.1021976300
## 93   -0.5427177 -0.23078491  0.76910156  0.142537610 -0.2898696400 -
0.0682152750
## 94   -0.5533210 -0.25493090  0.80217789  0.240453550 -0.1429811100 -
0.2061076500
## 95   -0.5543149 -0.21986846  0.80189819  0.067580651  0.0949324830 -
0.4483850200
## 96   -0.5895583 -0.13706729  0.79344087 -0.149977090  0.2809977100 -
0.4010608100
## 97   -0.5833165 -0.12972155  0.84413596 -0.076894912  0.1928357900 -
0.3207076000
## 98   -0.6236455 -0.28714482  0.79097448 -0.020017775  0.0188128550 -
0.2587422500
## 99   -0.5798300 -0.26893689  0.77328537  0.075276407  0.0104341730 -
0.0323558120
## 100 -0.5542139 -0.25978251  0.80041562  0.179882320 -0.1475500900
0.0448237500
## 101 -0.5915923 -0.31637631  0.76222465  0.341945590 -0.2877123000
0.1865550800
## 102 -0.5003392 -0.21086410  0.81366102  0.319484610 -0.3914967100
0.1678891900
## 103 -0.5446530 -0.29793502  0.76222465  0.140963510 -0.2728785900 -
0.1778360300
## 104 -0.5386423 -0.24455426  0.81658898  0.007027301 -0.0631658410 -
0.4675860300
## 105 -0.5977529 -0.33281478  0.75355228 -0.066659320  0.0015049679 -
0.3102595200
## 106 -0.6663414 -0.27432688  0.74960333 -0.009116404 -0.0922133780
0.2688663900
## 107 -0.5624144 -0.20329104  0.76469104  0.111201650 -0.1844010200
0.2818076300
## 108 -0.5316132 -0.22618328  0.83395353  0.191667660 -0.3116184500
0.1758265200
```

```
## 109 -0.5735583 -0.39112158  0.80640656  0.194778710 -0.2615589400 -
0.1476831100
## 110 -0.5930531 -0.28092052  0.79481391  0.103058630 -0.1964216300 -
0.1741045000
## 111 -0.6236067 -0.27344432  0.78463148  0.001423311 -0.2347825900
0.0541091290
## 112 -0.5025787 -0.15572833  0.83899582  0.236065840 -0.3697718800 -
0.0631121060
## 113 -0.6124656 -0.32438638  0.75211457  0.278825460 -0.2621884100 -
0.1047827600
## 114 -0.6379575 -0.22952433  0.76018267  0.069527445 -0.0382869960 -
0.1768075100
## 115 -0.6498485 -0.28643482  0.76469104 -0.258864540  0.2097255600
0.0353105580
## 116 -0.6247922 -0.28707179  0.76405927 -0.112641780  0.0219623770
0.1744366400
## 117 -0.5785674 -0.19956067  0.80457193 -0.062789592 -0.0857211800 -
0.0627890380
## 118 -0.6067882 -0.25689545  0.76891970  0.094729949 -0.2934684800 -
0.0350212100
## 119 -0.7125058 -0.40705039  0.73925839  0.148964480 -0.3130353100
0.2514561900
## 120 -0.7103537 -0.43732390  0.74063144 -0.002061597  0.0001404168 -
0.1420153300
## 121 -0.7002544 -0.36265870  0.73686435 -0.105066090  0.1250015100 -
0.3557634600
## 122 -0.7020527 -0.47614338  0.72707929  0.218242450 -0.2577501500 -
0.2219779700
## 123 -0.6400576 -0.35084490  0.77303116  0.070605501 -0.1697264500 -
0.1117747800
## 124 -0.6590494 -0.33839338  0.74404647 -0.184821560  0.1582917400 -
0.2220789500
## 125 -0.6924104 -0.37079890  0.72069099 -0.001402512 -0.1396881700 -
0.1748216300
## 126 -0.7212578 -0.38506452  0.68380071 -0.048182805  0.0090149928 -
0.0818805810
## 127 -0.6490413 -0.42306462  0.73251849 -0.012437669 -0.0034946773
0.0226350590
## 128 -0.6110439 -0.32099578  0.78572483  0.017155698 -0.1686431800 -
0.0213267470
## 129 -0.5998196 -0.32968024  0.81373337 -0.027974013 -0.0915796990 -
0.1404324300
## 130 -0.5264801 -0.31884610  0.79608912 -0.170386790  0.1151202000 -
0.0319608770
## 131 -0.4456544 -0.15842254  0.80915265  0.008653741 -0.0774298000 -
0.2325263800
## 132 -0.5103235 -0.07421498  0.75027995  0.060611078 -0.1762818800 -
0.3838771400
## 133 -0.6272931 -0.20637530  0.76754665 -0.102597190  0.0221385530 -
0.2313778300
```

```
## 134 -0.6278708 -0.31087603  0.73519224 -0.251166060  0.1984369400 -
0.2825027500
## 135 -0.3489474 -0.07964202  0.86481769 -0.032698967 -0.1982721200
0.0886333900
## 136 -0.4157759 -0.02997866  0.81556799  0.003738920 -0.1624811500 -
0.0050320604
## 137 -0.3857145  0.08503249  0.86242365 -0.168902000  0.0913216850 -
0.1479189500
## 138 -0.4720391 -0.17512466  0.85019924 -0.041773857 -0.1416282900 -
0.0331268530
## 139 -0.5616031 -0.16991827  0.79994637 -0.123326480 -0.1651019500
0.3706331100
## 140 -0.5805164 -0.10148561  0.79132653 -0.228109690  0.1791911900 -
0.2841568500
## 141 -0.4837617 -0.03516280  0.85075866  0.116416420 -0.2068456000 -
0.0437621450
## 142 -0.5060559 -0.14423011  0.78572483  0.083889781 -0.2126592800
0.1276962400
## 143 -0.6053164 -0.31619327  0.81017364 -0.340203940  0.3418178000
0.0682513560
## 144 -0.6044565 -0.18057236  0.77835316 -0.309650680  0.2600121000 -
0.0678090150
## 145 -0.5265597 -0.08735651  0.78818353 -0.003859704 -0.1050630100 -
0.1983076600
## 146 -0.4797154 -0.12155777  0.81824174  0.053042239 -0.1403230200 -
0.2272810100
## 147 -0.6328059 -0.17069404  0.78407207 -0.006203901 -0.1012348700 -
0.0255278360
## 148 -0.6593803 -0.31472370  0.77131374  0.127688470 -0.1831268200
0.3270485900
## 149 -0.6282538 -0.30918752  0.79601677  0.175839750 -0.3347083200
0.1961530200
## 150 -0.6335118 -0.28398421  0.79372057 -0.007616835 -0.1125858800
0.0164289030
## 151 -0.8580243 -0.58188046  0.57632221 -0.092805325  0.2261409700
0.1268961800
## 152 -0.8762708 -0.64035298  0.57677165 -0.267184770  0.3306300100 -
0.0186238120
## 153 -0.8881383 -0.62923393  0.60677733 -0.247010190  0.3387208700
0.1775952600
## 154 -0.8656280 -0.59926733  0.60826758 -0.156754910  0.1980668300
0.1818446200
## 155 -0.8324607 -0.59205660  0.60986780 -0.216007260  0.2604011600 -
0.0648800860
## 156 -0.8607454 -0.57513932  0.56791742 -0.200401300  0.2307507800 -
0.0463153740
## 157 -0.8529251 -0.57456626  0.58813758  0.014575646 -0.0282641590
0.1709245400
## 158 -0.8361683 -0.53222505  0.63963862  0.034964527 -0.0260711800
0.0200418800
```

```
## 159  -0.8197805 -0.62503872   0.58569054 -0.056635603   0.3417469500 -
0.3954932600
## 160  -0.8633838 -0.57126518   0.57841672 -0.029933904   0.2019190300 -
0.3727204000
## 161  -0.8522500 -0.53122013   0.60224146 -0.003041467   0.0129732570 -
0.3325148500
## 162  -0.8489461 -0.61088155   0.57593253  0.021700885   0.1186611100 -
0.4149715200
## 163  -0.8888289 -0.67494888   0.51493826  0.013670914   0.3303856400 -
0.6581284700
## 164  -0.8659409 -0.62860996   0.53441668 -0.110014940   0.4708855100 -
0.7592440200
## 165  -0.8743788 -0.65236519   0.54260198 -0.208157610   0.5427441600 -
0.7193069500
## 166  -0.9175242 -0.67348478   0.43655716 -0.180782940   0.3071992000 -
0.0177953380
## 167  -0.9214426 -0.70197281   0.46737849 -0.482912230   0.3417026200
0.3658322900
## 168  -0.8772637 -0.67067245   0.50519759 -0.124185990   0.2586164500 -
0.2502625300
## 169  -0.8377158 -0.58952208   0.57091573 -0.267323200   0.3300700600 -
0.4753059600
## 170  -0.8433681 -0.57279823   0.57948256 -0.277679720   0.3808466400 -
0.5090707800
## 171  -0.8737621 -0.60247120   0.54322652 -0.230298750   0.5451173500 -
0.2510140500
## 172  -0.8649144 -0.61819561   0.59384880  0.043954592   0.2424447700 -
0.2808388500
## 173  -0.8708999 -0.65112283   0.55861329  0.067798025   0.0767233600 -
0.3684666500
## 174  -0.8496016 -0.59159846   0.61172178 -0.086183565   0.3089423800 -
0.3818573200
## 175  -0.8691087 -0.57006046   0.58543633 -0.029986099   0.3629166700 -
0.3750804600
## 176  -0.8324370 -0.66837534   0.53155338  0.048526897   0.0938603520 -
0.0800511270
## 177  -0.9997534 -0.98817205  -0.73629398  0.444741150  -0.2920408300
0.0463224980
##                 NA            NA            NA            NA            NA
## 1    -0.0382123130 -0.968959080 -0.964335180 -0.9572447700 -0.97505986
## 2    -0.4583456800 -0.980683140 -0.983754190 -0.9820027000 -0.98471460
## 3    -0.5205411200 -0.976317070 -0.986051460 -0.9844577800 -0.98471460
## 4    -0.4364594000 -0.982059880 -0.987351120 -0.9856316200 -0.99002906
## 5    -0.4582990900 -0.985203730 -0.989062570 -0.9896133700 -0.98702854
## 6    -0.1661819600 -0.985894400 -0.986440270 -0.9863045600 -0.98702854
## 7    -0.2072857600 -0.985500690 -0.984625250 -0.9824940100 -0.98799640
## 8    -0.3433793800 -0.984505630 -0.986838340 -0.9857492300 -0.98799640
## 9     0.1610410000 -0.989369780 -0.990914460 -0.9899020200 -0.99070265
## 10    0.1773754800 -0.984524360 -0.980263790 -0.9771521300 -0.98571654
## 11   -0.1164917600 -0.985250700 -0.980247760 -0.9771880700 -0.98571654
```

```
## 12   -0.3345880200 -0.994286710 -0.995633740 -0.9956132000 -0.99574306
## 13   -0.1439992300 -0.996308090 -0.997387970 -0.9970481400 -0.99776181
## 14   -0.0075682460 -0.997672460 -0.998414650 -0.9981836800 -0.99853329
## 15   -0.1469895000 -0.840506080 -0.882544000 -0.8714345000 -0.89525167
## 16   -0.0758225720 -0.931278330 -0.923089610 -0.9059759800 -0.95385803
## 17   -0.3434576900 -0.972364430 -0.981893230 -0.9823475700 -0.98187601
## 18   -0.1816856600 -0.980489500 -0.988677710 -0.9865715000 -0.99031305
## 19   -0.2244497400 -0.988568970 -0.993882860 -0.9933126400 -0.99371588
## 20   -0.2000887600 -0.993472000 -0.995284370 -0.9945770900 -0.99595335
## 21   -0.2340211900 -0.996982740 -0.999001440 -0.9988442900 -0.99894971
## 22    0.0978928070 -0.997073630 -0.998432420 -0.9983163500 -0.99803535
## 23   -0.0880339180 -0.997622270 -0.997969070 -0.9976787800 -0.99803535
## 24   -0.3532353400 -0.997361980 -0.997723600 -0.9971923400 -0.99841441
## 25   -0.0145212450 -0.995698790 -0.997353090 -0.9965659900 -0.99841441
## 26    0.1037209100 -0.995266310 -0.996167020 -0.9959377000 -0.99668897
## 27    0.0961370780 -0.995826150 -0.995794620 -0.9956030300 -0.99668897
## 28   -0.0791182060 -0.873880100 -0.969767950 -0.9707557100 -0.93837213
## 29    0.1746519600 -0.895202710 -0.952744530 -0.9422317000 -0.95495767
## 30   -0.0675969520 -0.940965670 -0.954165230 -0.9459351900 -0.96533655
## 31   -0.5266571300 -0.681908450 -0.271364540 -0.1069492500 -0.62321973
## 32   -0.4278029000 -0.592879870 -0.357014170 -0.2634400200 -0.62321973
## 33   -0.2824538900 -0.853617420 -0.810636040 -0.7947640800 -0.85609561
## 34   -0.1663872300 -0.936177510 -0.967117240 -0.9639588900 -0.95467741
## 35   -0.0352047840 -0.963854230 -0.975098820 -0.9702368900 -0.98044952
## 36   -0.1913383900 -0.984304760 -0.986889860 -0.9850970100 -0.99030212
## 37    0.1528509600 -0.993888440 -0.993774200 -0.9925275300 -0.99552249
## 38    0.0130176160 -0.996631240 -0.996316760 -0.9962066700 -0.99552249
## 39    0.1669768400 -0.626075130 -0.836599350 -0.8009948200 -0.83570156
## 40   -0.0551015210 -0.788145220 -0.827689480 -0.7973296500 -0.87338068
## 41   -0.4425845100 -0.921598190 -0.892400400 -0.8700175100 -0.93651433
## 42   -0.1661938400 -0.982388200 -0.976539200 -0.9737730200 -0.98148041
## 43    0.0159343600 -0.985339980 -0.986211490 -0.9840902300 -0.98888279
## 44   -0.2249968900 -0.980753580 -0.989282270 -0.9882096500 -0.98888279
## 45   -0.2329777500 -0.988324570 -0.990262810 -0.9887446700 -0.99253195
## 46   -0.3240585700 -0.993564220 -0.994671420 -0.9937695600 -0.99607679
## 47   -0.4287861700 -0.994658560 -0.994460940 -0.9933222600 -0.99607679
## 48    0.3669052500 -0.995525740 -0.996520940 -0.9959170500 -0.99684024
## 49    0.4545768600 -0.995042930 -0.996372140 -0.9958239300 -0.99684024
## 50    0.2721183100 -0.994410550 -0.995574570 -0.9949815900 -0.99491650
## 51    0.0140973170 -0.993670300 -0.994287910 -0.9943452100 -0.99260973
## 52    0.6223954200 -0.777561780 -0.811648440 -0.7796165000 -0.83111325
## 53   -0.0266745110 -0.915218960 -0.898603960 -0.8798764500 -0.93711704
## 54   -0.1763693200 -0.973400950 -0.972910510 -0.9706287200 -0.97761136
## 55    0.0347763160 -0.982099080 -0.993051540 -0.9918595100 -0.99263477
## 56   -0.1097905900 -0.984412520 -0.994448230 -0.9937891400 -0.99282655
## 57    0.2017292900 -0.988145490 -0.996219720 -0.9958992600 -0.99581415
## 58    0.4085372200 -0.992512940 -0.993948180 -0.9921438200 -0.99619840
## 59   -0.2600994500 -0.995989300 -0.997748730 -0.9975900100 -0.99719682
## 60   -0.2567433900 -0.996831710 -0.998042380 -0.9976434100 -0.99746026
## 61   -0.2009405300 -0.997056250 -0.998527080 -0.9981519600 -0.99865470
```

```
## 62   -0.4163761300 -0.996619330 -0.999044180 -0.9988274500 -0.99917752
## 63   -0.2492673000 -0.996240040 -0.998006310 -0.9977036000 -0.99806364
## 64   -0.2001908000 -0.995952830 -0.997179530 -0.9966976900 -0.99806364
## 65   -0.5893854600 -0.607384400 -0.799336510 -0.8113406400 -0.75201682
## 66   -0.1030663000 -0.751969170 -0.844587640 -0.8155010300 -0.86931148
## 67    0.1135349100 -0.599101830 -0.210745930 -0.3122949800 -0.25142193
## 68    0.0488787160 -0.547093370 -0.237494210 -0.3615349500 -0.25142193
## 69   -0.2798866800 -0.801574670 -0.759332080 -0.7495425900 -0.80676861
## 70    0.0808315910 -0.715739090 -0.437826080 -0.4868815800 -0.26647137
## 71    0.0676508700 -0.401129810  0.273406120  0.0288607310  0.16937681
## 72   -0.0737984000 -0.484206220  0.258386250 -0.0257546100  0.16937681
## 73   -0.6813630700 -0.733580550 -0.718563380 -0.7463058600 -0.72925907
## 74   -0.2909246600 -0.792010160 -0.907064930 -0.8931741000 -0.90541070
## 75   -0.1791103200 -0.876342720 -0.913343790 -0.8938481200 -0.93014783
## 76    0.1604910700 -0.951215360 -0.938294040 -0.9220669100 -0.96634103
## 77   -0.1423000700 -0.987370970 -0.980355990 -0.9815716000 -0.98272489
## 78   -0.2388992400 -0.992047650 -0.993634060 -0.9922660400 -0.99463902
## 79    0.4962580800 -0.034395601 -0.168186260 -0.0624192520 -0.38259533
## 80    0.6309566200 -0.140938230 -0.216055180 -0.0812561660 -0.41989844
## 81    0.4241485200 -0.094593563 -0.290847390 -0.1895768500 -0.46008366
## 82   -0.0038249083 -0.049340623 -0.090123903 -0.0123999660 -0.22641047
## 83   -0.1342786200 -0.021410464 -0.044636319  0.0773735430 -0.22641047
## 84    0.0311425050 -0.138875310 -0.167307550 -0.0316795240 -0.35986715
## 85    0.4755458800 -0.196389870 -0.256099660 -0.1390797600 -0.38505137
## 86    0.4441117800 -0.146382510 -0.249081290 -0.1598558700 -0.34680107
## 87    0.1450151300 -0.214722040 -0.227929350 -0.1170125000 -0.39781524
## 88    0.3770378400 -0.178794540 -0.253423870 -0.1069812200 -0.39781524
## 89    0.1438304800 -0.186565460 -0.284364340 -0.1344854300 -0.45615375
## 90    0.0002960504 -0.162954120 -0.254478010 -0.1398799200 -0.35089504
## 91    0.0581714160 -0.075164913 -0.207691790 -0.0971573320 -0.35089504
## 92    0.2946969500 -0.099273959 -0.168998040 -0.0392448160 -0.33702763
## 93    0.2368233700 -0.153659650 -0.264578530 -0.1552604100 -0.33702763
## 94    0.0009323857 -0.124089310 -0.214310240 -0.1173257600 -0.30519613
## 95    0.1711214800 -0.126386650 -0.113015520  0.0244277030 -0.30519613
## 96    0.1591295100 -0.123044220 -0.124993180  0.0160425930 -0.33512691
## 97    0.0805559850 -0.091700752 -0.099522253  0.0393138450 -0.33252817
## 98    0.1961503400 -0.135993970 -0.142689620 -0.0187816960 -0.33252817
## 99   -0.1649086500 -0.039073593 -0.261322790 -0.1448450000 -0.34987428
## 100  -0.1519710400 -0.129628640 -0.235474140 -0.1088393200 -0.41358068
## 101  -0.3335907200 -0.192946220 -0.229352320 -0.1160476700 -0.41311593
## 102  -0.0806482070 -0.112013610 -0.138185320 -0.0075761866 -0.31693594
## 103   0.4159071900 -0.088644270 -0.115132340  0.0048845233 -0.30494404
## 104   0.5556537600 -0.093538752 -0.111115270 -0.0078416730 -0.30494404
## 105   0.3722867400 -0.141954260 -0.181808990 -0.0659563270 -0.31787601
## 106  -0.2144123700 -0.211465540 -0.242287440 -0.1033017000 -0.39454890
## 107  -0.2556256800 -0.158392680 -0.180438430 -0.0555959120 -0.33786073
## 108  -0.0768083060 -0.113072030 -0.195497830 -0.0679104610 -0.33786073
## 109   0.2015081200 -0.105370890 -0.204713080 -0.0518766100 -0.41253456
## 110   0.2694318200 -0.094159584 -0.149721580 -0.0158530480 -0.24758075
## 111   0.2285245200 -0.129153230 -0.148609950 -0.0391823360 -0.24758075
```

```
## 112   0.2058995000   0.080741014 -0.054343677   0.0861742250 -0.26149044
## 113   0.0361309810 -0.088967213 -0.173577130 -0.0540507030 -0.32142041
## 114   0.0735544280 -0.132053540 -0.211740700 -0.1028354100 -0.34274125
## 115 -0.0626838050 -0.114566560 -0.176499820 -0.0597544040 -0.34274125
## 116 -0.1190295200 -0.143820460 -0.148663800   0.0036190911 -0.36741629
## 117   0.2282529600 -0.176352390 -0.215382940 -0.0837478860 -0.36741629
## 118   0.2738314300 -0.198187390 -0.306289200 -0.1930846100 -0.46933464
## 119 -0.0862737050 -0.208456920 -0.259883840 -0.1608095900 -0.35616242
## 120   0.0817502620 -0.245563500 -0.199265900 -0.0955464980 -0.35616242
## 121   0.2632399800 -0.258947690 -0.211654180 -0.1108420700 -0.34884015
## 122   0.2240107400 -0.188040210 -0.227373580 -0.1454664000 -0.34884015
## 123   0.1928171900 -0.084250228 -0.277121250 -0.2224388100 -0.33888524
## 124   0.1824972400 -0.102054540 -0.204400330 -0.1155888200 -0.33888524
## 125   0.3408392600 -0.221462740 -0.111906420   0.0002165599 -0.27561779
## 126   0.1651146400 -0.380148630 -0.456242430 -0.3987684900 -0.48356913
## 127 -0.0299697940 -0.318154100 -0.285041390 -0.2851396000 -0.05750276
## 128   0.2130188100 -0.034722567 -0.039304038   0.0740641130 -0.05750276
## 129   0.2856687900 -0.001720524 -0.143907880 -0.0231504830 -0.30082239
## 130   0.0683338860 -0.207916610 -0.390701520 -0.3202009400 -0.42774369
## 131   0.3339918100   0.008441575 -0.160832840 -0.1047377200 -0.13020738
## 132   0.5879366000   0.069394797 -0.218374370 -0.1955586200 -0.13020738
## 133   0.4069810200 -0.133609780 -0.441985400 -0.3693620200 -0.36715515
## 134   0.3765854900 -0.254896830 -0.391095520 -0.3566012300 -0.36715515
## 135   0.2366091300 -0.066701101 -0.107861380 -0.0181596540 -0.17380204
## 136   0.2250481300 -0.113039590 -0.181948480 -0.0912326420 -0.23290255
## 137   0.2610875600   0.131041710   0.070014431   0.2288546500 -0.20308106
## 138   0.2745315600   0.164313710   0.073314928   0.2287088000 -0.19840814
## 139 -0.0544592720   0.030720346 -0.023868319   0.0274715910   0.05167230
## 140   0.3393945600   0.017206344   0.038888130   0.0455216940   0.05167230
## 141   0.1622363500 -0.008343083 -0.194324130 -0.2225701400   0.02275394
## 142   0.0202819440 -0.078489390 -0.379919650 -0.3540224700 -0.31597181
## 143 -0.1465966800 -0.104457920 -0.262906480 -0.1497247600 -0.38429494
## 144   0.1169591800 -0.115798860 -0.213528860 -0.0895352800 -0.36618966
## 145   0.3273032600   0.110598560   0.048261980   0.1810297200 -0.08284774
## 146   0.3304729800   0.140530660   0.015332393   0.1281821200 -0.08284774
## 147   0.1462413300 -0.014713381 -0.164430390 -0.0781033510 -0.18426195
## 148 -0.3634136000 -0.050395776 -0.195859060 -0.1196671800 -0.33863502
## 149 -0.0541830900 -0.095271912 -0.385440030 -0.3314291700 -0.38537060
## 150   0.1105483300 -0.142730820 -0.409922230 -0.3481405800 -0.46352325
## 151 -0.4429663100 -0.217570190 -0.160708640 -0.0674121340 -0.32727262
## 152 -0.1839345200 -0.282302360 -0.183663320 -0.0415486100 -0.39693962
## 153 -0.4352625600 -0.050825995   0.101300390   0.2290615300 -0.22449039
## 154 -0.3283372500   0.013820270   0.008518332   0.0800312230 -0.22449039
## 155 -0.0482589480 -0.161205300 -0.214250580 -0.1601659300 -0.20298588
## 156 -0.0805329680 -0.234503350 -0.169740760 -0.0715574230 -0.20298588
## 157 -0.2382714400 -0.214704210 -0.158624240 -0.0845175650 -0.29907395
## 158 -0.0730074470 -0.157705580 -0.152147170 -0.0722548930 -0.29907395
## 159 -0.0791425020 -0.217829070 -0.200289010 -0.0610173420 -0.41786854
## 160   0.0734384690 -0.257769720 -0.147183520   0.0047518659 -0.35222100
## 161   0.2705075900 -0.004317202   0.098520781   0.2279385400 -0.17973000
```

```
## 162   0.1503223200   0.015006792   0.001209953   0.0954494550  -0.17973000
## 163   0.1178401200  -0.198316510  -0.357036210  -0.2655951700  -0.47240953
## 164   0.2145864400  -0.241127090  -0.293245690  -0.1773175200  -0.47240953
## 165   0.2011651600  -0.216744920  -0.323382560  -0.2385286800  -0.44060106
## 166  -0.2763190900  -0.182911950  -0.345185240  -0.2578202500  -0.44060106
## 167  -0.2982155700  -0.294346770  -0.258686660  -0.1226387700  -0.44995904
## 168  -0.0048127209  -0.072142793  -0.248795220  -0.1087803600  -0.42302224
## 169   0.3868341900  -0.201621080  -0.190550390  -0.0184538020  -0.37617339
## 170   0.3379350500  -0.007828562   0.114369360   0.2598039600  -0.17588780
## 171  -0.3164105400   0.018036168  -0.005496678   0.0691251710  -0.17588780
## 172  -0.1881093300  -0.265857210  -0.359110140  -0.3114625000  -0.39923913
## 173   0.1404782000  -0.316586040  -0.293081370  -0.2225440600  -0.43367590
## 174   0.0090731482  -0.188701310  -0.269182310  -0.1680310700  -0.43367590
## 175  -0.1676181900  -0.162048980  -0.354691980  -0.2869608700  -0.47598246
## 176  -0.1688802800  -0.205894060  -0.354565170  -0.2521298900  -0.44175370
## 177  -0.3172702100  -0.883424990  -0.882089100  -0.8642336300  -0.91200531
##              NA            NA            NA            NA            NA
## 1    -0.99155366  -0.968959080  -0.9992865  -0.9497658200   0.072579035
## 2    -0.99155366  -0.980683140  -0.9997247  -0.9828568100  -0.192899060
## 3    -0.96619294  -0.976317070  -0.9996406  -0.9834544600  -0.222829260
## 4    -0.98168559  -0.982059880  -0.9997679  -0.9839660100  -0.240719220
## 5    -0.98168559  -0.985203730  -0.9998294  -0.9923380200  -0.338699140
## 6    -0.99036050  -0.985894400  -0.9998297  -0.9892783400  -0.244945960
## 7    -0.99317783  -0.985500690  -0.9998151  -0.9796151300  -0.218840780
## 8    -0.99317783  -0.984505630  -0.9998090  -0.9873955500  -0.256580060
## 9    -0.99193469  -0.989369780  -0.9998956  -0.9897375400  -0.377148720
## 10   -0.99193469  -0.984524360  -0.9997757  -0.9771724300  -0.149407830
## 11   -0.99001058  -0.985250700  -0.9997875  -0.9789466700  -0.184287700
## 12   -0.99348434  -0.994286710  -0.9999596  -0.9970525000  -0.611367910
## 13   -0.99695083  -0.996308090  -0.9999781  -0.9967856700  -0.681688780
## 14   -0.99737277  -0.997672460  -0.9999880  -0.9984054700  -0.775183100
## 15   -0.74560010  -0.840506080  -0.9868115  -0.8787296300   0.513096300
## 16   -0.94896306  -0.931278330  -0.9969316  -0.8949333800   0.285463220
## 17   -0.94896306  -0.972364430  -0.9995198  -0.9880913200  -0.236694840
## 18   -0.97867569  -0.980489500  -0.9997426  -0.9847558600  -0.281807510
## 19   -0.98836141  -0.988568970  -0.9998937  -0.9944618400  -0.477322420
## 20   -0.99299314  -0.993472000  -0.9999518  -0.9942160500  -0.554964340
## 21   -0.99299314  -0.996982740  -0.9999847  -0.9986647500  -0.837145750
## 22   -0.99230278  -0.997073630  -0.9999845  -0.9983860700  -0.798475800
## 23   -0.99613799  -0.997622270  -0.9999871  -0.9976016400  -0.772576780
## 24   -0.99613799  -0.997361980  -0.9999853  -0.9968880800  -0.736066650
## 25   -0.99533970  -0.995698790  -0.9999738  -0.9959959200  -0.691858220
## 26   -0.99690271  -0.995266310  -0.9999685  -0.9968759900  -0.646990310
## 27   -0.99690271  -0.995826150  -0.9999719  -0.9960748500  -0.630695020
## 28   -0.81114604  -0.873880100  -0.9926843  -0.9758440500  -0.017026165
## 29   -0.82256369  -0.895202710  -0.9946561  -0.9312682500   0.197732300
## 30   -0.90926131  -0.940965670  -0.9980054  -0.9453008000   0.173546630
## 31   -0.99365450  -0.681908450  -0.8875364  -0.0350991330   0.330924560
## 32   -0.99365450  -0.592879870  -0.8750608  -0.1758756500   0.762665030
## 33   -0.87650551  -0.853617420  -0.9856641  -0.8640693500   0.502774400
```

```
## 34   -0.86134038 -0.936177510 -0.9978819 -0.9583339900  0.044427894
## 35   -0.94392516 -0.963854230 -0.9992164 -0.9652539700 -0.007750227
## 36   -0.98772069 -0.984304760 -0.9998059 -0.9848465400 -0.236879670
## 37   -0.99354669 -0.993888440 -0.9999520 -0.9923061300 -0.519097870
## 38   -0.99354669 -0.996631240 -0.9999784 -0.9969409000 -0.713136130
## 39   -0.24098688 -0.626075130 -0.9360456 -0.7824783200  0.680474110
## 40   -0.80421154 -0.788145220 -0.9763284 -0.7805560200  0.810200380
## 41   -0.96630613 -0.921598190 -0.9955430 -0.8450211400  0.478748900
## 42   -0.98201948 -0.982388200 -0.9997142 -0.9777657000 -0.211694300
## 43   -0.98201948 -0.985339980 -0.9998200 -0.9859213800 -0.294021910
## 44   -0.96390662 -0.980753580 -0.9997501 -0.9880497200 -0.333729800
## 45   -0.99632962 -0.988324570 -0.9998798 -0.9878988800 -0.370142920
## 46   -0.99632962 -0.993564220 -0.9999513 -0.9935621100 -0.522421870
## 47   -0.99548896 -0.994658560 -0.9999602 -0.9931947800 -0.542949710
## 48   -0.99548896 -0.995525740 -0.9999711 -0.9955474400 -0.637387450
## 49   -0.99236958 -0.995042930 -0.9999672 -0.9959197800 -0.633580200
## 50   -0.99236958 -0.994410550 -0.9999605 -0.9950311500 -0.606314260
## 51   -0.99142040 -0.993670300 -0.9999513 -0.9953615200 -0.559459430
## 52   -0.71311737 -0.777561780 -0.9735946 -0.7394621200  0.731250020
## 53   -0.95398122 -0.915218960 -0.9952519 -0.8747484700  0.511478760
## 54   -0.96123470 -0.973400950 -0.9994872 -0.9734050900 -0.086295986
## 55   -0.96123470 -0.982099080 -0.9997880 -0.9919320800 -0.466446370
## 56   -0.96877685 -0.984412520 -0.9998326 -0.9937907600 -0.504069100
## 57   -0.98288405 -0.988145490 -0.9998930 -0.9958656200 -0.617966860
## 58   -0.99079543 -0.992512940 -0.9999396 -0.9897888400 -0.526136080
## 59   -0.99374856 -0.995989300 -0.9999765 -0.9982392700 -0.734939270
## 60   -0.99374856 -0.996831710 -0.9999825 -0.9972329100 -0.774124190
## 61   -0.99459752 -0.997056250 -0.9999845 -0.9977944700 -0.781641410
## 62   -0.99459752 -0.996619330 -0.9999824 -0.9987581400 -0.820781070
## 63   -0.99058837 -0.996240040 -0.9999786 -0.9981824800 -0.764485310
## 64   -0.99746642 -0.995952830 -0.9999753 -0.9968169900 -0.671737320
## 65   -0.14341513 -0.607384400 -0.9281587 -0.8682906200  0.665861950
## 66   -0.64873824 -0.751969170 -0.9698966 -0.7946577300  0.675920240
## 67   -0.64873824 -0.599101830 -0.8502692 -0.6031732500  0.702297060
## 68   -0.80702600 -0.547093370 -0.8366659 -0.6413735600  0.821366650
## 69   -0.98427857 -0.801574670 -0.9750295 -0.7492317500  0.769347090
## 70   -0.98427857 -0.715739090 -0.9239069 -0.6261098500  0.803919000
## 71   -0.89866955 -0.401129810 -0.6377623 -0.4556280100  0.850391250
## 72   -0.89866955 -0.484206220 -0.6820440 -0.4479009500  0.811908740
## 73   -0.84577603 -0.733580550 -0.9586773 -0.8661596800  0.651842560
## 74   -0.60107184 -0.792010160 -0.9797934 -0.8657672600  0.462455620
## 75   -0.83003252 -0.876342720 -0.9920579 -0.8876922400  0.425441280
## 76   -0.98916465 -0.951215360 -0.9982763 -0.9056581500  0.227142800
## 77   -0.99452367 -0.987370970 -0.9998203 -0.9890206400 -0.245760590
## 78   -0.99452367 -0.992047650 -0.9999341 -0.9904133300 -0.482705450
## 79   -0.48674233 -0.034395601 -0.5135152 -0.1010419000  0.137033850
## 80   -0.56520385 -0.140938230 -0.6059295  0.0528563160  0.267017580
## 81   -0.68527229 -0.094593563 -0.5855884 -0.1622876700  0.272085300
## 82   -0.68527229 -0.049340623 -0.5081953 -0.0688371880  0.299421790
## 83   -0.90587659 -0.021410464 -0.4744439 -0.0259215660  0.200174990
```

```
## 84   -0.90587659 -0.138875310 -0.5942961  0.0711137430  0.346926520
## 85   -0.75247175 -0.196389870 -0.6529261 -0.1002829300  0.463208870
## 86   -0.60118907 -0.146382510 -0.6164023 -0.2151450500  0.419669800
## 87   -0.49210335 -0.214722040 -0.6598021 -0.1004039500  0.527979830
## 88   -0.66670556 -0.178794540 -0.6402777 -0.0009637106  0.324584450
## 89   -0.66670556 -0.186565460 -0.6514863 -0.0156648560  0.344832730
## 90   -0.66565258 -0.162954120 -0.6293309 -0.1900576300  0.424301110
## 91   -0.66565258 -0.075164913 -0.5544524 -0.0658786810  0.172460700
## 92   -0.58318833 -0.099273959 -0.5650524 -0.0082690914  0.209175810
## 93   -0.65302260 -0.153659650 -0.6246136 -0.1712054900  0.339285420
## 94   -0.65302260 -0.124089310 -0.5931729 -0.1892305800  0.375292510
## 95   -0.69873006 -0.126386650 -0.5731076  0.0737180270  0.416485790
## 96   -0.69873006 -0.123044220 -0.5733360  0.1008622200  0.429404700
## 97   -0.50210241 -0.091700752 -0.5437852  0.1292627100  0.385569860
## 98   -0.55009947 -0.135993970 -0.5868411 -0.0310064030  0.512359510
## 99   -0.59835453 -0.039073593 -0.5361373 -0.1100061100  0.115459280
## 100  -0.59835453 -0.129628640 -0.6014946 -0.0755060500  0.235669520
## 101  -0.68155649 -0.192946220 -0.6453640 -0.1228148500  0.438675020
## 102  -0.68155649 -0.112013610 -0.5680189  0.0020325514  0.334383230
## 103  -0.70108892 -0.088644270 -0.5450057  0.0316575600  0.312194010
## 104  -0.70108892 -0.093538752 -0.5478650 -0.0891204010  0.375292510
## 105  -0.69614163 -0.141954260 -0.5996186 -0.0996071510  0.346926520
## 106  -0.60758219 -0.211465540 -0.6604496 -0.0196207900  0.391933260
## 107  -0.53337330 -0.158392680 -0.6111874 -0.0151677370  0.344102460
## 108  -0.41630661 -0.113072030 -0.5810873  0.0339570980  0.265499850
## 109  -0.32489611 -0.105370890 -0.5771607  0.0906813310  0.210271400
## 110  -0.35211950 -0.094159584 -0.5569683  0.0638122980  0.249896070
## 111  -0.41974257 -0.129153230 -0.5831049  0.0600068100  0.370741180
## 112   0.07126498  0.080741014 -0.3876161  0.1627839500  0.106270050
## 113  -0.36068258 -0.088967213 -0.5581054 -0.0838286690  0.301099390
## 114  -0.81622450 -0.132053540 -0.5985464 -0.1020120400  0.372381450
## 115  -0.81622450 -0.114566560 -0.5782367  0.0249545220  0.316381600
## 116  -0.64849678 -0.143820460 -0.5938658  0.0558343980  0.317464320
## 117  -0.73899672 -0.176352390 -0.6310853 -0.0776023710  0.422033100
## 118  -0.73899672 -0.198187390 -0.6634286 -0.1717672600  0.474153990
## 119  -0.47087445 -0.208456920 -0.6618196 -0.1845019500  0.535620940
## 120  -0.48789051 -0.245563500 -0.6741713 -0.1080032700  0.596488270
## 121  -0.60413678 -0.258947690 -0.6852017 -0.0328691110  0.543373960
## 122  -0.60413678 -0.188040210 -0.6415998 -0.1569317900  0.506241310
## 123  -0.57303224 -0.084250228 -0.5750695 -0.2764153500  0.383929590
## 124  -0.63150123 -0.102054540 -0.5745745 -0.1439263300  0.374663060
## 125  -0.79157426 -0.221462740 -0.6395271 -0.0004154508  0.530073630
## 126  -0.69608266 -0.380148630 -0.7971985 -0.3981533100  0.858032350
## 127  -0.69608266 -0.318154100 -0.7351713 -0.3656663800  0.839405080
## 128  -0.51167478 -0.034722567 -0.4841068 -0.0131464200  0.290821010
## 129  -0.21415143 -0.001720524 -0.4810352 -0.0787368310  0.163459880
## 130  -0.50650484 -0.207916610 -0.6841617 -0.3790813700  0.574299040
## 131  -0.50650484  0.008441575 -0.4760740 -0.1959397800  0.180101800
## 132  -0.23385172  0.069394797 -0.4343591 -0.3278661300  0.011496604
## 133   0.25833543 -0.133609780 -0.6395615 -0.3786405300  0.459374500
```

```
## 134  -0.23252045  -0.254896830  -0.7148878  -0.4384421600   0.687266600
## 135  -0.41511202  -0.066701101  -0.5261745  -0.1270768800   0.341379220
## 136  -0.22145866  -0.113039590  -0.5782377  -0.0732827080   0.475014130
## 137  -0.72534632   0.131041710  -0.3082706   0.1655678600   0.076594628
## 138  -0.72534632   0.164313710  -0.2749936   0.1094501000  -0.004271337
## 139  -0.31622974   0.030720346  -0.4248735  -0.1163597800   0.228028420
## 140  -0.31622974   0.017206344  -0.4203719  -0.1225765100   0.327460540
## 141   0.26854702  -0.008343083  -0.4973893  -0.4182222300   0.371837830
## 142  -0.18115382  -0.078489390  -0.5883366  -0.4942281300   0.435322840
## 143  -0.54294186  -0.104457920  -0.5879299  -0.0730570230   0.391117170
## 144  -0.54294186  -0.115798860  -0.5868234  -0.0866418470   0.324003210
## 145  -0.44639763   0.110598560  -0.3336105   0.2894843400   0.030122374
## 146  -0.44639763   0.140530660  -0.3137743   0.0709299810   0.057858910
## 147  -0.32546927  -0.014713381  -0.4964254  -0.1835616200   0.240101730
## 148  -0.32546927  -0.050395776  -0.5323302  -0.1931463800   0.278592280
## 149  -0.17490851  -0.095271912  -0.6022162  -0.4185594200   0.452824900
## 150  -0.17490851  -0.142730820  -0.6414940  -0.4978181100   0.625260400
## 151  -0.98166536  -0.217570190  -0.6477778  -0.0622817270   0.570433530
## 152  -0.77148067  -0.282302360  -0.6938995  -0.0125360030   0.563526510
## 153  -0.73934821  -0.050825995  -0.4599594   0.2606022500   0.319835110
## 154  -0.73146860   0.013820270  -0.4312715  -0.1183366700   0.406118820
## 155  -0.67267890  -0.161205300  -0.6201690  -0.2446775800   0.491530000
## 156  -0.69451461  -0.234503350  -0.6608446  -0.0553420030   0.488076490
## 157  -0.69451461  -0.214704210  -0.6454200  -0.1934207800   0.571844580
## 158  -0.40209219  -0.157705580  -0.6046349  -0.1597755800   0.509694820
## 159  -0.63793816  -0.217829070  -0.6562860  -0.0369949380   0.488076490
## 160  -0.61701539  -0.257769720  -0.6708632   0.0687879200   0.541168250
## 161  -0.44522532  -0.004317202  -0.4223814   0.0927356650   0.243555240
## 162  -0.42185801   0.015006792  -0.4321366  -0.0802802740   0.218293520
## 163  -0.71272543  -0.198316510  -0.6722416  -0.3052424600   0.530868300
## 164  -0.71272543  -0.241127090  -0.6895327  -0.1776230000   0.561432720
## 165  -0.65774031  -0.216744920  -0.6789290  -0.2625193600   0.573092370
## 166  -0.60482237  -0.182911950  -0.6596776  -0.2477936100   0.495486220
## 167  -0.63295660  -0.294346770  -0.7162023  -0.0233923110   0.531602380
## 168  -0.54942834  -0.072142793  -0.5602321  -0.0139618090   0.115748710
## 169  -0.75153833  -0.201621080  -0.6433962   0.1338854700   0.369115750
## 170  -0.75153833  -0.007828562  -0.4208398   0.1860921400   0.211269600
## 171  -0.08515727   0.018036168  -0.4312437  -0.1359806700   0.355739530
## 172  -0.54673579  -0.265857210  -0.7166297  -0.3788257300   0.692238770
## 173  -0.54673579  -0.316586040  -0.7357316  -0.3336160400   0.683813090
## 174  -0.40524565  -0.188701310  -0.6501358  -0.2468619600   0.514960460
## 175  -0.01291505  -0.162048980  -0.6466120  -0.3206881200   0.588486500
## 176  -0.30064180  -0.205894060  -0.6769655  -0.1494339000   0.539525150
## 177  -0.89243506  -0.883424990  -0.9919555  -0.8611511400   0.508740170
##                 NA            NA            NA            NA            NA
## 1     0.5725114200  -0.738602190   0.212577760   0.4334049500  -0.9942478
## 2    -0.2253173800  -0.017059623   0.155777240   0.0825752080  -0.9951232
## 3    -0.2268309300   0.059680819   0.061476177   0.0417021260  -0.9934032
## 4    -0.2019850100   0.054711916   0.110071560  -0.0794225930  -0.9955022
## 5    -0.2369925700   0.093820007   0.023332720   0.0390389760  -0.9958076
```

```
## 6     -0.1726625300  -0.007801159   0.095891245   0.0697559560  -0.9952748
## 7     -0.0992591220  -0.091254239   0.196340640  -0.0113179020  -0.9937188
## 8     -0.0535556390  -0.126589960   0.227078400  -0.0643883450  -0.9942907
## 9     -0.0936973880   0.062756526  -0.110989530   0.1157817900  -0.9958495
## 10    -0.1562922000   0.117166240  -0.099525400   0.0709650890  -0.9897993
## 11    -0.0688815740  -0.026641108   0.138314540  -0.1429914100  -0.9912612
## 12     0.3509023200  -0.472024220   0.516623870  -0.4154633400  -0.9977610
## 13     0.2628139800  -0.332948780   0.395177500  -0.3984873700  -0.9986015
## 14     0.2921354200  -0.275355050   0.184877530  -0.2097283700  -0.9983345
## 15    -0.1392244400  -0.048703944  -0.043866658   0.3411440300  -0.9914491
## 16    -0.2581495900   0.187301010  -0.253422630   0.2989976100  -0.9968019
## 17    -0.1759099000   0.097815091  -0.126262400   0.1627305300  -0.9969056
## 18    -0.0480305660  -0.089795689   0.087035260   0.0540922700  -0.9970015
## 19    -0.0635739130  -0.119038910   0.208811960  -0.0453045700  -0.9980807
## 20     0.0927706000  -0.187528430   0.037083444   0.1644997300  -0.9986959
## 21     0.4429120800  -0.427578050   0.257022650  -0.2249911300  -0.9984329
## 22     0.4057724000  -0.397953970   0.371947910  -0.4447585100  -0.9981884
## 23     0.3075529800  -0.362035870   0.368370510  -0.3334297500  -0.9985293
## 24     0.4413230100  -0.454993140   0.286861580  -0.1788372600  -0.9983214
## 25     0.3663655800  -0.418274360   0.301189880  -0.1717616300  -0.9974098
## 26     0.2083755500  -0.368599690   0.421278400  -0.2223703600  -0.9971719
## 27     0.2336613700  -0.291873980   0.246456420  -0.1645271400  -0.9971742
## 28    -0.6447100400   0.684799150  -0.525701460   0.1605685300  -0.9902348
## 29    -0.1113254400  -0.013050729   0.035322091   0.0437508900  -0.9980877
## 30    -0.1733813300   0.040671218   0.020874798   0.0405541060  -0.9988625
## 31    -0.7868637800   0.677759370  -0.363357620   0.1659956500  -0.9175591
## 32    -0.7090899900   0.590791260  -0.325477640   0.1898369700  -0.8887884
## 33    -0.2174539500   0.096247375  -0.030694438   0.0753296150  -0.9660986
## 34    -0.2996303200   0.099986480   0.046009366   0.0780547310  -0.9931470
## 35     0.3177442100  -0.413029460   0.278758690  -0.1117897300  -0.9967949
## 36     0.7165125300  -0.711304030   0.463080400  -0.3787832200  -0.9970314
## 37     0.6051562500  -0.594977840   0.475762490  -0.4745501900  -0.9965865
## 38     0.5541918300  -0.521697680   0.277838880  -0.1558323200  -0.9964865
## 39    -0.2904921500   0.121092920  -0.190699280   0.4273405900  -0.9926913
## 40    -0.4069102900   0.140566370  -0.071655027   0.3780466100  -0.9952965
## 41    -0.2065079500  -0.074240341   0.161168620   0.1646255100  -0.9965889
## 42     0.2580214700  -0.339710620   0.260101530  -0.1621887500  -0.9970724
## 43     0.2210044000  -0.332444250   0.314751040  -0.2057420100  -0.9973482
## 44     0.0280027640  -0.125603910   0.089333250  -0.0002746892  -0.9977953
## 45     0.3712415800  -0.371178670   0.212568760  -0.1938733700  -0.9974850
## 46     0.4131156800  -0.437426400   0.267307500  -0.1655384800  -0.9971289
## 47     0.3379965400  -0.442461210   0.362800210  -0.1780836100  -0.9974587
## 48     0.3018968800  -0.369585360   0.375402190  -0.3239045100  -0.9975804
## 49     0.2619098700  -0.288699190   0.216035420  -0.1777377500  -0.9974714
## 50     0.3636796900  -0.364030730   0.323056480  -0.3724608100  -0.9970611
## 51     0.0900738980  -0.204048860   0.300335450  -0.2308449300  -0.9970486
## 52    -0.4686190800   0.444442930  -0.387646330   0.2365370100  -0.9732644
## 53    -0.2829867800   0.099806166  -0.264996540   0.6083679400  -0.9975084
## 54    -0.0600609190  -0.051199662   0.066023400  -0.0002393424  -0.9977556
## 55    -0.0003360451  -0.100425950   0.146887030  -0.1203613500  -0.9983250
```

```
## 56    0.0396890280 -0.142276400  0.016237234  0.1590977800 -0.9989408
## 57    0.1102906800 -0.175193260  0.007333160  0.1370497000 -0.9987064
## 58    0.2107220800 -0.249465920 -0.019469055  0.2129764600 -0.9982823
## 59    0.3154342400 -0.324008930  0.030681773  0.1475528400 -0.9987554
## 60    0.2308778500 -0.251354950  0.130587380 -0.0673051570 -0.9990628
## 61    0.2785966800 -0.314165880  0.200952460 -0.1098558900 -0.9988674
## 62    0.5474716300 -0.615861900  0.411790450 -0.1830787700 -0.9986479
## 63    0.4875093800 -0.552766450  0.399415930 -0.2227102000 -0.9985391
## 64    0.2904780100 -0.270053710  0.142085960 -0.1666841100 -0.9984094
## 65   -0.4729580200  0.427750660 -0.541503080  0.5733197700 -0.9501847
## 66   -0.2857782400  0.060031566 -0.073962298  0.3740276600 -0.9891264
## 67   -0.7554837100  0.635201860 -0.326867110  0.1791799500 -0.8687560
## 68   -0.7612240900  0.656430330 -0.361249340  0.1935235200 -0.8308079
## 69   -0.6873164900  0.644763830 -0.392033920  0.1220728500 -0.9460804
## 70   -0.2473250200  0.055668065  0.071166132  0.1101366200 -0.8710263
## 71   -0.3676584100  0.065948647  0.260219130 -0.0441800940 -0.6756277
## 72   -0.2757316900 -0.030634947  0.329297400 -0.0925294470 -0.7502360
## 73   -0.6723556100  0.665116670 -0.539322250  0.2996744600 -0.9508217
## 74   -0.2318373500  0.139052010 -0.095643388  0.0936272270 -0.9851478
## 75   -0.1284891600  0.071303547 -0.096895329  0.0867225010 -0.9900837
## 76   -0.0343832810 -0.179763570  0.321143820 -0.1626678600 -0.9961971
## 77    0.2171014300 -0.390308050  0.466768470 -0.3079183300 -0.9961236
## 78    0.2241356200 -0.368759170  0.473875050 -0.3764241900 -0.9965365
## 79    0.1102777100 -0.211774280  0.294424530 -0.2624441500 -0.4661497
## 80    0.1692098400 -0.191863060  0.203545160 -0.2563891600 -0.3899198
## 81    0.2377205400 -0.238541050  0.016162243  0.0845705400 -0.3741507
## 82    0.2200043100 -0.164962920  0.032214568 -0.0919013040 -0.2364741
## 83    0.3040239700 -0.283233570  0.278475180 -0.3693140300 -0.2200966
## 84    0.3778543700 -0.424344080  0.391251350 -0.3261462400 -0.3038356
## 85    0.3332631900 -0.372070290  0.298804250 -0.2346637000 -0.3271154
## 86    0.3522469600 -0.365193270  0.320186000 -0.3276050200 -0.3037392
## 87   -0.0015879448 -0.028831011  0.038606806 -0.0801893920 -0.4643463
## 88    0.3389116100 -0.342785500  0.225593700 -0.2024017500 -0.3927762
## 89    0.3998946200 -0.401307310  0.264796340 -0.2258831100 -0.3894135
## 90    0.3446112800 -0.276106670  0.064704075 -0.0942652900 -0.3143304
## 91    0.4093374100 -0.382967570  0.167466060 -0.1055480700 -0.2719825
## 92    0.4489782700 -0.452591430  0.302608780 -0.2326748000 -0.2747823
## 93    0.4857837300 -0.487285090  0.308916110 -0.2287455500 -0.2996404
## 94    0.3333438700 -0.382219350  0.382005140 -0.3526785200 -0.2890987
## 95    0.1676252700 -0.183488470  0.202027460 -0.2475446300 -0.2711544
## 96    0.2486790000 -0.221202660  0.107267370 -0.1231356100 -0.2497903
## 97    0.3345886000 -0.320303330  0.243922110 -0.2630934100 -0.2246535
## 98    0.1828984000 -0.190526110  0.274275640 -0.3979722200 -0.3026735
## 99    0.1758363800 -0.134456370  0.065365432 -0.1746823800 -0.2864583
## 100   0.0981124920 -0.110370580  0.028677683 -0.0127941680 -0.3351580
## 101   0.3853058500 -0.312563740  0.048237558 -0.0248997770 -0.2998284
## 102   0.6472179300 -0.571153370  0.315449560 -0.2845232800 -0.1642771
## 103   0.6277197700 -0.577467290  0.354736920 -0.3122902500 -0.2018006
## 104   0.3400368000 -0.279806130  0.149981410 -0.2214253500 -0.2365622
## 105   0.3737736200 -0.351639080  0.180699070 -0.1394325300 -0.2960481
```

```
## 106   0.3122898900 -0.364411930  0.258788320 -0.1308923200 -0.3669457
## 107   0.3181158900 -0.326224220  0.263648630 -0.2559213100 -0.2970367
## 108   0.2244100300 -0.254278660  0.200570170 -0.1661548400 -0.2934721
## 109   0.1579912500 -0.096071645 -0.116198310  0.0953318000 -0.2873888
## 110   0.1764440000 -0.093966243 -0.018781832 -0.1231487600 -0.2528806
## 111   0.1662692600 -0.132385380  0.191351330 -0.3865128400 -0.2902064
## 112   0.3300184400 -0.509097890  0.525613580 -0.2685507100 -0.2464726
## 113   0.4118207900 -0.519217410  0.370930560 -0.1089460200 -0.3654577
## 114   0.3065880000 -0.297821590  0.080190104  0.0133058400 -0.3270002
## 115   0.2271024800 -0.161189820  0.012657524 -0.0901259800 -0.2850545
## 116   0.3139555000 -0.314450990  0.272949070 -0.2999315200 -0.2997406
## 117   0.3553759500 -0.360145520  0.251289310 -0.2158138000 -0.3082006
## 118   0.3328679100 -0.353665830  0.249781680 -0.1937570700 -0.3399016
## 119   0.2317840400 -0.284436310  0.259401120 -0.2067049200 -0.3930977
## 120   0.0511785020 -0.037065890 -0.019045678 -0.0322729170 -0.4115426
## 121   0.1028534200 -0.049216870 -0.054529374 -0.0416950180 -0.4194320
## 122   0.0846742730 -0.035667031 -0.088968294  0.0144499250 -0.3862723
## 123  -0.0006939846  0.052533899 -0.117099880 -0.0279664180 -0.3376773
## 124   0.0124441340 -0.024445168  0.081220163 -0.1961318900 -0.3527251
## 125   0.0843075880 -0.087770242  0.044230399 -0.0601783420 -0.3862431
## 126   0.4042089600 -0.461408300  0.390876870 -0.2546077800 -0.4592824
## 127   0.5017454400 -0.513210790  0.334300290 -0.1368471100 -0.3650609
## 128   0.4587296600 -0.523499620  0.357382300 -0.1347410000 -0.2760745
## 129   0.2130753100 -0.381068780  0.579998110 -0.5067132100 -0.3312103
## 130   0.1486328300 -0.202005730  0.214793860 -0.1909353100 -0.3689840
## 131   0.3713714500 -0.350437130  0.161269890 -0.1242710700 -0.2615177
## 132   0.4789258700 -0.460127390  0.241278540 -0.1802184500 -0.3010377
## 133   0.3712086500 -0.441161180  0.412939190 -0.3316910500 -0.4158176
## 134   0.3975083500 -0.473480830  0.461828070 -0.3459976300 -0.3864044
## 135   0.5568321200 -0.672101960  0.504068190 -0.1473647300 -0.2170654
## 136   0.3744105900 -0.446775400  0.385726320 -0.2041497100 -0.2600991
## 137   0.2978683400 -0.365320080  0.295859960 -0.1683886500 -0.2204020
## 138   0.1745022800 -0.209667540  0.085115067  0.0207138790 -0.1996211
## 139   0.3531376600 -0.364620240  0.202480160 -0.0900249720 -0.1911278
## 140   0.3908172400 -0.566054890  0.557571220 -0.2639996600 -0.2381760
## 141   0.2657627700 -0.469213880  0.647069440 -0.4743483300 -0.2876153
## 142  -0.0482945850  0.005794620  0.025955808 -0.0576047300 -0.3597811
## 143  -0.0520855540 -0.087254741  0.271113970 -0.2195019600 -0.3562477
## 144   0.1029985100 -0.268169120  0.422531230 -0.2805079300 -0.3410245
## 145   0.4025170000 -0.632013510  0.667648750 -0.3290254000 -0.2828309
## 146   0.4528254900 -0.602944790  0.632959470 -0.4405117300 -0.1735035
## 147   0.2644879600 -0.380826650  0.459599650 -0.3780576300 -0.3256857
## 148   0.1054454800 -0.214366690  0.075761050  0.1772006700 -0.3665851
## 149   0.1704800700 -0.243822510  0.219966570 -0.1350168000 -0.3387479
## 150  -0.0094806812 -0.116439020  0.350041540 -0.4004459700 -0.4326069
## 151  -0.4554252200  0.371053570 -0.015494076 -0.2293674700 -0.5542681
## 152  -0.3631387600  0.256644700  0.107798830 -0.3095658700 -0.5804087
## 153  -0.3871948600  0.270548570 -0.096989421  0.0541929210 -0.6054311
## 154  -0.4979861900  0.394730200 -0.158171530  0.0354305860 -0.5797910
## 155  -0.5472447700  0.495231380 -0.183280920 -0.1033748300 -0.5980851
```

```
## 156 -0.4885291500   0.426082870 -0.232639330   0.0742688480 -0.6287900
## 157 -0.2800849000   0.214699580 -0.023272067 -0.1146765200 -0.5606645
## 158 -0.3139174700   0.263686270 -0.052697931 -0.1379932100 -0.5511050
## 159 -0.2451067400   0.106164780   0.236706820 -0.3600209100 -0.5670185
## 160 -0.3605189800   0.185723990   0.227647500 -0.3356607400 -0.5621183
## 161 -0.4592942000   0.306949660   0.009713063 -0.1079745900 -0.5394625
## 162 -0.2945352400   0.164460030   0.041815293 -0.0922943950 -0.5823160
## 163 -0.4070356600   0.323283910 -0.054413872 -0.1338654900 -0.6527377
## 164 -0.2801545700   0.184660620   0.045886299 -0.1637658100 -0.6225299
## 165 -0.2539618800   0.137473250   0.072670444 -0.1398507300 -0.6471948
## 166 -0.1838744600 -0.066017970   0.453833560 -0.4111795600 -0.6716453
## 167 -0.1977738200 -0.016608335   0.334664650 -0.2858737100 -0.6742344
## 168 -0.5065761100   0.478734350 -0.432013270   0.3145679400 -0.6690247
## 169 -0.5021183100   0.453247430 -0.294096450   0.1385013500 -0.6377267
## 170 -0.5540485700   0.512693830 -0.382095590   0.2193389800 -0.6125291
## 171 -0.4210373800   0.361755280 -0.351589050   0.3218801700 -0.6326070
## 172 -0.2621114300   0.207499870 -0.119283930   0.0346509570 -0.6469846
## 173 -0.2768061000   0.208782430 -0.121871530   0.0759933630 -0.6599647
## 174 -0.3911600600   0.352099790 -0.275494550   0.1694939000 -0.6268747
## 175 -0.4341284300   0.405180610 -0.284762320   0.1104320100 -0.6556885
## 176 -0.4020710000   0.302310390 -0.012713278 -0.1655499200 -0.6701324
## 177  0.3744360400 -0.575797070  0.347318950   0.1043175000 -0.9884753
##              NA          NA          NA          NA          NA          NA
## 1    -0.99136761 -0.9931430 -0.98893563 -0.99348603 -0.9942478 -0.9999490
## 2    -0.99610164 -0.9958385 -0.99654485 -0.99200604 -0.9951232 -0.9999698
## 3    -0.99509104 -0.9948595 -0.99535951 -0.99765184 -0.9934032 -0.9999549
## 4    -0.99526660 -0.9953048 -0.99535951 -0.99765184 -0.9955022 -0.9999702
## 5    -0.99525804 -0.9963073 -0.99238935 -0.99219267 -0.9958076 -0.9999721
## 6    -0.99520498 -0.9960696 -0.99238935 -0.99275370 -0.9952748 -0.9999686
## 7    -0.99526950 -0.9949353 -0.99628668 -0.99275370 -0.9937188 -0.9999578
## 8    -0.99521070 -0.9950755 -0.99628668 -0.99232373 -0.9942907 -0.9999619
## 9    -0.99558830 -0.9958789 -0.99556992 -0.99232373 -0.9958495 -0.9999732
## 10   -0.99073520 -0.9907103 -0.99266440 -0.98974543 -0.9897993 -0.9999075
## 11   -0.99034063 -0.9904621 -0.99266440 -0.99347850 -0.9912612 -0.9999202
## 12   -0.99781536 -0.9976266 -0.99857086 -0.99347850 -0.9977610 -0.9999883
## 13   -0.99915139 -0.9989523 -0.99935148 -0.99094803 -0.9986015 -0.9999941
## 14   -0.99915859 -0.9992039 -0.99854535 -0.99835678 -0.9983345 -0.9999929
## 15   -0.98971134 -0.9901280 -0.99087741 -0.98947032 -0.9914491 -0.9999191
## 16   -0.99809793 -0.9981840 -0.99794359 -0.98947032 -0.9968019 -0.9999839
## 17   -0.99779235 -0.9979832 -0.99733932 -0.98870879 -0.9969056 -0.9999839
## 18   -0.99768614 -0.9977719 -0.99733932 -0.99619464 -0.9970015 -0.9999842
## 19   -0.99848741 -0.9984959 -0.99826853 -0.99619464 -0.9980807 -0.9999909
## 20   -0.99967043 -0.9995513 -0.99937305 -0.99508798 -0.9986959 -0.9999951
## 21   -0.99918860 -0.9991135 -0.99905473 -0.99366851 -0.9984329 -0.9999934
## 22   -0.99867706 -0.9985339 -0.99905473 -0.99366851 -0.9981884 -0.9999916
## 23   -0.99891331 -0.9988192 -0.99913146 -0.99191487 -0.9985293 -0.9999934
## 24   -0.99893826 -0.9990340 -0.99863704 -0.99191487 -0.9983214 -0.9999926
## 25   -0.99890363 -0.9989063 -0.99863704 -0.98850940 -0.9974098 -0.9999883
## 26   -0.99868261 -0.9985012 -0.99857415 -0.98812820 -0.9971719 -0.9999868
## 27   -0.99829940 -0.9981975 -0.99794746 -0.99544543 -0.9971742 -0.9999862
```

```
## 28    -0.98011390 -0.9834393 -0.98229709 -0.99107502 -0.9902348 -0.9998490
## 29    -0.99875192 -0.9987556 -0.99826521 -0.99474147 -0.9980877 -0.9999913
## 30    -0.99918640 -0.9991389 -0.99934318 -0.99731581 -0.9988625 -0.9999952
## 31    -0.83220576 -0.8249708 -0.87551242 -0.99731581 -0.9175591 -0.9924592
## 32    -0.85172027 -0.8543253 -0.87551242 -0.99329070 -0.8887884 -0.9914815
## 33    -0.94714080 -0.9511167 -0.94049869 -0.99286396 -0.9660986 -0.9989674
## 34    -0.98932118 -0.9909509 -0.98641700 -0.99286396 -0.9931470 -0.9999319
## 35    -0.99571251 -0.9965262 -0.99572442 -0.99042252 -0.9967949 -0.9999789
## 36    -0.99591487 -0.9968687 -0.99521044 -0.99271209 -0.9970314 -0.9999807
## 37    -0.99598442 -0.9965394 -0.99521044 -0.99271209 -0.9965865 -0.9999784
## 38    -0.99617057 -0.9964699 -0.99545361 -0.99398167 -0.9964865 -0.9999783
## 39    -0.99356814 -0.9938155 -0.99235043 -0.98349555 -0.9926913 -0.9999448
## 40    -0.99563264 -0.9964689 -0.99505336 -0.98761012 -0.9952965 -0.9999698
## 41    -0.99663743 -0.9969307 -0.99666076 -0.99079221 -0.9965889 -0.9999799
## 42    -0.99584487 -0.9962206 -0.99666076 -0.99500827 -0.9970724 -0.9999807
## 43    -0.99701870 -0.9972691 -0.99700225 -0.99500827 -0.9973482 -0.9999847
## 44    -0.99844111 -0.9985040 -0.99835906 -0.99227633 -0.9977953 -0.9999895
## 45    -0.99754577 -0.9980597 -0.99613521 -0.99179903 -0.9974850 -0.9999864
## 46    -0.99714750 -0.9977097 -0.99613521 -0.99179903 -0.9971289 -0.9999839
## 47    -0.99810576 -0.9983616 -0.99748155 -0.98819650 -0.9974587 -0.9999873
## 48    -0.99822544 -0.9982730 -0.99719212 -0.99596060 -0.9975804 -0.9999881
## 49    -0.99793913 -0.9979759 -0.99719212 -0.99596060 -0.9974714 -0.9999871
## 50    -0.99769576 -0.9976692 -0.99786299 -0.99519529 -0.9970611 -0.9999846
## 51    -0.99682107 -0.9969715 -0.99745405 -0.99158318 -0.9970486 -0.9999828
## 52    -0.94034612 -0.9473641 -0.94909332 -0.98697113 -0.9732644 -0.9990062
## 53    -0.99865538 -0.9988011 -0.99811244 -0.99076240 -0.9975084 -0.9999884
## 54    -0.99842692 -0.9985412 -0.99811244 -0.99149975 -0.9977556 -0.9999893
## 55    -0.99869506 -0.9986784 -0.99881622 -0.99437824 -0.9983250 -0.9999923
## 56    -0.99912404 -0.9993182 -0.99848779 -0.99437824 -0.9989408 -0.9999954
## 57    -0.99919122 -0.9993254 -0.99848779 -0.99435866 -0.9987064 -0.9999945
## 58    -0.99872606 -0.9989598 -0.99728056 -0.99274152 -0.9982823 -0.9999921
## 59    -0.99867217 -0.9988888 -0.99728056 -0.99274152 -0.9987554 -0.9999940
## 60    -0.99933286 -0.9991582 -0.99905074 -0.99553895 -0.9990628 -0.9999961
## 61    -0.99923411 -0.9990961 -0.99913103 -0.99553895 -0.9988674 -0.9999952
## 62    -0.99869226 -0.9990608 -0.99748058 -0.99516919 -0.9986479 -0.9999936
## 63    -0.99862726 -0.9989179 -0.99748058 -0.99086618 -0.9985391 -0.9999931
## 64    -0.99873700 -0.9987566 -0.99816935 -0.98969026 -0.9984094 -0.9999927
## 65    -0.91945032 -0.9246231 -0.93733670 -0.98404316 -0.9501847 -0.9978022
## 66    -0.98723543 -0.9889398 -0.98505342 -0.98939341 -0.9891264 -0.9998839
## 67    -0.69583753 -0.7469955 -0.68333473 -0.98939341 -0.8687560 -0.9776995
## 68    -0.71704468 -0.7765121 -0.68333473 -0.87504519 -0.8308079 -0.9757178
## 69    -0.92582469 -0.9385506 -0.92053607 -0.96932533 -0.9460804 -0.9978131
## 70    -0.73505633 -0.7908227 -0.67603250 -0.96932533 -0.8710263 -0.9817077
## 71    -0.53941555 -0.6089275 -0.61052195 -0.87732288 -0.6756277 -0.9261050
## 72    -0.54078957 -0.6097482 -0.61052195 -0.99020751 -0.7502360 -0.9414996
## 73    -0.89968023 -0.9134590 -0.91775065 -0.99020751 -0.9508217 -0.9972045
## 74    -0.98501114 -0.9868711 -0.98609699 -0.98593376 -0.9851478 -0.9998229
## 75    -0.98434630 -0.9864463 -0.98609699 -0.99298573 -0.9900837 -0.9998771
## 76    -0.99682330 -0.9969529 -0.99727834 -0.99298573 -0.9961971 -0.9999781
## 77    -0.99674240 -0.9968031 -0.99717127 -0.99258315 -0.9961236 -0.9999775
```

```
## 78   -0.99682352 -0.9968190 -0.99687958 -0.99069092 -0.9965365 -0.9999800
## 79   -0.43365401 -0.4757336 -0.46833824 -0.59944186 -0.4661497 -0.8443428
## 80   -0.43898407 -0.4825932 -0.48749004 -0.76484791 -0.3899198 -0.8146959
## 81   -0.41803191 -0.4826810 -0.44653953 -0.76484791 -0.3741507 -0.8037966
## 82   -0.22944178 -0.3055795 -0.23938684 -0.53265475 -0.2364741 -0.6935254
## 83   -0.21277224 -0.2894471 -0.23938684 -0.70597466 -0.2200966 -0.6802696
## 84   -0.37442998 -0.4215599 -0.38123606 -0.70597466 -0.3038356 -0.7622425
## 85   -0.42371876 -0.4374817 -0.41473670 -0.54804284 -0.3271154 -0.7834507
## 86   -0.37066839 -0.3871146 -0.32041100 -0.63652429 -0.3037392 -0.7613974
## 87   -0.46330737 -0.5136378 -0.43962213 -0.51484620 -0.4643463 -0.8491970
## 88   -0.43292775 -0.4659781 -0.43962213 -0.82360017 -0.3927762 -0.8147625
## 89   -0.46969061 -0.4850978 -0.51677359 -0.82360017 -0.3894135 -0.8201475
## 90   -0.41836589 -0.4663177 -0.43879456 -0.23456612 -0.3143304 -0.7763026
## 91   -0.35678785 -0.4100591 -0.40875694 -0.51087945 -0.2719825 -0.7425319
## 92   -0.28557360 -0.3102997 -0.34082759 -0.77540209 -0.2747823 -0.7276227
## 93   -0.34351191 -0.3789516 -0.34082759 -0.77540209 -0.2996404 -0.7534854
## 94   -0.35180971 -0.4150689 -0.24198396 -0.79996123 -0.2890987 -0.7500916
## 95   -0.29102630 -0.3464810 -0.24198396 -0.79996123 -0.2711544 -0.7270822
## 96   -0.25113264 -0.2906401 -0.31393076 -0.65849491 -0.2497903 -0.7061662
## 97   -0.19401136 -0.2490806 -0.23557646 -0.65849491 -0.2246535 -0.6777090
## 98   -0.30304085 -0.3617147 -0.23557646 -0.55089401 -0.3026735 -0.7457179
## 99   -0.38555145 -0.4305407 -0.30931335 -0.07198991 -0.2864583 -0.7559727
## 100  -0.44745156 -0.4575256 -0.52121615 -0.58776977 -0.3351580 -0.7917606
## 101  -0.31259403 -0.3579630 -0.37683202 -0.58776977 -0.2998284 -0.7465564
## 102  -0.12044922 -0.1598875 -0.24798729 -0.54293385 -0.1642771 -0.6226498
## 103  -0.16298274 -0.1987165 -0.24798729 -0.64122359 -0.2018006 -0.6564835
## 104  -0.25478179 -0.2787589 -0.24499781 -0.64122359 -0.2365622 -0.7000601
## 105  -0.29858896 -0.3439405 -0.24499781 -0.57676476 -0.2960481 -0.7414062
## 106  -0.42317337 -0.4389750 -0.52520785 -0.57676476 -0.3669457 -0.8016170
## 107  -0.34890167 -0.3506578 -0.46101920 -0.52001108 -0.2970367 -0.7533936
## 108  -0.36498378 -0.3828990 -0.46101920 -0.70013949 -0.2934721 -0.7551254
## 109  -0.36668668 -0.3954269 -0.41790924 -0.70013949 -0.2873888 -0.7524595
## 110  -0.30844168 -0.3640228 -0.17648149 -0.65557123 -0.2528806 -0.7217359
## 111  -0.31878729 -0.3833792 -0.17648149 -0.83951549 -0.2902064 -0.7432252
## 112  -0.30047131 -0.3020555 -0.42021217 -0.74806579 -0.2464726 -0.7164875
## 113  -0.41555168 -0.4372468 -0.42021217 -0.74806579 -0.3654577 -0.7994575
## 114  -0.36998523 -0.4195357 -0.29826516 -0.50274845 -0.3270002 -0.7724371
## 115  -0.35491730 -0.4012579 -0.29826516 -0.12845474 -0.2850545 -0.7487464
## 116  -0.33627652 -0.3742995 -0.33750506 -0.71421672 -0.2997406 -0.7519204
## 117  -0.35804112 -0.3746078 -0.33750506 -0.71421672 -0.3082006 -0.7608585
## 118  -0.43255374 -0.4160230 -0.56273100 -0.24534523 -0.3399016 -0.7911461
## 119  -0.41091453 -0.4400816 -0.30446708 -0.58855934 -0.3930977 -0.8105957
## 120  -0.40542066 -0.4599458 -0.30446708 -0.58855934 -0.4115426 -0.8172464
## 121  -0.43451248 -0.4893624 -0.39659452 -0.46212756 -0.4194320 -0.8261961
## 122  -0.39916334 -0.4558703 -0.39799764 -0.44870602 -0.3862723 -0.8053033
## 123  -0.43977564 -0.4806954 -0.42074759 -0.03824192 -0.3376773 -0.7914903
## 124  -0.48100763 -0.4995918 -0.49666447 -0.45032638 -0.3527251 -0.8059408
## 125  -0.34081800 -0.4011230 -0.19312800 -0.45032638 -0.3862431 -0.7928637
## 126  -0.47554454 -0.5113398 -0.45875480 -0.80861246 -0.4592824 -0.8494764
## 127  -0.22428234 -0.3682746 -0.04411328 -0.80861246 -0.3650609 -0.7553195
```

```
## 128  -0.11145682  -0.2318734  -0.04411328  -0.12370331  -0.2760745  -0.6811493
## 129  -0.34730564  -0.3955893  -0.38878901  -0.52183655  -0.3312103  -0.7695041
## 130  -0.52355150  -0.5445867  -0.54539659  -0.52183655  -0.3689840  -0.8204108
## 131  -0.29158374  -0.3526181  -0.40945698  -0.32117453  -0.2615177  -0.7222521
## 132  -0.23241768  -0.2912294  -0.40220369  -0.32117453  -0.3010377  -0.7274439
## 133  -0.43280411  -0.4827977  -0.40220369  -0.25571854  -0.4158176  -0.8243887
## 134  -0.37454225  -0.4330576  -0.32641025  -0.14562224  -0.3864044  -0.8002558
## 135  -0.03628165  -0.1998819  -0.04815043  -0.36528021  -0.2170654  -0.6264406
## 136  -0.17484412  -0.2743413  -0.03225767  -0.36528021  -0.2600991  -0.6912792
## 137  -0.07587671  -0.2280617   0.09364587  -0.31980867  -0.2204020  -0.6408853
## 138  -0.13917226  -0.2382228   0.09364587  -0.76199932  -0.1996211  -0.6484360
## 139  -0.12381434  -0.2165506  -0.01955260  -0.76199932  -0.1911278  -0.6391374
## 140  -0.17961948  -0.2866766  -0.01955260  -0.43315073  -0.2381760  -0.6810512
## 141  -0.38310075  -0.4216054  -0.34930599  -0.48434124  -0.2876153  -0.7560418
## 142  -0.43825071  -0.4671093  -0.34930599  -0.64193860  -0.3597811  -0.8013151
## 143  -0.46677784  -0.4904752  -0.52003551  -0.12752761  -0.3562477  -0.8050051
## 144  -0.41175141  -0.4275708  -0.52003551  -0.42866873  -0.3410245  -0.7876007
## 145  -0.23500523  -0.3105081  -0.15239893  -0.42866873  -0.2828309  -0.7190612
## 146  -0.15995657  -0.2276919  -0.15239893  -0.20288466  -0.1735035  -0.6394984
## 147  -0.32514533  -0.3991322  -0.25942122  -0.58624557  -0.3256857  -0.7619263
## 148  -0.40408907  -0.4651290  -0.40957862  -0.58624557  -0.3665851  -0.7976720
## 149  -0.39408504  -0.4491162  -0.40957862  -0.41521828  -0.3387479  -0.7829779
## 150  -0.53436189  -0.5639279  -0.51833078  -0.28887679  -0.4326069  -0.8489364
## 151  -0.57058347  -0.5921688  -0.61769217  -0.59087644  -0.5542681  -0.8978135
## 152  -0.60924570  -0.6173832  -0.66571081  -0.59333132  -0.5804087  -0.9111616
## 153  -0.64489902  -0.6557122  -0.63642718  -0.59333132  -0.6054311  -0.9228581
## 154  -0.61090800  -0.6334104  -0.62654707  -0.48313426  -0.5797910  -0.9111985
## 155  -0.59631013  -0.6472644  -0.58149652  -0.66056419  -0.5980851  -0.9145417
## 156  -0.63693073  -0.6752228  -0.58149652  -0.80143921  -0.6287900  -0.9282018
## 157  -0.56945972  -0.5894656  -0.58002110  -0.80143921  -0.5606645  -0.8996450
## 158  -0.56765074  -0.5871581  -0.58002110  -0.68870771  -0.5511050  -0.8963881
## 159  -0.68193484  -0.6825226  -0.65780833  -0.52147851  -0.5670185  -0.9158783
## 160  -0.66371950  -0.6796330  -0.65780833  -0.44423336  -0.5621183  -0.9123503
## 161  -0.63602302  -0.6503377  -0.63963607  -0.55310757  -0.5394625  -0.9018866
## 162  -0.65009120  -0.6653728  -0.63963607  -0.95189486  -0.5823160  -0.9168558
## 163  -0.72668504  -0.7290446  -0.75454624  -0.95189486  -0.6527377  -0.9439808
## 164  -0.68036371  -0.6954556  -0.66160838  -0.48929859  -0.6225299  -0.9315795
## 165  -0.71542311  -0.7418405  -0.66160838  -0.48929859  -0.6471948  -0.9415410
## 166  -0.74889161  -0.7811653  -0.67988279  -0.55937357  -0.6716453  -0.9504791
## 167  -0.71214465  -0.7436027  -0.67988279  -0.77149940  -0.6742344  -0.9477089
## 168  -0.74512567  -0.7420810  -0.72939952  -0.63958060  -0.6690247  -0.9495436
## 169  -0.63689422  -0.6686490  -0.61371018  -0.71934742  -0.6377267  -0.9305125
## 170  -0.62212411  -0.6478764  -0.61371018  -0.71934742  -0.6125291  -0.9219856
## 171  -0.69975664  -0.7008427  -0.74172723  -0.53648483  -0.6326070  -0.9362722
## 172  -0.68564471  -0.6925978  -0.71743042  -0.78110876  -0.6469846  -0.9384578
## 173  -0.68089052  -0.7005332  -0.63530759  -0.78110876  -0.6599647  -0.9411259
## 174  -0.67831737  -0.6925029  -0.63530759  -0.81895727  -0.6268747  -0.9325082
## 175  -0.69917633  -0.6982212  -0.73362124  -0.81895727  -0.6556885  -0.9420171
## 176  -0.67684454  -0.6983058  -0.67141849  -0.72976659  -0.6701324  -0.9430931
## 177  -0.98548228  -0.9885373  -0.98100605  -0.98872575  -0.9884753  -0.9998669
```

```
##               NA            NA             NA             NA             NA
NA
## 1    -0.9945472 -0.61976763  0.292840490 -0.1768892000 -0.145779210 -
0.124072330
## 2    -0.9948192 -0.73072160  0.209334130 -0.1781125600 -0.103084330 -
0.043823965
## 3    -0.9939883 -0.66291363  0.328031460 -0.1545600100 -0.220587120 -
0.107514160
## 4    -0.9950011 -0.68301625  0.595371270 -0.2645687700 -0.315723000 -
0.163825530
## 5    -0.9964837 -0.72017068  0.331858440 -0.2605620300 -0.145664640 -
0.007367991
## 6    -0.9961068 -0.75109221  0.178759930 -0.1814448900  0.049574642 -
0.168852760
## 7    -0.9936228 -0.68125693  0.264598000 -0.2548618000  0.202742470 -
0.365160420
## 8    -0.9942044 -0.64591615  0.326716910 -0.3293826400  0.233694340 -
0.351910260
## 9    -0.9963229 -0.68701641  0.480209580 -0.2585176900 -0.007453049 -
0.367062250
## 10   -0.9896253 -0.46620434  0.548098420 -0.3291289700 -0.249580360 -
0.081848717
## 11   -0.9892153 -0.47100223  0.571770350 -0.3492704200 -0.171442940 -
0.173458680
## 12   -0.9970826 -0.81085833  0.489947250 -0.4578070400  0.236660130 -
0.325850540
## 13   -0.9985016 -0.90271132  0.762638100 -0.5378084300 -0.087643077 -
0.190848620
## 14   -0.9991278 -0.89471020  0.829742890 -0.3582460500 -0.223429850 -
0.442788570
## 15   -0.9914879 -0.46685721  0.593403830 -0.2795609100 -0.244477960 -
0.221518500
## 16   -0.9982958 -0.80907846  0.680049030 -0.4324071700 -0.062888979 -
0.287387640
## 17   -0.9980217 -0.83107741  0.525129070 -0.3560418100  0.227760710 -
0.540178060
## 18   -0.9978290 -0.79485167  0.416371880 -0.4133682400  0.250796860 -
0.325871400
## 19   -0.9989592 -0.84878249  0.592809430 -0.6300118100 -0.059032547
0.151145850
## 20   -0.9994095 -0.97273065  0.675475020 -0.4200803400 -0.084506646 -
0.292118910
## 21   -0.9986976 -0.92316873  0.694508870 -0.3433161300 -0.088755549 -
0.438948290
## 22   -0.9982525 -0.88244203  0.648972820 -0.3501048900  0.015119297 -
0.472756040
## 23   -0.9989229 -0.87808696  0.610774970 -0.3735469200  0.013210478 -
0.380653340
## 24   -0.9989830 -0.89522431  0.572151830 -0.3355028600 -0.027097284 -
0.357628050
```

```
## 25   -0.9988831 -0.92143519  0.640256030 -0.3318804300  0.011379664 -
0.504248740
## 26   -0.9977693 -0.85931236  0.625973610 -0.2638289600  0.010080229 -
0.600367220
## 27   -0.9976921 -0.80252264  0.711288200 -0.3925817000  0.040406020 -
0.516119300
## 28   -0.9948076 -0.53051367  0.498397820 -0.2615945100 -0.497698200
0.155429560
## 29   -0.9983469 -0.88976345  0.575810950 -0.2587900200 -0.095356884 -
0.414520620
## 30   -0.9989044 -0.90763308  0.788695200 -0.5802354100 -0.191165990 -
0.023115347
## 31   -0.8313479 -0.05045768 -0.056690998  0.0077020609 -0.067513544 -
0.048659421
## 32   -0.8618245  0.51245711  0.066960260 -0.1029794400  0.032730374 -
0.135778400
## 33   -0.9546899  0.07910772  0.375245870 -0.4290598100  0.220909760 -
0.161224710
## 34   -0.9913111 -0.50779613  0.521609510 -0.5869211900  0.175956570 -
0.041896063
## 35   -0.9975464 -0.79578066  0.514914760 -0.6760749100 -0.006111691
0.328887200
## 36   -0.9979738 -0.78271263  0.311283630 -0.4895503300 -0.010027002
0.278865290
## 37   -0.9974110 -0.69775236  0.346109280 -0.4026492100 -0.251763800
0.357147460
## 38   -0.9970946 -0.70424641  0.497238620 -0.5440513400  0.051459258
0.078584276
## 39   -0.9943148 -0.60818449  0.329508760 -0.2854550300 -0.029594524 -
0.098847285
## 40   -0.9975800 -0.76668882  0.221894590 -0.3949408600  0.118247600
0.085844097
## 41   -0.9970424 -0.75461372  0.106427820 -0.3361050400  0.077192798
0.189534440
## 42   -0.9971965 -0.70446403  0.428399470 -0.5271952900 -0.095407502
0.301024930
## 43   -0.9974279 -0.76874471  0.660009430 -0.5315617000 -0.048258510 -
0.085948369
## 44   -0.9983878 -0.87063364  0.473060890 -0.4664417400  0.064399776 -
0.113017020
## 45   -0.9983345 -0.81873008  0.402049060 -0.5077280500 -0.115483280
0.294107990
## 46   -0.9982789 -0.81292135  0.415439560 -0.5120544800 -0.043446563
0.212703980
## 47   -0.9987689 -0.85347717  0.375308750 -0.3710452300 -0.077855993
0.034861528
## 48   -0.9984136 -0.82850587  0.450086680 -0.3055085900 -0.416207740
0.198149590
## 49   -0.9979655 -0.83637808  0.542836380 -0.3360755400 -0.390177880
0.109927380
```

```
## 50   -0.9979501 -0.85165359  0.464211870 -0.3784115800 -0.175538830
0.031521728
## 51   -0.9977822 -0.78321354 -0.009301548 -0.1047784100  0.005498351 -
0.027165320
## 52   -0.9687791 -0.17361075  0.343501460 -0.1787035300 -0.415794960
0.139815130
## 53   -0.9988653 -0.88381988  0.565948130 -0.2983362100 -0.143750770 -
0.291430980
## 54   -0.9983294 -0.88689300  0.481392480 -0.3306722600 -0.170994630 -
0.078232868
## 55   -0.9985829 -0.90862324  0.570605140 -0.3533036200 -0.063692500 -
0.266564730
## 56   -0.9995794 -0.92378785  0.701329870 -0.3313098500 -0.076652057 -
0.463627550
## 57   -0.9991924 -0.90390911  0.569919230 -0.3313765100  0.119034970 -
0.525306810
## 58   -0.9991071 -0.87767245  0.428943380 -0.2848827000  0.122154890 -
0.418936680
## 59   -0.9985916 -0.88857593  0.391464370 -0.2294811900  0.085689206 -
0.421683600
## 60   -0.9983803 -0.93203377  0.582441040 -0.4286690000 -0.003073017 -
0.216540500
## 61   -0.9987908 -0.93361178  0.788766670 -0.6245063400 -0.006828376 -
0.146754340
## 62   -0.9993450 -0.88756686  0.757664570 -0.5899545100 -0.059413819 -
0.113879900
## 63   -0.9993044 -0.84387688  0.756545180 -0.5737436600 -0.093777750 -
0.104036510
## 64   -0.9988801 -0.87402604  0.714141920 -0.5228955100 -0.067676869 -
0.160055270
## 65   -0.9440353  0.19758095  0.444134190 -0.3188958900 -0.028263260 -
0.212681070
## 66   -0.9904399 -0.41494136  0.473596600 -0.3779066600 -0.041653138 -
0.095047661
## 67   -0.8050215  0.36855309 -0.745776410  0.5039034300  0.405795360 -
0.552994330
## 68   -0.8450973  0.54389694 -0.652870300  0.4207832700  0.403050440 -
0.521086430
## 69   -0.9495791  0.16262728  0.107092370 -0.0722359470 -0.016236803 -
0.182345960
## 70   -0.8259512  0.45986500 -0.353713700  0.0548628270  0.153968470
0.067947520
## 71   -0.7433679  0.81164951 -0.212960050 -0.0820752650  0.263677540 -
0.053154790
## 72   -0.7082917  0.73050161 -0.086438077 -0.1686200500  0.209943070 -
0.021152952
## 73   -0.9617563  0.05839597  0.267167800 -0.2916457200  0.415911800 -
0.501899600
## 74   -0.9908218 -0.36123694  0.730786620 -0.5963875700 -0.233528730
0.125555330
```

```
## 75   -0.9899921 -0.40699741  0.992823140 -0.6642912700 -0.381384290
0.051489333
## 76   -0.9970187 -0.75395257  0.427483480 -0.4755955000  0.094590090 -
0.066063249
## 77   -0.9961918 -0.76384788  0.391658400 -0.4937322300  0.182188560 -
0.068882032
## 78   -0.9969034 -0.76943966  0.443440850 -0.3617839000  0.180556790 -
0.349954160
## 79   -0.5398614  0.89247540 -0.052909904  0.1160253200 -0.176827620 -
0.096554914
## 80   -0.4478020  0.83408482  0.081121733  0.0294798040 -0.003504281 -
0.333836510
## 81   -0.5184353  0.87823699  0.251099500 -0.1231237000  0.101376320 -
0.403764490
## 82   -0.3824050  0.87031119  0.368417720 -0.0906741320 -0.064581037 -
0.418380440
## 83   -0.4051486  0.88134588  0.398932410 -0.1475980100 -0.055353921 -
0.358787670
## 84   -0.4237821  0.94942163  0.367748710 -0.2100111000  0.051298122 -
0.345638620
## 85   -0.3980795  0.97695238  0.339624300 -0.1482128400  0.003976753 -
0.394181030
## 86   -0.2820271  0.95994628  0.420720280 -0.2350386000  0.097796642 -
0.447992290
## 87   -0.5862535  0.92942022 -0.064977194  0.2790864800 -0.353970630 -
0.176024600
## 88   -0.5026546  0.92737100 -0.182282310  0.2864187200 -0.309639270 -
0.086614574
## 89   -0.4854738  0.91962147  0.127387970  0.0301476640 -0.244767660 -
0.129508690
## 90   -0.4726181  0.88123229  0.144945760  0.0382839590 -0.282834800 -
0.112120110
## 91   -0.4873078  0.89551418  0.087967654  0.0276259810  0.003604657 -
0.337167610
## 92   -0.3345665  0.90188947  0.273943570 -0.2571859800  0.160661790 -
0.255736760
## 93   -0.3943109  0.89612649  0.371495260 -0.4418135200  0.146403790 -
0.073131678
## 94   -0.4357067  0.95485084  0.317754460 -0.1378143600  0.002453801 -
0.366697120
## 95   -0.3293969  0.86843823  0.206197040  0.0004866060 -0.156369720 -
0.271845530
## 96   -0.2754806  0.86222044  0.109327860  0.0909402570 -0.192576170 -
0.247260390
## 97   -0.2462034  0.90284671  0.244211810 -0.0506297660 -0.074857393 -
0.293822910
## 98   -0.3819644  0.92604023  0.325070290 -0.1904163300 -0.097703742 -
0.138917950
## 99   -0.4182548  0.94570787  0.331925440 -0.1337768600 -0.153809170 -
0.209686250
```

```
## 100 -0.4124603  0.98443081  0.233962240 -0.0952621030 -0.067599187 -
0.248720670
## 101 -0.3231506  0.93108476  0.430661110 -0.2625235500 -0.077310170 -
0.182464560
## 102 -0.2015530  0.83487340  0.400870820 -0.3469378100  0.014161287 -
0.102931230
## 103 -0.2147128  0.89331905  0.350603940 -0.2785031900  0.108819320 -
0.272584080
## 104 -0.2174092  0.90188947  0.472702310 -0.1907410000  0.006377658 -
0.464227620
## 105 -0.3790423  0.92876444  0.544863050 -0.3236031900 -0.021420451 -
0.296934540
## 106 -0.4476799  0.90903414  0.355519610 -0.1878650800 -0.067852509 -
0.225409400
## 107 -0.2931087  0.90936791  0.372972560 -0.1904677000 -0.066586844 -
0.261662330
## 108 -0.3680089  0.95967519  0.126451800 -0.0239434520 -0.195964040 -
0.088428442
## 109 -0.4252440  0.94122473  0.169962730 -0.0206981600 -0.007721651 -
0.365026150
## 110 -0.3555383  0.92360633  0.292026890 -0.0408428940 -0.130275560 -
0.342213660
## 111 -0.4593854  0.94365864  0.226034880 -0.0041537098 -0.257555560 -
0.166480340
## 112 -0.2860197  0.92122333  0.436301500 -0.3475002800 -0.092817756 -
0.053578829
## 113 -0.4286043  0.91829070  0.235885630 -0.0619901830 -0.079997595 -
0.290159610
## 114 -0.4398675  0.90227416  0.216125920 -0.0354868590 -0.030131883 -
0.359752830
## 115 -0.4056869  0.91141713  0.157643460 -0.0002090493 -0.002318957 -
0.385865510
## 116 -0.3837995  0.91446335  0.236498210 -0.1423803500  0.034242253 -
0.290014010
## 117 -0.3671632  0.95219675  0.303651180 -0.1718152800  0.066707136 -
0.360308520
## 118 -0.3295797  0.95523552  0.398285450 -0.2907415600  0.142619390 -
0.375702680
## 119 -0.3606985  0.93618021  0.350634780 -0.1496437700 -0.005958560 -
0.370277930
## 120 -0.4056799  0.91518181  0.250916000 -0.0048314751 -0.124387420 -
0.362667000
## 121 -0.4899468  0.91036491  0.202546130  0.0139662680 -0.064744672 -
0.402372780
## 122 -0.5174984  0.91962147  0.264419500 -0.0896927730  0.075378137 -
0.449859370
## 123 -0.5133753  0.89008496  0.353955510 -0.1652036900 -0.015647801 -
0.349534650
## 124 -0.4673669  0.91518181  0.324834150 -0.0698343130 -0.161528990 -
0.318220290
```

```
## 125 -0.4162857  0.88267665  0.141649670  0.0990956110 -0.260461340 -
0.224161830
## 126 -0.5907460  0.89407727  0.311402170 -0.3307191700  0.024390079 -
0.049819223
## 127 -0.4851647  0.84832324  0.218127540 -0.3548463400  0.161879960
0.021901584
## 128 -0.4210723  0.80440241  0.339340400 -0.4285689500  0.012775412
0.155123690
## 129 -0.4347663  0.88055730  0.492060790 -0.3645893400 -0.120658300 -
0.048194062
## 130 -0.5682887  0.89817571  0.443744880 -0.2829567700 -0.179164620 -
0.065758659
## 131 -0.4984067  0.85215059  0.426290750 -0.3687707400 -0.449134100
0.403167100
## 132 -0.4035293  0.87570064  0.417035870 -0.3829460500 -0.407216450
0.405705560
## 133 -0.5228105  0.85580168  0.411461190 -0.4216238100  0.013243774
0.016470660
## 134 -0.5445789  0.84156326  0.589238670 -0.7099119100  0.137026600
0.133596840
## 135 -0.4210040  0.85603301  0.458902920 -0.4605959700 -0.285118320
0.367410470
## 136 -0.3653752  0.90155570  0.766993120 -0.5684359500 -0.243278570
0.105404640
## 137 -0.3207563  0.89763352  0.673325760 -0.7137551600 -0.039864467
0.283131240
## 138 -0.3073912  0.92549804  0.269638980 -0.3833934200 -0.104107850
0.292533820
## 139 -0.3134873  0.83697769  0.412878120 -0.3391165300 -0.379386780
0.296439920
## 140 -0.3997618  0.92155710  0.562061210 -0.4667710600 -0.123007010
0.032993405
## 141 -0.4330384  0.94232787  0.393639780 -0.4355503300  0.205059290 -
0.162546030
## 142 -0.4660094  0.90637260  0.360781940 -0.2368650900 -0.061957440 -
0.129519940
## 143 -0.4798384  0.93351867  0.329655770 -0.2289817900 -0.010496386 -
0.195714460
## 144 -0.4342111  0.93689866  0.264453970 -0.2743756000  0.018836178 -
0.055358542
## 145 -0.3334392  0.89684494  0.244351440 -0.3867582900  0.041512303
0.174329240
## 146 -0.3176697  0.86617298  0.219051730 -0.4400838700  0.296228480 -
0.006142431
## 147 -0.4623604  0.90022493  0.265746250 -0.3667741100  0.205027890 -
0.110991640
## 148 -0.5398804  0.87512809  0.524046500 -0.4032070400 -0.189554230
0.078390998
## 149 -0.5146963  0.88936651  0.549179170 -0.4230709500 -0.154300310
0.022386015
```

```
## 150 -0.5822188  0.93822943  0.403730250 -0.3020967800 -0.036702418 -
0.155623540
## 151 -0.6154695  0.87857820  0.081991137  0.1784604100 -0.429018500 -
0.129950640
## 152 -0.6535355  0.85945276  0.162293190  0.0504213920 -0.252183140 -
0.201206370
## 153 -0.6649916  0.81646641  0.074811842  0.0550597310 -0.219909630 -
0.104382300
## 154 -0.6498089  0.88134588  0.033157439  0.1152325000 -0.121431710 -
0.276485350
## 155 -0.6660617  0.88598652 -0.010013170  0.1677506800 -0.299160050 -
0.128668300
## 156 -0.7044402  0.85686135  0.112258310  0.0638103030 -0.349175280 -
0.037163281
## 157 -0.6307137  0.84593280  0.362269960 -0.0615069230 -0.338391980 -
0.167506410
## 158 -0.5872230  0.85955890  0.281843540 -0.0293725620 -0.319126300 -
0.140048070
## 159 -0.6572452  0.82117717  0.378078970 -0.1357128000 -0.151550090 -
0.287051750
## 160 -0.6876693  0.82554671  0.087299406  0.1106484900 -0.118596990 -
0.377282310
## 161 -0.6733646  0.85812199 -0.054240491  0.1469881900 -0.073258007 -
0.297401890
## 162 -0.6755764  0.88393729  0.043793368  0.0327060060 -0.075047987 -
0.218066810
## 163 -0.7007617  0.83097593  0.176547590 -0.0740549980  0.001139061 -
0.296733210
## 164 -0.7149949  0.83203560  0.250141580 -0.1944674800  0.084357394 -
0.261670120
## 165 -0.7671826  0.78556312  0.287986110 -0.2962336000  0.182133070 -
0.256193050
## 166 -0.7969108  0.72856598  0.127867230 -0.1060405100  0.134076360 -
0.350309650
## 167 -0.7577786  0.77986281  0.064071854  0.0954770840 -0.207091220 -
0.200536220
## 168 -0.7224055  0.75127239  0.045348064  0.0735077000 -0.161018100 -
0.195250090
## 169 -0.6707573  0.76001147  0.069585333  0.0755317250 -0.276808960 -
0.084275631
## 170 -0.6419380  0.85553058  0.008140579  0.0335332780 -0.144055520 -
0.073140777
## 171 -0.7006512  0.77621172  0.091799979 -0.0738318170  0.027403398 -
0.205454740
## 172 -0.6838901  0.80461844  0.123649300 -0.0611918160  0.113882280 -
0.362042190
## 173 -0.6907587  0.85481213  0.166293880 -0.1078417500  0.013325133 -
0.204713690
## 174 -0.6432798  0.84289403  0.159585990  0.0241657930 -0.096445791 -
0.317877840
```

```
## 175 -0.6650588  0.83435592 -0.029037549  0.1713368000 -0.022427499 -
0.436967130
## 176 -0.7503040  0.76179704  0.097235847 -0.1439145900 -0.038023352 -
0.029362532
## 177 -0.9905729 -0.43025728  0.164349050  0.0937894020 -0.084665541 -
0.481313490
##                 NA           NA           NA           NA           NA
## 1    -0.994783190 -0.9829841000 -0.93926865 -0.995421750 -0.9831329700
## 2    -0.997450720 -0.9768517300 -0.97352267 -0.998680260 -0.9749298100
## 3    -0.993594090 -0.9725114600 -0.98330396 -0.996312810 -0.9655059300
## 4    -0.995490620 -0.9835697200 -0.99107978 -0.996312110 -0.9832443700
## 5    -0.997285920 -0.9823009900 -0.98836944 -0.998606470 -0.9801294700
## 6    -0.996656750 -0.9869395000 -0.99273860 -0.997643800 -0.9922636500
## 7    -0.995849130 -0.9676116100 -0.98412325 -0.997461250 -0.9679257800
## 8    -0.995192760 -0.9742912700 -0.98865193 -0.997279330 -0.9641019500
## 9    -0.997099910 -0.9682052700 -0.99063224 -0.997367590 -0.9591814800
## 10   -0.993519330 -0.9703186400 -0.98609566 -0.995388450 -0.9747937800
## 11   -0.992886330 -0.9706080000 -0.98367242 -0.995810750 -0.9751099300
## 12   -0.998239350 -0.9849160700 -0.99163940 -0.998181430 -0.9882844500
## 13   -0.999377320 -0.9871587700 -0.99581923 -0.998950360 -0.9832591600
## 14   -0.998819560 -0.9888076800 -0.99182892 -0.999389980 -0.9910295000
## 15   -0.989339670 -0.8834138500 -0.95494861 -0.988175950 -0.7994294500
## 16   -0.995628900 -0.9831707500 -0.98412856 -0.997469860 -0.9715039800
## 17   -0.996195040 -0.9872585100 -0.98768709 -0.997276280 -0.9793237700
## 18   -0.996834090 -0.9880423900 -0.98993731 -0.998140600 -0.9868985400
## 19   -0.996801190 -0.9909443600 -0.99596151 -0.997813660 -0.9939495600
## 20   -0.997204970 -0.9902976600 -0.99669495 -0.998095950 -0.9901247200
## 21   -0.997198290 -0.9926108400 -0.99417669 -0.998258270 -0.9945857800
## 22   -0.996574740 -0.9869780200 -0.99542528 -0.998443860 -0.9913441400
## 23   -0.997546400 -0.9864129000 -0.99403597 -0.997968050 -0.9919837800
## 24   -0.997502640 -0.9849869900 -0.98999238 -0.998900300 -0.9883914100
## 25   -0.998656770 -0.9867237200 -0.99260252 -0.998402550 -0.9891455500
## 26   -0.997472020 -0.9852728000 -0.99227953 -0.998344090 -0.9862863200
## 27   -0.998981870 -0.9899461600 -0.99251428 -0.999395240 -0.9954701400
## 28   -0.921287540 -0.4327786100 -0.61401743 -0.898029070 -0.1252637300
## 29   -0.986123520 -0.9319656000 -0.97975316 -0.981475800 -0.8804637200
## 30   -0.992936910 -0.9574913700 -0.98337133 -0.992623900 -0.9352808000
## 31   -0.807644530 -0.7655053300 -0.67628885 -0.817408550 -0.7560513500
## 32   -0.813356310 -0.7065674400 -0.70433301 -0.739547170 -0.5594663000
## 33   -0.850109090 -0.7616632500 -0.72770498 -0.794201340 -0.5252163400
## 34   -0.967779100 -0.8790280300 -0.98069583 -0.952358540 -0.8295526700
## 35   -0.983393220 -0.9746504300 -0.97488987 -0.974984000 -0.9600656100
## 36   -0.995976430 -0.9934082900 -0.99489744 -0.992820510 -0.9923583400
## 37   -0.996127320 -0.9927257600 -0.99818451 -0.995940840 -0.9969793200
## 38   -0.995298160 -0.9916906600 -0.99619448 -0.995608960 -0.9956291900
## 39   -0.983332640 -0.8991465800 -0.97708524 -0.978452610 -0.8585915200
## 40   -0.989814690 -0.9540931200 -0.99134764 -0.991108460 -0.9295374500
## 41   -0.994435060 -0.9848406000 -0.99008845 -0.995923300 -0.9839212500
## 42   -0.992634360 -0.9857641900 -0.99157404 -0.995251850 -0.9837794400
## 43   -0.994199300 -0.9876598300 -0.99277646 -0.996131170 -0.9790288500
```

```
## 44   -0.994983450 -0.9811016000 -0.99061930 -0.994916360 -0.9664373400
## 45   -0.994044020 -0.9854291300 -0.99060927 -0.994990400 -0.9768572100
## 46   -0.994610520 -0.9890901800 -0.99548767 -0.996492810 -0.9886880600
## 47   -0.995583070 -0.9867623600 -0.99486711 -0.997168990 -0.9810549900
## 48   -0.994922590 -0.9875012600 -0.99196132 -0.997236150 -0.9830884600
## 49   -0.994752890 -0.9913502200 -0.99126636 -0.996416870 -0.9860001400
## 50   -0.995278340 -0.9886292200 -0.99509609 -0.996045300 -0.9772429700
## 51   -0.992965240 -0.9842413900 -0.99532656 -0.997433280 -0.9766304200
## 52   -0.926313960 -0.8869484700 -0.92879208 -0.910374890 -0.9056273600
## 53   -0.986874430 -0.9890077400 -0.98337917 -0.983894090 -0.9918461100
## 54   -0.993614770 -0.9942588700 -0.99519692 -0.994362990 -0.9968263000
## 55   -0.995749890 -0.9934525100 -0.99726751 -0.996234960 -0.9964720400
## 56   -0.996511170 -0.9950610100 -0.99473614 -0.996821630 -0.9977321000
## 57   -0.994701590 -0.9956666600 -0.99156425 -0.994922650 -0.9991905400
## 58   -0.994037290 -0.9923765500 -0.99333595 -0.994497390 -0.9956765700
## 59   -0.995690540 -0.9925955100 -0.99203037 -0.996815730 -0.9942085800
## 60   -0.995293950 -0.9897473300 -0.99107413 -0.996749390 -0.9930936500
## 61   -0.993074210 -0.9887966600 -0.99237312 -0.995641170 -0.9918477700
## 62   -0.994804160 -0.9938037300 -0.99248491 -0.995776760 -0.9957850600
## 63   -0.995180200 -0.9938824500 -0.99360666 -0.996580880 -0.9964224800
## 64   -0.993545860 -0.9939895000 -0.99425916 -0.996098440 -0.9960855400
## 65   -0.668604420 -0.7896379800 -0.73499812 -0.658253240 -0.6965821000
## 66   -0.974986790 -0.9541017800 -0.97750397 -0.953116510 -0.8950186800
## 67   -0.741759730 -0.3704741800 -0.54169783 -0.597924080 -0.1578801500
## 68   -0.782548020 -0.3530276500 -0.58238308 -0.593623410 -0.0820212340
## 69   -0.826827650 -0.8045476600 -0.71690557 -0.795287660 -0.7286633600
## 70   -0.777640420 -0.6564147400 -0.74389472 -0.747737720 -0.6570983700
## 71   -0.621679460  0.2631996500 -0.25634415 -0.590777180  0.5628890300
## 72   -0.608389220  0.0290286610 -0.31756454 -0.591637890 -0.0424261010
## 73   -0.906118270 -0.3876160400 -0.72773664 -0.925607660  0.1888508500
## 74   -0.975908390 -0.6846349700 -0.98198090 -0.977881260 -0.5687337400
## 75   -0.981763250 -0.9323466500 -0.98938688 -0.987560860 -0.8858831000
## 76   -0.993567560 -0.9832153400 -0.99346289 -0.996532590 -0.9782760700
## 77   -0.992306580 -0.9881730300 -0.99393740 -0.995796690 -0.9857358000
## 78   -0.991416080 -0.9884550700 -0.99336390 -0.993908790 -0.9904275800
## 79   -0.260904910 -0.1225668000 -0.33121596 -0.356707010 -0.1995671900
## 80   -0.151115250 -0.0290499670 -0.25730713 -0.262197270 -0.0238578470
## 81   -0.230407370  0.0254268520 -0.37731132 -0.293522340 -0.0576931730
## 82   -0.151322880  0.1952672000 -0.32123865 -0.263125570  0.0878553160
## 83   -0.225803630  0.1102884800 -0.20488317 -0.226802270  0.1188010600
## 84   -0.290428680  0.0578222830 -0.24835735 -0.199970710 -0.0620991190
## 85   -0.163562170 -0.0416276980 -0.25329234 -0.263476930  0.0085179170
## 86   -0.187773140 -0.0046568174 -0.26867150 -0.271723760  0.0194942470
## 87   -0.274906800 -0.0623495620 -0.31909457 -0.386570780 -0.0559098780
## 88   -0.236244590  0.1085277100 -0.27465450 -0.273649080  0.0423823330
## 89   -0.205110720 -0.0429373140 -0.33885732 -0.283723780 -0.0006035845
## 90   -0.170747700  0.0185981100 -0.35554991 -0.267590100  0.0333544000
## 91   -0.197113140 -0.0582798260 -0.25261291 -0.202420930  0.1516668900
## 92   -0.236662930  0.0957696160 -0.16416393 -0.143264790  0.1631943500
## 93   -0.213766970  0.1882365000 -0.22944501 -0.206270660  0.1810332400
```

```
## 94  -0.140082100  0.1818073400 -0.30269727 -0.254565650  0.0891287600
## 95  -0.160441560  0.1176680900 -0.29040059 -0.223924650  0.0296300750
## 96  -0.145907500  0.1165576300 -0.26081978 -0.293129490  0.0704857480
## 97  -0.217238270  0.1598667100 -0.29537396 -0.339973740  0.0756000860
## 98  -0.199532050  0.0220322110 -0.32765269 -0.440571160 -0.0207286370
## 99  -0.139067240  0.1196943900 -0.27105874 -0.201562900  0.0802205240
## 100 -0.042235154  0.0192724380 -0.28011376 -0.140573120  0.0876268760
## 101 -0.101608180 -0.0378948690 -0.37123480 -0.154684070  0.0114049760
## 102 -0.101386690  0.1414767500 -0.27903807 -0.200368710  0.1562948400
## 103 -0.225387500  0.2631908000 -0.28012234 -0.241885910  0.1237494400
## 104 -0.200940010  0.2820922700 -0.29508969 -0.272283510  0.1828646600
## 105 -0.173248850  0.2344523800 -0.22498748 -0.253568820  0.0856815750
## 106 -0.170905540  0.0037015146 -0.35903494 -0.208988100 -0.0720510010
## 107 -0.171941180  0.1527012300 -0.27350035 -0.209450910  0.0523678830
## 108 -0.160954510  0.2504374500 -0.27857550 -0.283635840  0.2415374600
## 109 -0.238354250  0.2891861100 -0.32518854 -0.288447040  0.1615510400
## 110 -0.164395150  0.1065195100 -0.32709151 -0.352027400  0.1570457600
## 111 -0.237482360  0.1159241300 -0.33195765 -0.343972470  0.0615717650
## 112 -0.136974760  0.1875428100 -0.18079962 -0.195350640  0.1930045300
## 113 -0.140305990  0.0969490710 -0.38204519 -0.256312430 -0.0169567770
## 114 -0.189881890  0.0010569448 -0.32983597 -0.278618800 -0.0023412684
## 115 -0.206561760 -0.0123309670 -0.31315655 -0.261928260  0.0908686410
## 116 -0.182482690  0.1284389300 -0.25421267 -0.236331300  0.0491637600
## 117 -0.153679900  0.0288164600 -0.35171428 -0.240922680  0.0968730460
## 118 -0.189881690  0.0375351600 -0.31970848 -0.293549550  0.0006568535
## 119 -0.318401120  0.0288693280 -0.39401743 -0.424915610 -0.1105205300
## 120 -0.281028500 -0.0795431570 -0.42086097 -0.409840110 -0.1265218300
## 121 -0.278583680 -0.0616958480 -0.34682459 -0.408056660 -0.1531830000
## 122 -0.326420100  0.0471383170 -0.38125886 -0.490079250 -0.0847060990
## 123 -0.234225620  0.0937929420 -0.34629014 -0.428001140 -0.0647880610
## 124 -0.215160260  0.0601245540 -0.25467659 -0.365891620 -0.0558432030
## 125 -0.280431080 -0.1010596600 -0.34445719 -0.418708230  0.0204351150
## 126 -0.248573540 -0.1698128000 -0.48820241 -0.143602100 -0.2496675900
## 127 -0.171551680 -0.1637462700 -0.42169445  0.007006763 -0.1836562800
## 128 -0.148577170  0.0080386219 -0.31528880 -0.074232455 -0.0785509400
## 129 -0.152296570  0.1420275200 -0.30789359 -0.125997700  0.0552003100
## 130  0.018727258  0.0993390360 -0.21460601  0.088544939 -0.0324259650
## 131  0.086303779  0.1476629300 -0.21015915  0.133492570 -0.0218783080
## 132 -0.055009237  0.0410019090 -0.20084382 -0.008942605 -0.1354782600
## 133 -0.129121580 -0.1919411800 -0.23693541 -0.020483967 -0.3266215000
## 134 -0.103587630 -0.1481513100 -0.26134633 -0.049114098 -0.2833012100
## 135  0.217069980  0.1905177600  0.16518534  0.083777484 -0.0503234520
## 136  0.147713780  0.1300254500 -0.02565410  0.102490470 -0.1109878400
## 137  0.192700330  0.3910825900 -0.11830312  0.060062722  0.1663835500
## 138  0.262793630  0.3492373100 -0.20879168 -0.042123898  0.1376183500
## 139  0.058169860 -0.0485478460 -0.16506860  0.140995830 -0.1123314700
## 140  0.198174050 -0.0346629140 -0.23513046  0.005957387 -0.0698944010
## 141  0.153131080 -0.0805405440 -0.14693913  0.144067300 -0.2556966200
## 142  0.026153823 -0.1717200100 -0.09650277  0.327291590 -0.2841465400
## 143  0.002559478 -0.0696421600 -0.30294416  0.106939960 -0.1717751700
```

```
## 144   0.014677668 -0.0787293220 -0.33767480   0.099496176 -0.1692101800
## 145  -0.013751670  0.1420476300 -0.18688863  -0.147161330  0.0167033280
## 146   0.022251610  0.1959375200 -0.19731127   0.027879150  0.0789090680
## 147   0.181672880  0.0003307283 -0.30486593   0.065090081 -0.1205340800
## 148  -0.135547780 -0.1920431900 -0.30973532  -0.006495807 -0.1589464200
## 149  -0.028980821 -0.1758032500 -0.27669012  -0.021517836 -0.2600397900
## 150   0.017364625 -0.1324827900 -0.30341736   0.020096585 -0.3364446900
## 151  -0.416390130 -0.2914366000 -0.36168731  -0.349130570 -0.0671730860
## 152  -0.426280400 -0.3832795900 -0.43699429  -0.334257120 -0.0667572800
## 153  -0.444530000 -0.1108946900 -0.48044247  -0.333008920 -0.0061562148
## 154  -0.427718310 -0.0318087680 -0.34873771  -0.346038220  0.0896901330
## 155  -0.452782870 -0.1129261500 -0.38601337  -0.294119220 -0.0356257960
## 156  -0.371832990 -0.0714978050 -0.41272384  -0.419978760 -0.1479230300
## 157  -0.422895300 -0.1683865800 -0.34817298  -0.400393140 -0.0778979880
## 158  -0.433203370 -0.2906792500 -0.37765783  -0.308807250 -0.1402912200
## 159  -0.308573400 -0.2870818300 -0.42342398  -0.207101760 -0.0425038020
## 160  -0.418923040 -0.3707564000 -0.44740720  -0.280363130 -0.0581782940
## 161  -0.424855240 -0.1753136100 -0.44060852  -0.332176760  0.0756870150
## 162  -0.399588230 -0.2227646100 -0.45162200  -0.346561100  0.0651638910
## 163  -0.424034790 -0.2918662700 -0.47230908  -0.428795400 -0.0966385080
## 164  -0.389627450 -0.1786876300 -0.39731517  -0.434418970  0.0140214620
## 165  -0.503962100 -0.3258196300 -0.50883056  -0.358818140 -0.0510754420
## 166  -0.563092520 -0.4514573100 -0.52128511  -0.390144040 -0.1916191000
## 167  -0.574209100 -0.3848420600 -0.48593649  -0.417729410 -0.1787858900
## 168  -0.496352840 -0.2765199900 -0.47111671  -0.301669830  0.0464179340
## 169  -0.449917010 -0.1670647000 -0.48067901  -0.317396870  0.0827829180
## 170  -0.410751180 -0.0093092233 -0.39943721  -0.391663810  0.1791696600
## 171  -0.465554160 -0.1502428900 -0.35288048  -0.433784030  0.1724649000
## 172  -0.492534420 -0.1238663100 -0.42996221  -0.428761420  0.0112850100
## 173  -0.382711750 -0.1336332700 -0.40896755  -0.509832020  0.0186544430
## 174  -0.329200440 -0.1219479300 -0.34236940  -0.413172110 -0.0439858560
## 175  -0.437783440 -0.3276466100 -0.50814712  -0.333582240 -0.1182834200
## 176  -0.241349530 -0.1811694700 -0.45193372  -0.388561050 -0.2168305200
## 177  -0.980722190 -0.9561302300 -0.91879231  -0.971005680 -0.9211379200
##                NA            NA          NA            NA            NA
## 1     -0.906164980 -0.996888640 -0.984519270 -0.93208200 -0.993756340
## 2     -0.955438110 -0.997889670 -0.976923890 -0.96837677 -0.999371730
## 3     -0.977049320 -0.994097440 -0.971686700 -0.98216914 -0.998158490
## 4     -0.990229110 -0.994546810 -0.982824060 -0.98900729 -0.997403520
## 5     -0.991914960 -0.997724950 -0.982352780 -0.99091458 -0.999277430
## 6     -0.997045920 -0.996604840 -0.989898870 -0.99504830 -0.998597930
## 7     -0.982887310 -0.997508020 -0.971907950 -0.98307681 -0.996957380
## 8     -0.978075860 -0.996037380 -0.973339020 -0.98514797 -0.998346950
## 9     -0.980059890 -0.997362520 -0.970453650 -0.98805648 -0.997173660
## 10    -0.986535570 -0.993345660 -0.971241450 -0.98580244 -0.996913430
## 11    -0.986830430 -0.995048730 -0.973766910 -0.98513139 -0.996465740
## 12    -0.993196990 -0.997786950 -0.988005650 -0.99232900 -0.998099180
## 13    -0.996001700 -0.999193520 -0.988298100 -0.99448895 -0.998868700
## 14    -0.994139200 -0.998607510 -0.990601000 -0.99349789 -0.999951590
## 15    -0.885473510 -0.990107440 -0.886606400 -0.94271506 -0.986489300
```

```
## 16   -0.983299380 -0.996131790 -0.980691950 -0.98546623 -0.998872320
## 17   -0.979983270 -0.996174120 -0.984557540 -0.98586494 -0.998196630
## 18   -0.990590320 -0.997138210 -0.989396980 -0.99063072 -0.999012720
## 19   -0.995651620 -0.997124090 -0.992925680 -0.99297864 -0.997898880
## 20   -0.997614400 -0.997098150 -0.992141180 -0.99584462 -0.999204930
## 21   -0.996753870 -0.997706400 -0.994647970 -0.99476183 -0.998528640
## 22   -0.996839960 -0.997190980 -0.991852810 -0.99530128 -0.999552020
## 23   -0.994522930 -0.997382070 -0.989984910 -0.99299471 -0.998509620
## 24   -0.991258090 -0.998510520 -0.988493730 -0.98903757 -0.998943240
## 25   -0.993239500 -0.998500110 -0.989884540 -0.99322615 -0.998586510
## 26   -0.993887500 -0.997111730 -0.988285060 -0.99293560 -0.999308530
## 27   -0.995021860 -0.999369590 -0.993378550 -0.99370967 -0.998716090
## 28   -0.403813290 -0.921148410 -0.415053160 -0.58077331 -0.891528020
## 29   -0.928655700 -0.986376640 -0.929662090 -0.96958137 -0.979401040
## 30   -0.980842310 -0.993661830 -0.958453930 -0.98367126 -0.991669070
## 31   -0.552058380 -0.795228080 -0.750034150 -0.60443473 -0.870396060
## 32   -0.369051400 -0.771364630 -0.660862240 -0.53056327 -0.752931070
## 33   -0.604623500 -0.861354440 -0.737806690 -0.72743795 -0.772293160
## 34   -0.930385510 -0.965719570 -0.881252830 -0.96629462 -0.948456120
## 35   -0.957839630 -0.982771030 -0.976761220 -0.97145539 -0.972264630
## 36   -0.992118130 -0.995078170 -0.995205860 -0.99432548 -0.990986710
## 37   -0.997489620 -0.996371420 -0.995939210 -0.99674402 -0.994747000
## 38   -0.992961660 -0.995245150 -0.993862350 -0.99364201 -0.994847220
## 39   -0.964909360 -0.982859120 -0.902752250 -0.97409917 -0.975670810
## 40   -0.990121320 -0.989181380 -0.951568990 -0.98944550 -0.993140260
## 41   -0.991459550 -0.994652810 -0.989386060 -0.98765741 -0.997176310
## 42   -0.992009550 -0.992876180 -0.988463310 -0.99037067 -0.997349070
## 43   -0.993593900 -0.995315380 -0.987871680 -0.99142200 -0.996854390
## 44   -0.988309120 -0.995218400 -0.982553170 -0.98866276 -0.994596540
## 45   -0.986311970 -0.995093100 -0.986397160 -0.99027064 -0.993742300
## 46   -0.991662110 -0.995061570 -0.991765850 -0.99241927 -0.997969960
## 47   -0.994254550 -0.995793360 -0.988607050 -0.99360142 -0.998113570
## 48   -0.989655450 -0.995793610 -0.988368950 -0.99206525 -0.997892410
## 49   -0.986626950 -0.994783790 -0.992121360 -0.98878306 -0.998230490
## 50   -0.991890050 -0.995657790 -0.987917940 -0.99246659 -0.995896780
## 51   -0.988738980 -0.996202450 -0.986018070 -0.99475114 -0.998032530
## 52   -0.881044650 -0.922014520 -0.890090280 -0.91292383 -0.906775360
## 53   -0.981797490 -0.986118760 -0.990331230 -0.98345778 -0.982523340
## 54   -0.995364750 -0.995042830 -0.996282740 -0.99573763 -0.994919860
## 55   -0.999023710 -0.996522400 -0.995541460 -0.99783914 -0.995812490
## 56   -0.995386000 -0.995909950 -0.996327210 -0.99567690 -0.997771020
## 57   -0.992058800 -0.994762540 -0.997614810 -0.99033430 -0.994528460
## 58   -0.995569890 -0.994476020 -0.994293270 -0.99478324 -0.993533200
## 59   -0.991482210 -0.996068020 -0.992582240 -0.99011355 -0.997496010
## 60   -0.989484840 -0.995575390 -0.992404340 -0.98897520 -0.997949420
## 61   -0.993415080 -0.993998050 -0.992559610 -0.99266248 -0.997599910
## 62   -0.994717370 -0.995633250 -0.995823930 -0.99400266 -0.995299890
## 63   -0.995355910 -0.995718550 -0.995374800 -0.99429248 -0.997466150
## 64   -0.994089340 -0.994980540 -0.995568240 -0.99413808 -0.996654390
## 65   -0.705317140 -0.680573480 -0.794862520 -0.73548045 -0.667952960
```

```
## 66   -0.991045960 -0.969610730 -0.943044560 -0.98777371 -0.946878800
## 67   -0.266736440 -0.695461980 -0.190023100 -0.40724441 -0.589863220
## 68   -0.174995670 -0.725812670 -0.155040910 -0.41075292 -0.553751980
## 69   -0.580654420 -0.832700980 -0.782908150 -0.70099790 -0.800841040
## 70   -0.692743270 -0.759085960 -0.678854450 -0.69387419 -0.788210940
## 71    0.054977589 -0.629754440  0.461106800 -0.03336104 -0.568168830
## 72   -0.144144220 -0.594791570 -0.020489115 -0.06862128 -0.593196840
## 73   -0.610437600 -0.901767420 -0.244564560 -0.71071821 -0.949683340
## 74   -0.965951690 -0.975696690 -0.687153560 -0.97501581 -0.979412850
## 75   -0.987429860 -0.983991610 -0.929202860 -0.98643762 -0.989112910
## 76   -0.996405400 -0.994842930 -0.983913110 -0.99372238 -0.998090620
## 77   -0.997214570 -0.994628910 -0.987579510 -0.99511004 -0.996563730
## 78   -0.996472080 -0.992197190 -0.989620910 -0.99351954 -0.995726660
## 79   -0.177780170 -0.185770760 -0.079726841 -0.24177281 -0.597352280
## 80   -0.322163930 -0.093833857  0.024516981 -0.31918066 -0.470685400
## 81   -0.290085410 -0.187268990  0.007705041 -0.30916750 -0.424167690
## 82   -0.216974960 -0.139295250  0.168832520 -0.20359696 -0.415990950
## 83   -0.146351550 -0.148296630  0.126644430 -0.09061866 -0.336935100
## 84   -0.110658280 -0.216280380 -0.037498316 -0.20537681 -0.324928730
## 85   -0.177816480 -0.125323730  0.088526879 -0.22023925 -0.496279880
## 86   -0.237578040 -0.068654895  0.101353350 -0.26695122 -0.608865450
## 87   -0.098385402 -0.260885060 -0.076015023 -0.18608503 -0.560528930
## 88   -0.240385190 -0.193722970  0.133993970 -0.22892507 -0.510113380
## 89   -0.226928350 -0.175321760  0.034057352 -0.25803633 -0.424377730
## 90   -0.248018240 -0.206522590  0.003434910 -0.30098771 -0.327808470
## 91   -0.264038880 -0.142962930 -0.020432519 -0.22989074 -0.290602020
## 92   -0.195931430 -0.149974550  0.145020810 -0.19792590 -0.258561180
## 93   -0.186723090 -0.158017820  0.244609350 -0.20413853 -0.400833920
## 94   -0.224846440 -0.081330049  0.191017090 -0.24250322 -0.436948340
## 95   -0.229308480 -0.119781340  0.120737020 -0.20157750 -0.391005850
## 96   -0.199426780 -0.143896520  0.100917010 -0.20002126 -0.535209740
## 97   -0.174229270 -0.162101800  0.220461000 -0.19517844 -0.647357090
## 98   -0.257774830 -0.289729390 -0.035330994 -0.32010923 -0.638446730
## 99   -0.261606580 -0.050727813  0.164881580 -0.22814478 -0.348852370
## 100  -0.250715430 -0.053579001 -0.017757695 -0.32502899 -0.283744590
## 101  -0.268162350 -0.018982429 -0.159042640 -0.30393499 -0.315191080
## 102  -0.310825110 -0.143288230  0.083766963 -0.28339757 -0.259688480
## 103  -0.261399090 -0.185706720  0.204623890 -0.24964906 -0.290594340
## 104  -0.189611240 -0.142545670  0.320005690 -0.16637622 -0.459019720
## 105  -0.196459510 -0.117960590  0.171978970 -0.19098055 -0.498728740
## 106  -0.159532720 -0.157972200 -0.045914078 -0.31368943 -0.435283060
## 107  -0.189440160 -0.107216310  0.183385780 -0.20425413 -0.448163740
## 108  -0.228060950 -0.179874590  0.246894140 -0.20679239 -0.414140600
## 109  -0.232681770 -0.202739580  0.307158250 -0.22422442 -0.399677790
## 110  -0.230994620 -0.189838290  0.151786880 -0.26782369 -0.587367800
## 111  -0.267279240 -0.181162210  0.159030550 -0.28533652 -0.636671050
## 112  -0.192802650 -0.070558517  0.160033920 -0.12051422 -0.351062610
## 113  -0.312311390 -0.148962290  0.011096314 -0.31066428 -0.343708420
## 114  -0.301953120 -0.224600100 -0.064260815 -0.35058198 -0.345315250
## 115  -0.249384560 -0.195688700  0.097977552 -0.28068717 -0.387672180
```

```
## 116 -0.265150030 -0.143368280  0.120819360 -0.28600597 -0.496525060
## 117 -0.209587540 -0.081743464  0.165320240 -0.27749583 -0.503408330
## 118 -0.267630040 -0.132556800  0.035365669 -0.27428011 -0.589757680
## 119 -0.252302980 -0.278527320 -0.084697938 -0.30492736 -0.638812360
## 120 -0.293284630 -0.238252940 -0.083027987 -0.32451061 -0.661598300
## 121 -0.275522070 -0.207878840 -0.023346488 -0.31834396 -0.689500600
## 122 -0.182073580 -0.336269580 -0.035208378 -0.26544125 -0.718471350
## 123 -0.177694310 -0.202338330  0.095691159 -0.23979213 -0.689430850
## 124 -0.206226410 -0.199150860  0.035585232 -0.20663487 -0.637100930
## 125 -0.253336670 -0.230763720  0.066272747 -0.31206032 -0.600899960
## 126 -0.398794020 -0.221933100 -0.196382400 -0.49952196 -0.134882110
## 127 -0.327002230 -0.086439134 -0.166971250 -0.42043785  0.006145546
## 128 -0.421360770 -0.073135449  0.018193859 -0.37884933 -0.095018411
## 129 -0.408328930 -0.080791758  0.156524880 -0.33567572 -0.164467480
## 130 -0.310297800  0.130754050  0.140570080 -0.25210587 -0.001178045
## 131 -0.292738940  0.135222880  0.160519740 -0.17514128  0.063667147
## 132 -0.259266010 -0.052692552  0.041976349 -0.20344095 -0.042411291
## 133 -0.332698240 -0.047070103 -0.206752100 -0.30774254 -0.067432185
## 134 -0.427246400 -0.044072994 -0.102743400 -0.35629851 -0.164321520
## 135 -0.114485360  0.152931160  0.094225725 -0.04247862 -0.187228920
## 136 -0.118782040  0.260008950  0.020763037  0.00371267 -0.034183126
## 137 -0.331313230  0.115570570  0.329446690 -0.27492665  0.053905423
## 138 -0.279209970  0.128268680  0.408432790 -0.19133798 -0.159038330
## 139 -0.205188960  0.153962400 -0.019988864 -0.20597639 -0.169720740
## 140 -0.289955090  0.057523754  0.044982590 -0.23739171 -0.024698998
## 141 -0.366496010  0.245344450 -0.152438630 -0.20970187  0.035114410
## 142 -0.285789100  0.084413571 -0.294770100 -0.15817965  0.424800610
## 143 -0.300542230  0.116695660 -0.080438489 -0.27316979  0.020796274
## 144 -0.331420760  0.049394598 -0.199424290 -0.32766329  0.142627630
## 145 -0.316739040  0.002007352  0.195533740 -0.19927299 -0.311095710
## 146 -0.245559450  0.112395980  0.255577600 -0.13815365 -0.124438560
## 147 -0.312073820  0.184509820 -0.035776917 -0.27992170 -0.248973200
## 148 -0.366979810 -0.084494072 -0.103751440 -0.32639963  0.012506152
## 149 -0.358895570 -0.046503985 -0.171056210 -0.32283462 -0.077127149
## 150 -0.366463100  0.106210350 -0.220457430 -0.30668343 -0.160412480
## 151  0.115301930 -0.363868980 -0.227515760 -0.17732552 -0.353680910
## 152 -0.019915788 -0.359990320 -0.284549840 -0.31652864 -0.363752080
## 153 -0.017145055 -0.337624770 -0.099365376 -0.34213895 -0.357793650
## 154  0.058855639 -0.340240820 -0.052078810 -0.20001338 -0.356151940
## 155  0.136945230 -0.361715290 -0.037485081 -0.24748300 -0.281272710
## 156  0.089081577 -0.276173990 -0.175884050 -0.25350525 -0.621845500
## 157  0.117533180 -0.379188730 -0.072198240 -0.17403178 -0.407599600
## 158  0.121675560 -0.378620840 -0.248751950 -0.19289265 -0.290947800
## 159  0.065190688 -0.225295860 -0.207148760 -0.25071471 -0.229665420
## 160  0.024391156 -0.305219000 -0.280781350 -0.25612589 -0.293570410
## 161 -0.003489773 -0.333549860 -0.092660656 -0.25613388 -0.365620820
## 162 -0.012332467 -0.276355100 -0.127505240 -0.30837120 -0.408658650
## 163  0.007878653 -0.410351190 -0.202534960 -0.35764086 -0.451424860
## 164  0.077195419 -0.365651670 -0.105047860 -0.25731545 -0.507913500
## 165  0.084188969 -0.448919270 -0.285215980 -0.31119488 -0.371594760
```

```
## 166   0.043421386 -0.457965490 -0.371984890 -0.35217623 -0.400324840
## 167   0.135335720 -0.459369200 -0.343569490 -0.30332552 -0.419256150
## 168   0.132050960 -0.388261120 -0.207381930 -0.24479455 -0.304863800
## 169   0.025706838 -0.402939920 -0.133479320 -0.33645240 -0.319599950
## 170   0.042299867 -0.352985710  0.121978600 -0.23418968 -0.439831840
## 171   0.160548670 -0.385401920 -0.009550031 -0.17674464 -0.465714370
## 172   0.070334892 -0.412110830 -0.024772019 -0.25384234 -0.430979780
## 173   0.032263558 -0.464076910 -0.024250899 -0.24390361 -0.581348190
## 174   0.152715660 -0.371617680  0.039217188 -0.09497363 -0.437966680
## 175   0.103595470 -0.413488020 -0.218604440 -0.31959221 -0.311517910
## 176   0.050974006 -0.292672660 -0.167372340 -0.31517929 -0.428262650
## 177  -0.862560370 -0.978126260 -0.950841480 -0.90753299 -0.968646920
##               NA           NA           NA           NA           NA
NA
## 1   -0.983162850 -0.88505422 -0.9939619 -0.99344611 -0.9234277 -
0.974732710
## 2   -0.973770260 -0.94877678 -0.9982806 -0.99272090 -0.9895135 -
0.985811620
## 3   -0.963071850 -0.96859592 -0.9970937 -0.98992357 -0.9908857 -
0.985821310
## 4   -0.987274920 -0.98775434 -0.9944319 -0.99025892 -0.9965778 -
0.992812020
## 5   -0.980848200 -0.98911650 -0.9949679 -0.99178840 -0.9744938 -
0.992423250
## 6   -0.993414350 -0.99830598 -0.9956786 -0.99523220 -0.9863281 -
0.995002340
## 7   -0.968728800 -0.97693806 -0.9954209 -0.99595351 -0.9962842 -
0.985749390
## 8   -0.962426050 -0.96650853 -0.9918539 -0.99850476 -0.9937353 -
0.988994170
## 9   -0.953859270 -0.96807456 -0.9983494 -0.97399271 -0.9858658 -
0.988773910
## 10  -0.984395420 -0.98585244 -0.9992507 -0.99904143 -0.9957849 -
0.986056020
## 11  -0.979170100 -0.98518051 -0.9864829 -0.98557869 -0.9995747 -
0.985000910
## 12  -0.989351290 -0.99307555 -0.9972346 -0.98856680 -0.9928121 -
0.994818930
## 13  -0.979257690 -0.99758779 -0.9974671 -0.99447954 -0.9998233 -
0.997502790
## 14  -0.990390230 -0.99559771 -0.9923275 -0.98639158 -0.9812935 -
0.996372370
## 15  -0.784357350 -0.84797448 -0.9936624 -0.87461957 -0.9847840 -
0.946740760
## 16  -0.976988730 -0.98055204 -0.9947644 -0.99207116 -0.9834580 -
0.990407400
## 17  -0.982284000 -0.97098824 -0.9978684 -0.99497265 -0.9903741 -
0.993154190
## 18  -0.987879610 -0.98800919 -0.9986423 -0.99252659 -0.9896851 -
0.994482750
```

```
## 19   -0.996433610 -0.99677230 -0.9991222 -0.99120842 -0.9914477 -
0.997394590
## 20   -0.988556110 -0.99890913 -0.9993869 -0.99831342 -0.9913494 -
0.997651020
## 21   -0.994842290 -0.99844481 -0.9976330 -0.99246088 -0.9965509 -
0.997504130
## 22   -0.990963620 -0.99711289 -0.9969127 -0.98301951 -0.9995174 -
0.995881680
## 23   -0.994426930 -0.99523013 -0.9984814 -0.99370660 -0.9959794 -
0.995734790
## 24   -0.990631550 -0.99317423 -0.9934435 -0.98850848 -0.9922232 -
0.993906620
## 25   -0.987116060 -0.99174309 -0.9955345 -0.99053813 -0.9974695 -
0.995912320
## 26   -0.983992450 -0.98888491 -0.9968417 -0.99168044 -0.9905628 -
0.994752780
## 27   -0.998005200 -0.99269866 -0.9950134 -0.98992311 -0.9997011 -
0.997036250
## 28   -0.125151360 -0.28630134 -0.8934735 -0.16371061 -0.4266436 -
0.658437360
## 29   -0.873635180 -0.90003733 -0.9970893 -0.91642200 -0.9855624 -
0.968374240
## 30   -0.930182880 -0.97586487 -0.9906337 -0.98118585 -0.9800018 -
0.980904690
## 31   -0.807233270 -0.65506662 -0.8032447 -0.91256048 -0.7588662 -
0.723413820
## 32   -0.586892780 -0.33852211 -0.9336034 -0.93046520 -0.9860300 -
0.717762020
## 33   -0.500024580 -0.50105839 -0.7719665 -0.80598289 -0.6019004 -
0.761343740
## 34   -0.831282990 -0.90297563 -0.9895112 -0.84042550 -0.9949301 -
0.943092810
## 35   -0.955519500 -0.94472960 -0.9956983 -0.99601951 -0.9739653 -
0.978415190
## 36   -0.989979580 -0.98927726 -0.9993355 -0.99893205 -0.9897944 -
0.997368060
## 37   -0.998192370 -0.99527237 -0.9938217 -0.99401362 -0.9970446 -
0.998348660
## 38   -0.997150360 -0.98776013 -0.9988731 -0.99564329 -0.9923565 -
0.996934010
## 39   -0.858810920 -0.95412497 -0.9940273 -0.91490696 -0.9822457 -
0.955985970
## 40   -0.929394930 -0.98958317 -0.9939477 -0.96576491 -0.9906086 -
0.980967440
## 41   -0.980572220 -0.99407114 -0.9952046 -0.99548486 -0.9946454 -
0.992326490
## 42   -0.979839640 -0.99263165 -0.9951621 -0.98737458 -0.9943056 -
0.992192130
## 43   -0.974385280 -0.99316950 -0.9887132 -0.99274062 -0.9995411 -
0.993979970
```

```
## 44  -0.959570010 -0.98810840 -0.9953572 -0.98412832 -0.9966649 -
0.991640480
## 45  -0.972287470 -0.97893653 -0.9934986 -0.97955066 -0.9854701 -
0.992483310
## 46  -0.989241010 -0.98901776 -0.9984070 -0.98174976 -0.9967820 -
0.995546290
## 47  -0.976522340 -0.99200132 -0.9970809 -0.99206430 -0.9962888 -
0.995119820
## 48  -0.979304110 -0.98343770 -0.9963854 -0.99401116 -0.9939832 -
0.994025100
## 49  -0.981945270 -0.98500902 -0.9961369 -0.99693750 -0.9981741 -
0.994882800
## 50  -0.971601340 -0.98884627 -0.9905299 -0.99787136 -0.9933637 -
0.995613760
## 51  -0.972011580 -0.97883213 -0.9915247 -0.98922720 -0.9928149 -
0.993164760
## 52  -0.951236100 -0.86799953 -0.9834161 -0.99613317 -0.9852099 -
0.906758610
## 53  -0.993436730 -0.97708670 -0.9909481 -0.99337656 -0.9942328 -
0.987468450
## 54  -0.996573750 -0.99407563 -0.9885734 -0.99558054 -0.9986002 -
0.996523120
## 55  -0.996953670 -0.99918617 -0.9910412 -0.99341890 -0.9986216 -
0.998068100
## 56  -0.998691650 -0.99499890 -0.9991606 -0.99663780 -0.9949715 -
0.998093300
## 57  -1.000000000 -0.99452444 -0.9994040 -0.99948155 -0.9995590 -
0.996280380
## 58  -0.997017610 -0.99552310 -0.9979873 -0.99422233 -0.9899806 -
0.995532200
## 59  -0.996450150 -0.99187230 -0.9949598 -0.99828754 -0.9985484 -
0.996002320
## 60  -0.992733190 -0.98921616 -0.9988566 -0.99951361 -0.9995521 -
0.994602980
## 61  -0.990824410 -0.99215799 -0.9901573 -0.99649192 -0.9901811 -
0.993616860
## 62  -0.995971960 -0.99384348 -0.9953703 -0.99585312 -0.9872817 -
0.996073480
## 63  -0.997084170 -0.99323406 -0.9940023 -0.99632678 -0.9982055 -
0.996669510
## 64  -0.997575130 -0.99130049 -0.9944070 -0.99453073 -0.9912408 -
0.996087910
## 65  -0.690056470 -0.73767546 -0.4861533 -0.86021047 -0.9423583 -
0.679622510
## 66  -0.889432630 -0.99008264 -0.9979931 -0.98454308 -0.9668400 -
0.968705670
## 67  -0.371145430 -0.23225607 -0.9490736 -0.92544256 -0.9174359 -
0.523107330
## 68  -0.188882820 -0.01232240 -0.9327433 -0.95202266 -0.9808126 -
0.552378420
```

```
## 69   -0.764837230 -0.54644768 -0.6664494 -0.96418992 -0.6199288 -
0.758933110
## 70   -0.727981870 -0.73213837 -0.9111048 -0.87068627 -0.8684991 -
0.697528560
## 71    0.298243130  0.12307142 -0.8552131 -0.64924857 -0.5862079 -
0.170926370
## 72   -0.329794650 -0.27449893 -0.8876549 -0.52787049 -0.9141847 -
0.256629040
## 73    0.191282720 -0.52923631 -0.9342357 -0.58113451 -0.7980588 -
0.675336990
## 74   -0.586613120 -0.95397936 -0.9930534 -0.53684688 -0.9895971 -
0.888102460
## 75   -0.878123450 -0.98704680 -0.9855779 -0.95649336 -0.9937679 -
0.969523620
## 76   -0.976734350 -0.99766936 -0.9903983 -0.98427868 -0.9824092 -
0.992527250
## 77   -0.987455690 -0.99932039 -0.9796042 -0.98769854 -0.9890644 -
0.993562910
## 78   -0.993219900 -0.99912976 -0.9926525 -0.99475747 -0.9914748 -
0.993000100
## 79   -0.563245080 -0.15114842 -0.8116769 -0.89466127 -0.7820919 -
0.130119550
## 80   -0.396159150 -0.38778013 -0.6417678 -0.91239932 -0.3217408 -
0.020327183
## 81   -0.379802700 -0.37416205 -0.8578699 -0.64298205 -0.7249421 -
0.084777206
## 82   -0.285737060 -0.29569201 -0.9557736 -0.85831894 -0.9380455
0.026677266
## 83   -0.194195430 -0.30537356 -0.4095017 -0.60107651 -0.8405092
0.001952790
## 84   -0.326774210 -0.15777170 -0.9437335 -0.63253235 -0.5952773 -
0.061872711
## 85   -0.378281140 -0.13974442 -0.7168457 -0.93918401 -0.6071356 -
0.029184565
## 86   -0.377364320 -0.26978358 -0.7013920 -0.86995968 -0.7093183 -
0.035432982
## 87   -0.353689480 -0.06518582 -0.3983045 -0.92102018 -0.9015767 -
0.114716390
## 88   -0.376517420 -0.30029376 -0.8040285 -0.89127957 -0.6796128 -
0.027540945
## 89   -0.293334480 -0.31991241 -0.4749208 -0.73205667 -0.8107277 -
0.079784810
## 90   -0.254256680 -0.27551853 -0.1712553 -0.85249323 -0.8370876 -
0.049012769
## 91   -0.076655615 -0.39650025 -0.3099580 -0.84176542 -0.6071661 -
0.051205685
## 92   -0.204457950 -0.26991726 -0.8565418 -0.80796916 -0.5701731
0.005736468
## 93   -0.208714040 -0.22707028 -0.8209721 -0.86952720 -0.8560169
0.023680767
```

```
## 94   -0.311774910 -0.25261558 -0.8314517 -0.91728111 -0.9612568
0.034573219
## 95   -0.356106530 -0.33462793 -0.8261870 -0.32030189 -0.9449485
0.008672081
## 96   -0.394433390 -0.21076138 -0.2813957 -0.91647942 -0.9187858
0.025773071
## 97   -0.252347250 -0.18463646 -0.8302418 -0.66120202 -0.9243246 -
0.009105709
## 98   -0.371984440 -0.19758622 -0.8707511 -0.84413373 -0.3650968 -
0.053228133
## 99   -0.247482550 -0.36750689 -0.7081896 -0.93708897 -0.8329542
0.026764485
## 100 -0.190469000 -0.33306661 -0.6981548 -0.81234020 -0.9449678
0.042409983
## 101 -0.199150130 -0.33318661 -0.8756933 -0.50866949 -0.9148229 -
0.036300796
## 102 -0.101638020 -0.47627706 -0.5387137 -0.80742460 -0.7810616
0.049997497
## 103 -0.265777610 -0.33966968 -0.7224477 -0.78492310 -0.9180712
0.023560200
## 104 -0.317134910 -0.25682979 -0.7963499 -0.63254964 -0.7100230
0.036781571
## 105 -0.335501900 -0.24681385 -0.7555035 -0.57115906 -0.9471167
0.060062648
## 106 -0.343869970 -0.09301530 -0.5483463 -0.84324012 -0.7564370 -
0.054838838
## 107 -0.327185200 -0.27095839 -0.8575128 -0.64866767 -0.7282352
0.019253026
## 108 -0.117916630 -0.41042040 -0.4002423 -0.41178592 -0.8911896
0.053105636
## 109 -0.235442250 -0.36676018 -0.7800379 -0.84224390 -0.7100658
0.009645401
## 110 -0.322439790 -0.21166963 -0.4698317 -0.89460595 -0.7626250 -
0.009185514
## 111 -0.400322410 -0.24253584 -0.6939839 -0.94367679 -0.8724633 -
0.045303939
## 112 -0.185461990 -0.31994821 -0.9377873 -0.56378108 -0.6243940
0.079182040
## 113 -0.259219880 -0.44376734 -0.6944678 -0.14488304 -0.9463325 -
0.018409250
## 114 -0.237034280 -0.31732159 -0.3529374 -0.43035091 -0.7106102 -
0.055463910
## 115 -0.231965410 -0.28663625 -0.9103199 -0.98874403 -0.6367990 -
0.062445970
## 116 -0.331191110 -0.28522846 -0.8036833 -0.58707976 -0.8333748
0.012958165
## 117 -0.343314560 -0.15896043 -0.4995468 -0.87716160 -0.8321761 -
0.035859472
## 118 -0.376148690 -0.30520433 -0.8418766 -0.45444965 -0.8034852 -
0.040855302
```

```
## 119 -0.472776020 -0.27864112 -0.8826325 -0.36973232 -0.9293820 -
0.134349350
## 120 -0.452184140 -0.33674246 -0.8143469 -0.44287106 -0.9590128 -
0.157563130
## 121 -0.448464240 -0.31093247 -0.7810973 -0.89668060 -0.6021608 -
0.125781940
## 122 -0.381468560 -0.22364906 -0.7811413 -0.48712492 -0.9017768 -
0.128529570
## 123 -0.501785670 -0.16367579 -0.6743292 -0.92127610 -0.8652492 -
0.055274130
## 124 -0.429770390 -0.21662179 -0.7708373 -0.66891962 -0.8713825 -
0.024837721
## 125 -0.441113100 -0.20356549 -0.7055281 -0.96282738 -0.6816481 -
0.137989470
## 126 -0.399546980 -0.26640033 -0.7672920 -0.69041851 -0.7762689 -
0.191438280
## 127 -0.339504160 -0.20019161 -0.7733036 -0.85068624 -0.9739336 -
0.127701130
## 128 -0.354597710 -0.37903792 -0.6871729 -0.86963224 -0.9219906 -
0.027289642
## 129 -0.418876480 -0.38210596 -0.8321781 -0.75870358 -0.8758845
0.014379393
## 130 -0.417070610 -0.28191840 -0.9051571 -0.93965995 -0.8289405
0.120281340
## 131 -0.385122030 -0.37713137 -0.9124851 -0.98833469 -0.9862609
0.171134810
## 132 -0.403243480 -0.31813628 -0.9092648 -0.63589128 -0.9696372
0.069374473
## 133 -0.641831540 -0.30335151 -0.7333717 -0.77270989 -0.8261522 -
0.052115688
## 134 -0.650935250 -0.41564669 -0.9221541 -0.72295894 -0.6235504 -
0.033907609
## 135 -0.502848240 -0.11259446 -0.1332431 -0.85956162 -0.1138385
0.378157530
## 136 -0.497763210 -0.13950866 -0.4780777  0.02611970 -0.9114946
0.259570360
## 137 -0.223668970 -0.35181478 -0.6414264 -0.01970868 -0.8081184
0.331212370
## 138 -0.303730600 -0.43613986  0.3242734 -0.56668603 -0.8652942
0.323579880
## 139 -0.481674100 -0.13753683 -0.8790678 -0.89492349 -0.4351202
0.111882130
## 140 -0.466802300 -0.38152513 -0.3745732 -0.93120001 -0.6834564
0.163975380
## 141 -0.575199290 -0.48967880 -0.3571550 -0.57974173 -0.4621329
0.156746600
## 142 -0.359001920 -0.47620187 -0.6455253 -0.95938262 -0.4100952
0.080977654
## 143 -0.429034400 -0.30169425 -0.6500066 -0.82777206 -0.8612334
0.030323901
```

```
## 144 -0.262478720 -0.29393701 -0.4701589 -0.76228225 -0.7254146
0.021975698
## 145 -0.396934290 -0.38121813 -0.5556726 -0.82220624 -0.5872610
0.126154230
## 146 -0.335855980 -0.41346355 -0.7768879 -0.93471857 -0.8605344
0.157543680
## 147 -0.363077940 -0.30748940 -0.2732614 -0.53840742 -0.7952989
0.142661480
## 148 -0.334356770 -0.36929281 -0.8552792 -0.84937098 -0.7963514 -
0.080074329
## 149 -0.483400930 -0.31499495 -0.6501134 -0.86578100 -0.6565211 -
0.009446361
## 150 -0.565242300 -0.38233560 -0.3762499 -0.78105232 -0.6288469
0.018470175
## 151 -0.118533150  0.30450551 -0.6108975 -0.78533607 -0.9452567 -
0.271657560
## 152 -0.130664690  0.18832923 -0.8730984 -0.90682763 -0.8180230 -
0.330353250
## 153 -0.133141360  0.19859231 -0.9469871 -0.72616594 -0.7571459 -
0.270903640
## 154 -0.005216839  0.21869674 -0.7434303 -0.29208638 -0.7320518 -
0.193489610
## 155 -0.207512680  0.39616082 -0.9314641 -0.81875106 -0.9037850 -
0.243779560
## 156 -0.320744920  0.28588780 -0.9155871  0.13632747 -0.9101830 -
0.198751510
## 157 -0.241561300  0.32060532 -0.8776074 -0.74900742 -0.9314438 -
0.232693620
## 158 -0.229058160  0.31067857 -0.9587911 -0.91436120 -0.9874545 -
0.285424490
## 159 -0.063748447  0.27611089 -0.6378315 -0.83815220 -0.9629225 -
0.236117600
## 160 -0.049549029  0.21802382 -0.9705097 -0.88789754 -0.8849096 -
0.326279570
## 161  0.008406528  0.14408169 -0.9444427 -0.83077787 -0.9960149 -
0.267108190
## 162  0.017087350  0.12954104 -0.9767932 -0.88791277 -0.9680149 -
0.272466140
## 163 -0.213868700  0.22539573 -0.5872435 -0.72730500 -0.7468602 -
0.313142210
## 164 -0.047795963  0.27128409 -0.5643190 -0.83984742 -0.8732946 -
0.235483000
## 165 -0.030717019  0.32003918 -0.9728542 -0.88078665 -0.9532467 -
0.376760870
## 166 -0.185476770  0.27967943 -0.9771942 -0.97984921 -0.9737201 -
0.449704430
## 167 -0.176100680  0.39086090 -0.9349091 -0.69891743 -0.8635844 -
0.423003180
## 168  0.060595630  0.33734186 -0.8438670 -0.76447535 -0.9942367 -
0.344995630
```

```
## 169  0.045062112  0.23998161 -0.7820493 -0.91818401 -0.8296025 -
0.290952640
## 170 -0.053143369  0.17881035 -0.8559357 -0.98739118 -0.9189389 -
0.195084010
## 171  0.109836340  0.29042413 -0.7943032 -0.70337830 -0.7153416 -
0.250528460
## 172 -0.118789990  0.27173165 -0.8082921 -0.94056368 -0.9786124 -
0.282325860
## 173 -0.221129170  0.17084293 -0.1485746 -0.93572052 -0.7433875 -
0.222084030
## 174 -0.278824800  0.27611998 -0.4097064 -0.90835494 -0.8614453 -
0.168610070
## 175 -0.193021170  0.33186498 -0.7756031 -0.89997974 -0.9823612 -
0.343266660
## 176 -0.424957690  0.30552578 -0.3001055 -0.67788004 -0.8863320 -
0.178949850
## 177 -0.915440450 -0.82891116 -0.9951535 -0.98303495 -0.9680847 -
0.952384510
##              NA          NA          NA          NA          NA
NA
## 1   -0.9999684 -0.9996891 -0.9948915 -0.995926020 -0.9897088900 -
0.98799115
## 2   -0.9999908 -0.9994499 -0.9985691 -0.994864880 -0.9807836200 -
0.98577466
## 3   -0.9999693 -0.9991374 -0.9994336 -0.988569240 -0.9772424400 -
0.98130186
## 4   -0.9999754 -0.9996969 -0.9998029 -0.990442500 -0.9919019100 -
0.98806054
## 5   -0.9999902 -0.9996251 -0.9997979 -0.993760400 -0.9881796900 -
0.98635885
## 6   -0.9999849 -0.9998596 -0.9999139 -0.994823790 -0.9869223500 -
0.98782612
## 7   -0.9999819 -0.9991372 -0.9995804 -0.997358250 -0.9811432400 -
0.97763238
## 8   -0.9999792 -0.9991178 -0.9995285 -0.991369330 -0.9849405000 -
0.98576077
## 9   -0.9999848 -0.9988672 -0.9995987 -0.995168900 -0.9789664700 -
0.98967648
## 10  -0.9999640 -0.9993590 -0.9996793 -0.988303260 -0.9694264200 -
0.98795326
## 11  -0.9999641 -0.9993707 -0.9996523 -0.993555190 -0.9742708300 -
0.98100618
## 12  -0.9999908 -0.9997906 -0.9998536 -0.996177380 -0.9905583800 -
0.98801391
## 13  -0.9999959 -0.9997299 -0.9999315 -0.997915570 -0.9897694400 -
0.99072176
## 14  -0.9999961 -0.9998604 -0.9998685 -0.995823630 -0.9921742200 -
0.98933864
## 15  -0.9998864 -0.9815257 -0.9936450 -0.988714180 -0.9620977900 -
0.98105449
```

```
## 16   -0.9999813 -0.9994342 -0.9995892 -0.992222980 -0.9954684500 -
0.99220644
## 17   -0.9999820 -0.9996550 -0.9995624 -0.994717100 -0.9937831100 -
0.99086818
## 18   -0.9999873 -0.9997974 -0.9997959 -0.993756780 -0.9920943800 -
0.98981261
## 19   -0.9999860 -0.9999092 -0.9999286 -0.995573940 -0.9944630400 -
0.98375649
## 20   -0.9999881 -0.9998603 -0.9999578 -0.994767680 -0.9968105700 -
0.99028524
## 21   -0.9999887 -0.9999268 -0.9999250 -0.995445870 -0.9968567500 -
0.98745315
## 22   -0.9999878 -0.9998492 -0.9999378 -0.992277920 -0.9927948200 -
0.98933407
## 23   -0.9999884 -0.9998518 -0.9998961 -0.995387890 -0.9867466900 -
0.99089049
## 24   -0.9999917 -0.9997928 -0.9998069 -0.996309700 -0.9893053600 -
0.98491310
## 25   -0.9999926 -0.9998188 -0.9998644 -0.997654950 -0.9879192800 -
0.99058976
## 26   -0.9999897 -0.9997640 -0.9998699 -0.991935540 -0.9869155300 -
0.98317743
## 27   -0.9999965 -0.9999166 -0.9998872 -0.997667320 -0.9893335800 -
0.98601942
## 28   -0.9950246 -0.6604916 -0.8382875 -0.957876250 -0.8796633400 -
0.90507879
## 29   -0.9997804 -0.9930947 -0.9973446 -0.992057910 -0.9840054600 -
0.98899537
## 30   -0.9999431 -0.9976393 -0.9995252 -0.992949300 -0.9844145100 -
0.98696202
## 31   -0.9821026 -0.9663991 -0.9027868 -0.859803960 -0.8054820000 -
0.89330030
## 32   -0.9698934 -0.9112274 -0.8360230 -0.851408760 -0.8246890800 -
0.89753622
## 33   -0.9809375 -0.9053471 -0.9251765 -0.931973010 -0.9063542500 -
0.90567830
## 34   -0.9988691 -0.9854944 -0.9974599 -0.989026560 -0.9700614800 -
0.99324482
## 35   -0.9996468 -0.9989894 -0.9986880 -0.987328850 -0.9930818400 -
0.98721782
## 36   -0.9999545 -0.9999084 -0.9998710 -0.995556470 -0.9976746300 -
0.99725988
## 37   -0.9999753 -0.9999488 -0.9999690 -0.994335580 -0.9954140700 -
0.99025732
## 38   -0.9999710 -0.9999305 -0.9998951 -0.991475770 -0.9889223800 -
0.98929290
## 39   -0.9997128 -0.9897922 -0.9989808 -0.983094790 -0.9627387600 -
0.98130400
## 40   -0.9999176 -0.9972604 -0.9998041 -0.987707140 -0.9818171500 -
0.98645957
```

```
## 41   -0.9999701 -0.9997210 -0.9998111 -0.994841890 -0.9937725600 -
0.97737397
## 42   -0.9999600 -0.9997269 -0.9998358 -0.987203500 -0.9887521900 -
0.98545715
## 43   -0.9999704 -0.9996523 -0.9998711 -0.991838890 -0.9934361800 -
0.98384332
## 44   -0.9999660 -0.9992707 -0.9997657 -0.995055730 -0.9935575100 -
0.99145765
## 45   -0.9999634 -0.9995859 -0.9997295 -0.992111930 -0.9952684100 -
0.99395594
## 46   -0.9999736 -0.9998319 -0.9998697 -0.992021470 -0.9938412500 -
0.99118959
## 47   -0.9999798 -0.9996855 -0.9999006 -0.991544240 -0.9913638500 -
0.99170925
## 48   -0.9999781 -0.9997297 -0.9998031 -0.991535280 -0.9904511300 -
0.98975823
## 49   -0.9999737 -0.9998085 -0.9997426 -0.990726430 -0.9955484700 -
0.99218956
## 50   -0.9999734 -0.9996218 -0.9998695 -0.992989160 -0.9900288800 -
0.99314054
## 51   -0.9999723 -0.9995697 -0.9998212 -0.992063790 -0.9898123900 -
0.99311593
## 52   -0.9960170 -0.9935144 -0.9924458 -0.951654540 -0.9175003100 -
0.98116337
## 53   -0.9998205 -0.9998717 -0.9995466 -0.990300520 -0.9897643800 -
0.98405505
## 54   -0.9999580 -0.9999570 -0.9999180 -0.995683930 -0.9953716200 -
0.99384501
## 55   -0.9999758 -0.9999492 -0.9999775 -0.996485520 -0.9926215900 -
0.99188755
## 56   -0.9999808 -0.9999687 -0.9999139 -0.993094560 -0.9940478700 -
0.99107227
## 57   -0.9999651 -0.9999822 -0.9998364 -0.991659080 -0.9922376200 -
0.98832098
## 58   -0.9999603 -0.9999355 -0.9999025 -0.991534080 -0.9925146300 -
0.98949363
## 59   -0.9999785 -0.9999230 -0.9998328 -0.993823170 -0.9928052900 -
0.98610509
## 60   -0.9999770 -0.9998914 -0.9997907 -0.992195400 -0.9915405900 -
0.98958314
## 61   -0.9999638 -0.9998701 -0.9998644 -0.991248580 -0.9917473600 -
0.99100450
## 62   -0.9999704 -0.9999455 -0.9998830 -0.992985260 -0.9966208100 -
0.98974403
## 63   -0.9999758 -0.9999514 -0.9999025 -0.993018840 -0.9919024200 -
0.98907028
## 64   -0.9999680 -0.9999492 -0.9998926 -0.992142790 -0.9952938500 -
0.99156762
## 65   -0.9414117 -0.9564487 -0.9511292 -0.821224560 -0.8862152000 -
0.88796258
```

```
## 66   -0.9989668 -0.9948918 -0.9996304 -0.977982040 -0.9908554200 -
0.97868964
## 67   -0.9314092 -0.6669246 -0.7609098 -0.856160320 -0.6978983500 -
0.84600331
## 68   -0.9329515 -0.6145975 -0.7176828 -0.844439150 -0.6994378700 -
0.85046558
## 69   -0.9800032 -0.9643900 -0.9168847 -0.894505710 -0.8939324500 -
0.89756938
## 70   -0.9693014 -0.9331649 -0.9493656 -0.844326330 -0.7820845000 -
0.86208076
## 71   -0.9183741  0.1779019 -0.4873809 -0.560196490 -0.4657274700 -
0.80115069
## 72   -0.9171673 -0.4699397 -0.6394787 -0.537702650 -0.4077244800 -
0.81284317
## 73   -0.9964383 -0.4168940 -0.9268226 -0.877516630 -0.8549749500 -
0.89472814
## 74   -0.9996474 -0.9116613 -0.9990917 -0.968816930 -0.8986852500 -
0.98344769
## 75   -0.9998359 -0.9935903 -0.9997361 -0.978697190 -0.9665251900 -
0.98227568
## 76   -0.9999703 -0.9995959 -0.9999138 -0.989474490 -0.9903506000 -
0.98578264
## 77   -0.9999618 -0.9997803 -0.9999278 -0.990427210 -0.9882661900 -
0.99030460
## 78   -0.9999466 -0.9998501 -0.9999136 -0.989377990 -0.9925048200 -
0.98687056
## 79   -0.7724820 -0.6228087 -0.6632056 -0.362935210 -0.2194872400 -
0.56625437
## 80   -0.7009125 -0.4783220 -0.7186509 -0.012169355 -0.2030393200 -
0.52556466
## 81   -0.7353277 -0.4817651 -0.7363159 -0.187707240 -0.3722007400 -
0.58425554
## 82   -0.7014539 -0.3059891 -0.6827234 -0.087058674 -0.3057754100 -
0.39577606
## 83   -0.6988726 -0.3173173 -0.6068837 -0.224438570 -0.2385068800 -
0.27574927
## 84   -0.6973042 -0.4723629 -0.5985854 -0.257548550 -0.2056944600 -
0.57893394
## 85   -0.7045588 -0.4596038 -0.6407248 -0.149535170 -0.2337848500 -
0.56786114
## 86   -0.7145468 -0.4383044 -0.6788746 -0.120274280 -0.0897618520 -
0.49263047
## 87   -0.7888740 -0.5122093 -0.6114871 -0.277281180 -0.3680463500 -
0.59270950
## 88   -0.7263694 -0.3775677 -0.6821645 -0.444965170 -0.0428764520 -
0.47251820
## 89   -0.7247167 -0.4666707 -0.6930300 -0.158737960 -0.4390977900 -
0.60934722
## 90   -0.7084225 -0.4194416 -0.7088769 -0.242172030 -0.2309838200 -
0.55906887
```

```
## 91   -0.6787179 -0.3539509 -0.6880820 -0.174472030 -0.4142838500 -
0.32605487
## 92   -0.6523678 -0.2866921 -0.6224502 -0.155642080 -0.1638390300 -
0.37583923
## 93   -0.6846641 -0.2328821 -0.6385090 -0.225591390 -0.0619455200 -
0.40301692
## 94   -0.6941799 -0.3108573 -0.6818569  0.015525809 -0.1435581000 -
0.54881282
## 95   -0.6823389 -0.3833616 -0.6807693 -0.128229470 -0.2461184500 -
0.47177919
## 96   -0.7157048 -0.3528811 -0.6554111 -0.257767960 -0.3354824600 -
0.44450443
## 97   -0.7552337 -0.3308373 -0.6510855 -0.207884490  0.3556444800 -
0.50769687
## 98   -0.7953568 -0.4574132 -0.7065333 -0.287648260 -0.3660675300 -
0.62592800
## 99   -0.6645563 -0.3440467 -0.6923609 -0.259302890 -0.1943081700 -
0.43428964
## 100 -0.6033566 -0.3776892 -0.6892948 -0.083646610 -0.3999112900 -
0.59003644
## 101 -0.6275761 -0.4561831 -0.7235538 -0.056560535 -0.4232870800 -
0.49440486
## 102 -0.6544905 -0.2736947 -0.7196336 -0.103612840 -0.1444588700 -
0.46989167
## 103 -0.7070737 -0.2467638 -0.6949296 -0.154167180  0.0253516710 -
0.46857942
## 104 -0.7178431 -0.1888171 -0.6599068 -0.026152625  0.2541325700 -
0.50238111
## 105 -0.7015634 -0.2902352 -0.6426764 -0.074408642 -0.0163900670 -
0.41520637
## 106 -0.6764079 -0.4995525 -0.6599241 -0.438831590 -0.2326674900 -
0.57311532
## 107 -0.6769136 -0.3516997 -0.6535061 -0.166274240  0.1264932300 -
0.47674984
## 108 -0.7144579 -0.1522771 -0.6766366 -0.052752484 -0.1587952500 -
0.46696406
## 109 -0.7344665 -0.2034757 -0.6924373 -0.334072350  0.0803205640 -
0.55436815
## 110 -0.7487910 -0.2874873 -0.6920433 -0.149053150 -0.3089716000 -
0.55609014
## 111 -0.7615547 -0.3599921 -0.7126800 -0.099569025  0.0162294650 -
0.54385499
## 112 -0.6604713 -0.2229466 -0.6262624  0.075803735 -0.2715593800 -
0.24827424
## 113 -0.6951684 -0.4255997 -0.7485371 -0.080268553 -0.1821414100 -
0.55328637
## 114 -0.7186205 -0.4520946 -0.7296901 -0.372101350 -0.3044457900 -
0.57790661
## 115 -0.7136603 -0.3867940 -0.6980718 -0.256447490 -0.2218256400 -
0.57731665
```

```
## 116 -0.6943669 -0.3642809 -0.6891479 -0.188978920  0.0475096370 -
0.47888979
## 117 -0.6900937 -0.3668191 -0.6868735 -0.198990790 -0.3049647400 -
0.46524963
## 118 -0.7262766 -0.4362764 -0.7094885 -0.100555590 -0.3291564800 -
0.47790990
## 119 -0.8139283 -0.5153957 -0.7209995 -0.323522130 -0.2250449800 -
0.56545528
## 120 -0.8001938 -0.5644117 -0.7486493 -0.177554000 -0.1836041200 -
0.53115724
## 121 -0.7989369 -0.5748781 -0.7209520 -0.219706730  0.0009614204 -
0.54014685
## 122 -0.8408996 -0.4916126 -0.6788746 -0.408908420 -0.2896005600 -
0.66230208
## 123 -0.7979375 -0.4599742 -0.6672300  0.102886810  0.0840444160 -
0.48536702
## 124 -0.7668241 -0.4672188 -0.6573895 -0.201641040 -0.1064934800 -
0.35330341
## 125 -0.8038068 -0.4711761 -0.7087520 -0.023053898 -0.3673980400 -
0.49711801
## 126 -0.6551307 -0.6657441 -0.8127646 -0.197058330 -0.3023790600 -
0.56632517
## 127 -0.5372276 -0.6264976 -0.7653531 -0.270887690 -0.3858868900 -
0.53041563
## 128 -0.5880826 -0.5022886 -0.7798361  0.027358911 -0.0568933810 -
0.32959325
## 129 -0.6224016 -0.3540406 -0.7723279 -0.223661340 -0.0935328250 -
0.23801091
## 130 -0.4262455 -0.4355222 -0.6996059  0.199414490  0.1901854200 -
0.27094105
## 131 -0.3703356 -0.4081952 -0.6894795  0.155070420  0.2387832200 -
0.23760240
## 132 -0.5194148 -0.5265918 -0.6692866  0.064400858  0.0879565280 -
0.21330036
## 133 -0.5466089 -0.7120654 -0.7174327 -0.287058480 -0.3050925400 -
0.34505808
## 134 -0.5600472 -0.6768876 -0.7665882 -0.140768650 -0.0294889500 -
0.39226155
## 135 -0.3673055 -0.4096015 -0.4403569  0.090294463 -0.0546302830 -
0.06290983
## 136 -0.3758035 -0.4756111 -0.5256129  0.234516680 -0.1674210000
0.08460199
## 137 -0.3938278 -0.1493870 -0.6771121  0.285070020  0.1896145700 -
0.48749505
## 138 -0.4434714 -0.1942708 -0.6821891  0.166491030  0.7538857700 -
0.32655037
## 139 -0.3727437 -0.5447224 -0.6279955 -0.014691513 -0.1657023700 -
0.37282793
## 140 -0.4320633 -0.5119848 -0.6959822  0.125780340 -0.1721491300 -
0.29625337
```

```
## 141 -0.3405581 -0.6402692 -0.7034723  0.236228760 -0.2320119700 -
0.13384193
## 142 -0.2173770 -0.6846140 -0.6468788 -0.113073040 -0.3174808700 -
0.21901937
## 143 -0.4163862 -0.5888581 -0.7214832  0.178758640 -0.2808394700 -
0.33077994
## 144 -0.4188187 -0.5904141 -0.7461155  0.164328740 -0.3604358100 -
0.39418120
## 145 -0.5995750 -0.3827934 -0.6937317 -0.039207174  0.1522115800 -
0.17541475
## 146 -0.4712655 -0.3126825 -0.6608749  0.002027129  0.0920800450 -
0.30859429
## 147 -0.3936952 -0.5324275 -0.7277051 -0.253789210 -0.2514146600 -
0.39141190
## 148 -0.5382887 -0.6202668 -0.7548372 -0.125440830 -0.2406365500 -
0.35853919
## 149 -0.5212453 -0.6731594 -0.7416470  0.054729035 -0.2415674800 -
0.35397781
## 150 -0.4783900 -0.6984841 -0.7528161 -0.037478433 -0.2173441100 -
0.37598627
## 151 -0.7981231 -0.5892673 -0.4709673 -0.451145540 -0.5672090000 -
0.63530157
## 152 -0.7927128 -0.6114637 -0.5893869 -0.359099960 -0.7349583300 -
0.62608305
## 153 -0.7950419 -0.4937286 -0.5971392 -0.434612690 -0.4004034200 -
0.74536863
## 154 -0.7985326 -0.3947197 -0.5107940 -0.387863450 -0.5114846300 -
0.68161310
## 155 -0.7771569 -0.5152105 -0.4600341 -0.428090320 -0.2775069300 -
0.53634172
## 156 -0.8218029 -0.5750140 -0.5041412 -0.229562160 -0.4228913900 -
0.66216489
## 157 -0.8222322 -0.5615268 -0.4656466 -0.253118350 -0.5049113200 -
0.62874980
## 158 -0.7814288 -0.6363879 -0.4700655 -0.534238220 -0.4616029500 -
0.61652898
## 159 -0.7049846 -0.5712975 -0.5248327 -0.126700350 -0.5281030200 -
0.68152985
## 160 -0.7646885 -0.6027742 -0.5604477 -0.311134470 -0.5846719000 -
0.56545693
## 161 -0.7914836 -0.4529675 -0.5787661 -0.424583860 -0.3997956300 -
0.53202001
## 162 -0.7940949 -0.4750877 -0.5874621 -0.197930360 -0.3175671900 -
0.65649438
## 163 -0.8343740 -0.6089084 -0.5778136 -0.442231990 -0.5692378900 -
0.75843933
## 164 -0.8308783 -0.5004532 -0.5094555 -0.427802360 -0.3165212900 -
0.71878184
## 165 -0.8160552 -0.5871094 -0.5292018 -0.526325830 -0.4840372400 -
0.74631316
```

```
## 166 -0.8379915 -0.7046960 -0.5622656 -0.635607350 -0.6217574900 -
0.78480263
## 167 -0.8511794 -0.6827932 -0.4844677 -0.598386760 -0.5994446200 -
0.79675189
## 168 -0.7874729 -0.5042287 -0.4839086 -0.621218570 -0.6042275600 -
0.79167336
## 169 -0.7883190 -0.4449293 -0.5668322 -0.421930660 -0.3159508000 -
0.71413630
## 170 -0.8164310 -0.3134666 -0.5360473 -0.392680800 -0.3579927700 -
0.68308993
## 171 -0.8429633 -0.3668354 -0.4323878 -0.356847650 -0.4644392900 -
0.71299246
## 172 -0.8449051 -0.4853268 -0.5224996 -0.400528220 -0.3881342100 -
0.73043962
## 173 -0.8583155 -0.4830628 -0.5457159 -0.467240390 -0.2453781500 -
0.69479747
## 174 -0.8110932 -0.5239324 -0.4359638 -0.410529720 -0.1354549500 -
0.76162773
## 175 -0.7942455 -0.6319738 -0.5141043 -0.550165140 -0.4899601500 -
0.79248536
## 176 -0.7826965 -0.6509841 -0.5420212 -0.127457130 -0.3135743500 -
0.68380339
## 177 -0.9995421 -0.9968035 -0.9902478 -0.988252570 -0.9825182900 -
0.95909065
##                  NA          NA          NA          NA          NA
NA
## 1    -0.946356920 -0.90474776 -0.59130248 -1.00000000 -1.00000000 -
1.00000000
## 2    -1.000000000 -0.90474776 -0.75840851  0.09677419 -1.00000000 -
1.00000000
## 3    -1.000000000 -0.81578627 -0.81351333 -0.93548387 -1.00000000 -
1.00000000
## 4    -1.000000000 -0.87039785 -0.94419022 -1.00000000 -1.00000000 -
1.00000000
## 5    -1.000000000 -0.87039785 -0.94419022  0.09677419 -1.00000000 -
1.00000000
## 6    -1.000000000 -0.94487044 -1.00000000 -0.61290323 -1.00000000 -
1.00000000
## 7    -1.000000000 -0.75795326 -0.86879874 -0.48387097 -1.00000000 -
1.00000000
## 8    -1.000000000 -0.81578627 -0.88855242 -1.00000000 -1.00000000 -
1.00000000
## 9    -1.000000000 -0.84996072 -0.88855242 -1.00000000 -1.00000000 -
1.00000000
## 10   -1.000000000 -0.78688640 -0.80988792 -0.29032258 -0.26666667 -
0.38461538
## 11   -1.000000000 -0.81220504 -0.83788423 -0.54838710 -1.00000000 -
0.38461538
## 12   -1.000000000 -0.90474776 -0.90357248 -1.00000000 -1.00000000 -
1.00000000
```

```
## 13   -1.000000000 -0.94487044 -1.00000000 -0.93548387 -1.00000000 -
0.46153846
## 14   -1.000000000 -0.94487044 -0.94419022 -0.09677419 -1.00000000 -
1.00000000
## 15   -0.907316090 -0.53546236 -0.72785823 -1.00000000 -1.00000000 -
1.00000000
## 16   -1.000000000 -0.87039785 -0.83788423 -0.93548387 -0.93333333 -
0.92307692
## 17   -1.000000000 -0.90474776 -0.84810945 -0.67741935 -1.00000000 -
1.00000000
## 18   -1.000000000 -0.90474776 -0.90357248 -0.48387097 -0.93333333 -
1.00000000
## 19   -1.000000000 -1.00000000 -1.00000000 -0.54838710 -0.66666667 -
0.53846154
## 20   -1.000000000 -0.94487044 -1.00000000 -0.41935484 -1.00000000 -
0.23076923
## 21   -1.000000000 -1.00000000 -1.00000000 -0.29032258 -1.00000000 -
1.00000000
## 22   -1.000000000 -0.94487044 -1.00000000 -0.80645161 -1.00000000 -
0.76923077
## 23   -1.000000000 -1.00000000 -0.94419022 -0.74193548 -1.00000000 -
0.84615385
## 24   -1.000000000 -0.90474776 -0.90357248 -0.54838710 -1.00000000 -
1.00000000
## 25   -1.000000000 -0.94487044 -0.90357248 -1.00000000 -1.00000000 -
0.92307692
## 26   -1.000000000 -0.94487044 -0.94419022 -0.22580645 -1.00000000 -
1.00000000
## 27   -1.000000000 -1.00000000 -0.94419022  0.29032258 -0.86666667 -
1.00000000
## 28   -0.411235350 -0.21696556 -0.28803113 -1.00000000 -1.00000000 -
1.00000000
## 29   -0.892879150 -0.67893968 -0.88855242 -1.00000000 -1.00000000 -
1.00000000
## 30   -0.907316090 -0.78542693 -0.83788423 -1.00000000 -1.00000000 -
1.00000000
## 31   -0.004792536 -0.15162405 -0.01750729 -0.87096774 -1.00000000 -
0.92307692
## 32   -0.066209672 -0.06328703 -0.18112572 -1.00000000 -1.00000000 -
1.00000000
## 33   -0.203219470 -0.27015008 -0.12218206 -1.00000000 -1.00000000 -
1.00000000
## 34   -0.687596560 -0.43919865 -0.81351333 -1.00000000 -1.00000000 -
1.00000000
## 35   -0.854006290 -0.88991077 -0.75496674 -1.00000000 -1.00000000 -
1.00000000
## 36   -0.946356920 -0.94487044 -0.90357248 -1.00000000 -1.00000000 -
1.00000000
## 37   -0.946356920 -1.00000000 -0.94419022 -1.00000000 -0.46666667 -
1.00000000
```

```
## 38   -0.946356920 -1.00000000 -0.94419022 -1.00000000 -0.40000000 -
1.00000000
## 39   -0.820753300 -0.50601776 -0.78277940 -1.00000000 -1.00000000 -
1.00000000
## 40   -0.907316090 -0.75795326 -0.86879874 -1.00000000 -1.00000000 -
0.76923077
## 41   -1.000000000 -0.94487044 -0.86879874 -0.35483871 -1.00000000 -
0.92307692
## 42   -1.000000000 -0.94487044 -0.90357248 -0.93548387 -1.00000000 -
0.92307692
## 43   -1.000000000 -0.94487044 -0.94419022 -0.61290323 -1.00000000 -
0.92307692
## 44   -0.946356920 -0.88991077 -0.83788423 -1.00000000 -1.00000000 -
0.92307692
## 45   -0.946356920 -0.94487044 -0.90357248 -1.00000000 -1.00000000 -
1.00000000
## 46   -1.000000000 -0.90474776 -0.86879874 -0.29032258 -0.93333333 -
0.84615385
## 47   -1.000000000 -0.94487044 -0.94419022  0.80645161 -1.00000000 -
0.92307692
## 48   -1.000000000 -0.94487044 -0.90357248 -1.00000000 -1.00000000 -
1.00000000
## 49   -1.000000000 -0.94487044 -0.86879874 -0.93548387 -1.00000000 -
1.00000000
## 50   -0.946356920 -0.94487044 -0.94419022 -1.00000000 -1.00000000 -
0.92307692
## 51   -1.000000000 -0.88991077 -0.94419022 -1.00000000 -1.00000000 -
1.00000000
## 52   -0.430487310 -0.31607703 -0.54256068 -1.00000000 -1.00000000 -
1.00000000
## 53   -0.820753300 -0.94487044 -0.80988792 -1.00000000 -1.00000000 -
1.00000000
## 54   -0.907316090 -1.00000000 -0.94419022 -1.00000000 -0.20000000 -
0.15384615
## 55   -0.946356920 -1.00000000 -1.00000000 -0.41935484 -0.73333333 -
0.07692308
## 56   -1.000000000 -1.00000000 -0.86879874 -0.35483871 -0.66666667 -
1.00000000
## 57   -0.946356920 -1.00000000 -0.90357248 -0.41935484  0.06666667 -
0.46153846
## 58   -0.946356920 -1.00000000 -0.94419022 -0.41935484  0.00000000 -
0.46153846
## 59   -1.000000000 -1.00000000 -0.90357248 -0.48387097 -1.00000000 -
0.92307692
## 60   -1.000000000 -0.94487044 -0.86879874 -0.48387097 -1.00000000 -
1.00000000
## 61   -1.000000000 -0.94487044 -0.94419022 -0.35483871 -1.00000000 -
1.00000000
## 62   -0.946356920 -1.00000000 -0.94419022 -0.41935484 -1.00000000 -
0.69230769
```

```
## 63   -1.000000000 -1.00000000 -0.94419022 -0.41935484 -0.80000000 -
0.69230769
## 64   -1.000000000 -1.00000000 -0.94419022 -0.41935484 -0.66666667 -
1.00000000
## 65   -0.062930312 -0.20296933 -0.02219756 -1.00000000 -1.00000000 -
1.00000000
## 66   -0.791212560 -0.76135307 -0.86879874 -1.00000000 -1.00000000 -
0.46153846
## 67   -0.004436100  0.24152176  0.13376950 -1.00000000 -1.00000000 -
1.00000000
## 68   -0.029005054  0.22494435  0.01544323 -1.00000000 -1.00000000 -
1.00000000
## 69   -0.104616160 -0.24101254 -0.05564870 -1.00000000 -1.00000000 -
1.00000000
## 70    0.010984817  0.07543989  0.02770982 -1.00000000 -1.00000000 -
0.92307692
## 71    0.366556100  0.56826340  0.27992368 -1.00000000 -1.00000000 -
1.00000000
## 72    0.369385030  0.49064830  0.27598681 -1.00000000 -0.93333333 -
1.00000000
## 73   -0.246966110 -0.15784960 -0.02612223 -1.00000000 -1.00000000 -
1.00000000
## 74   -0.791212560 -0.12122083 -0.81351333 -1.00000000 -1.00000000 -
1.00000000
## 75   -0.817268640 -0.63474230 -0.86879874 -1.00000000 -1.00000000 -
1.00000000
## 76   -1.000000000 -0.90474776 -1.00000000  0.16129032 -1.00000000 -
0.61538462
## 77   -1.000000000 -0.90474776 -1.00000000 -0.67741935 -1.00000000 -
0.38461538
## 78   -0.907316090 -0.94487044 -1.00000000 -0.61290323 -1.00000000 -
0.92307692
## 79    0.538905490  0.52872027  0.20977135 -0.80645161 -0.80000000 -
0.92307692
## 80    0.573236150  0.58784329  0.38095218 -0.74193548 -0.26666667 -
0.92307692
## 81    0.681560740  0.45925872  0.29908859 -0.74193548 -0.73333333 -
0.92307692
## 82    0.678354960  0.53384892  0.47845774 -0.74193548 -0.73333333 -
0.92307692
## 83    0.474392890  0.66400301  0.50876953 -0.74193548 -0.73333333 -
0.92307692
## 84    0.566783900  0.60527587  0.34675965 -0.74193548 -0.73333333 -
0.92307692
## 85    0.640452580  0.57767394  0.46167778 -0.61290323 -0.73333333 -
0.92307692
## 86    0.383122090  0.57889649  0.38706511 -0.61290323 -0.33333333 -
0.92307692
## 87    0.529730640  0.53066422  0.38178857 -0.80645161 -0.33333333 -
0.92307692
```

```
## 88    0.490381890  0.66880980  0.44133872 -0.74193548 -0.73333333 -
0.92307692
## 89    0.496729180  0.55797767  0.40864268 -0.74193548 -0.73333333 -
0.92307692
## 90    0.564467860  0.46821327  0.42661230 -0.74193548 -0.26666667 -
0.92307692
## 91    0.455154620  0.54296700  0.42018919 -0.74193548 -0.26666667 -
0.92307692
## 92    0.651331030  0.50133394  0.47523384 -0.74193548 -0.26666667 -
0.92307692
## 93    0.648355420  0.65229057  0.59966818 -0.74193548 -0.73333333 -
0.92307692
## 94    0.645901710  0.68103208  0.46802967 -0.74193548 -0.73333333 -
0.92307692
## 95    0.659149070  0.43636669  0.48174375 -0.74193548 -0.73333333 -
0.92307692
## 96    0.542805830  0.60021121  0.57999424 -0.74193548 -0.73333333 -
0.92307692
## 97    0.535179770  0.63546726  0.49855744 -0.80645161 -0.33333333 -
0.92307692
## 98    0.617629600  0.54691415  0.25781171 -0.80645161 -0.80000000 -
0.92307692
## 99    0.682114060  0.66861590  0.54971361 -0.74193548 -0.73333333 -
0.92307692
## 100   0.708025790  0.53083787  0.34816648 -0.74193548 -0.73333333 -
0.69230769
## 101   0.758171640  0.41832157  0.45963718 -0.74193548 -0.73333333 -
0.92307692
## 102   0.633092990  0.70100664  0.38957759 -0.74193548 -0.73333333 -
0.84615385
## 103   0.721751700  0.75724141  0.43401797 -0.74193548 -0.73333333 -
0.92307692
## 104   0.699828550  0.76841119  0.45217432 -0.74193548 -0.73333333 -
0.92307692
## 105   0.737022900  0.63876278  0.51443020 -0.74193548  0.00000000 -
0.92307692
## 106   0.577205810  0.54048299  0.43861167 -0.74193548 -0.73333333 -
0.92307692
## 107   0.676217340  0.50031464  0.47356171 -0.74193548 -0.73333333 -
0.92307692
## 108   0.605521940  0.53100915  0.32184049 -0.74193548 -0.73333333 -
0.92307692
## 109   0.544082230  0.77106069  0.48318298 -0.74193548 -0.73333333 -
0.92307692
## 110   0.546985370  0.61389189  0.50772590 -0.74193548 -0.33333333 -
0.92307692
## 111   0.530940610  0.65923081  0.34581566 -0.61290323 -0.80000000 -
0.92307692
## 112   0.717764550  0.64306383  0.54836714 -0.74193548 -0.73333333 -
0.92307692
```

```
## 113  0.786157980  0.43720964  0.46649090 -0.74193548 -0.73333333 -
0.92307692
## 114  0.541043110  0.49130496  0.39054095 -0.74193548 -0.73333333 -
0.92307692
## 115  0.611606020  0.62759342  0.36178232 -0.74193548 -0.73333333 -
0.92307692
## 116  0.643383630  0.54221350  0.41694661 -0.74193548 -0.73333333 -
0.92307692
## 117  0.600359770  0.47901638  0.46239297 -0.61290323 -0.73333333 -
0.92307692
## 118  0.651936320  0.47041644  0.52305225 -0.61290323  0.00000000 -
0.92307692
## 119  0.618667090  0.50275903  0.38622949 -0.74193548 -0.33333333 -
0.92307692
## 120  0.691695890  0.41340517  0.29967378 -0.74193548 -0.33333333 -
0.92307692
## 121  0.538913140  0.57239423  0.32394064 -0.74193548 -0.33333333 -
0.92307692
## 122  0.494068190  0.57246971  0.33490243 -0.67741935 -0.33333333 -
0.92307692
## 123  0.736461040  0.64526376  0.41686818 -0.22580645 -0.06666667 -
0.92307692
## 124  0.548851710  0.56381126  0.36538789 -0.61290323 -0.80000000 -
0.92307692
## 125  0.644585280  0.50212850  0.42530879 -0.80645161 -0.80000000 -
0.92307692
## 126  0.613302690  0.55970603  0.28599896 -0.80645161 -0.80000000 -
0.92307692
## 127  0.626976520  0.53776550  0.45914818 -0.80645161 -0.80000000 -
0.92307692
## 128  0.732042470  0.65171934  0.54029628 -0.80645161 -0.80000000 -
0.92307692
## 129  0.703327610  0.68806552  0.53015311 -0.80645161 -0.40000000 -
0.92307692
## 130  0.744821120  0.69196141  0.57501930 -0.80645161 -0.40000000 -
0.92307692
## 131  0.768528110  0.70647775  0.61572163 -0.80645161 -0.80000000 -
0.92307692
## 132  0.767032820  0.66509010  0.65075731 -0.80645161 -0.80000000 -
0.92307692
## 133  0.704869900  0.48301070  0.54993051 -0.80645161  0.20000000 -
0.92307692
## 134  0.714818590  0.53993197  0.56282236 -0.80645161 -0.20000000 -
0.92307692
## 135  0.809366600  0.68813304  0.66931016 -0.74193548 -0.80000000 -
0.92307692
## 136  0.720696620  0.57626099  0.70265185 -0.80645161 -0.73333333 -
0.92307692
## 137  0.805313330  0.70220749  0.48489893 -0.74193548 -0.73333333 -
0.92307692
```

```
## 138   0.822381600   0.60532244   0.62684673 -0.74193548 -0.73333333 -
1.00000000
## 139   0.812184400   0.58199664   0.39094540 -0.80645161 -0.46666667 -
0.92307692
## 140   0.772242080   0.57841479   0.59148276 -0.74193548 -0.73333333 -
1.00000000
## 141   0.707061290   0.55114249   0.54347919 -0.74193548 -0.40000000 -
0.84615385
## 142   0.722159490   0.58981803   0.55995530 -0.74193548 -0.73333333 -
0.92307692
## 143   0.718601010   0.58825336   0.53894795 -0.74193548 -0.73333333 -
0.92307692
## 144   0.608554040   0.56261441   0.52826513 -0.74193548 -0.73333333 -
0.92307692
## 145   0.706815210   0.71946001   0.48874324 -0.74193548 -0.73333333 -
0.92307692
## 146   0.787570080   0.72409184   0.63490556 -0.74193548 -0.73333333 -
0.84615385
## 147   0.724237800   0.54776614   0.55479568 -0.80645161 -0.80000000 -
0.92307692
## 148   0.707285110   0.39426733   0.54345982 -0.80645161 -0.80000000 -
0.92307692
## 149   0.688743820   0.56523077   0.57233739 -0.80645161 -0.80000000 -
0.92307692
## 150   0.585261270   0.53655145   0.40154579 -0.80645161 -0.80000000 -
0.92307692
## 151   0.352416060   0.40713864   0.34142760 -0.80645161 -0.80000000 -
0.92307692
## 152   0.451144160   0.22861603   0.32128189 -0.80645161 -0.80000000 -
0.92307692
## 153   0.356372370   0.42689297   0.24087510 -0.80645161 -0.80000000 -
0.92307692
## 154   0.466621490   0.39654371   0.34908446 -0.80645161 -0.80000000 -
0.92307692
## 155   0.428738700   0.53285254   0.32912455 -0.80645161 -0.80000000 -
0.92307692
## 156   0.554812950   0.41250482   0.28753024 -0.80645161 -0.86666667 -
0.92307692
## 157   0.521095230   0.43902571   0.36704154 -0.80645161 -0.80000000 -
0.92307692
## 158   0.525802360   0.39335654   0.34867597 -0.80645161 -0.80000000 -
0.92307692
## 159   0.516155720   0.39309365   0.22862665 -0.80645161 -0.80000000 -
0.92307692
## 160   0.396684100   0.31132841   0.19184091 -0.80645161 -0.80000000 -
0.92307692
## 161   0.516134610   0.36626267   0.27699905 -0.80645161 -0.80000000 -
0.92307692
## 162   0.465373520   0.38248466   0.27325774 -0.80645161 -0.80000000 -
0.92307692
```

```
## 163   0.463767020   0.39292237   0.14035627  -0.80645161  -0.80000000 -
0.92307692
## 164   0.431455860   0.43397164   0.11599659  -0.80645161  -0.80000000 -
0.92307692
## 165   0.411421780   0.38768731   0.12649820  -0.80645161  -0.80000000 -
0.92307692
## 166   0.316202400   0.26187145   0.11079942  -0.80645161  -0.80000000 -
0.92307692
## 167   0.287402720   0.30471784   0.18267803  -0.80645161  -0.80000000 -
0.92307692
## 168   0.385021530   0.36670254   0.17122887  -0.80645161  -0.80000000 -
0.92307692
## 169   0.446602360   0.50190897   0.17436556  -0.80645161  -0.80000000 -
0.92307692
## 170   0.536981570   0.50500146   0.31681670  -0.80645161  -0.80000000 -
0.92307692
## 171   0.464810340   0.43484752   0.28512725  -0.80645161  -0.80000000 -
0.92307692
## 172   0.422841970   0.50915662   0.26088956  -0.80645161  -0.80000000 -
0.92307692
## 173   0.396305560   0.51174208   0.17837210  -0.80645161  -0.80000000 -
0.92307692
## 174   0.474567370   0.44394561   0.24180902  -0.80645161  -0.80000000 -
0.92307692
## 175   0.307838500   0.36502921   0.11816091  -0.80645161  -0.80000000 -
0.92307692
## 176   0.554246250   0.55883853   0.25823768  -0.80645161  -0.80000000 -
0.92307692
## 177  -0.791212560  -0.75795326  -0.53622971  -1.00000000  -1.00000000 -
1.00000000
##              NA           NA           NA           NA           NA
## 1     0.252482900   0.131835750  -0.052050251   0.142050560  -0.150682500
## 2     0.271308550   0.042863639  -0.014309755  -0.692540900  -0.954047030
## 3     0.124531240  -0.064610562   0.082676921  -0.727227320  -0.965419150
## 4     0.029044377   0.080302267   0.185694680  -0.599117990  -0.908449280
## 5     0.181089770   0.057987891   0.559786320  -0.676996500  -0.951370740
## 6     0.157383770   0.318835230   0.605599430  -0.631053000  -0.934903070
## 7     0.432263310   0.110410770   0.379586260  -0.321329670  -0.707691670
## 8     0.000771701  -0.122969740   0.157233620  -0.663914510  -0.941592590
## 9    -0.027979677   0.154135230   0.164839290  -0.359865970  -0.725729700
## 10    0.037599200   0.160762460   0.259786580  -0.607452600  -0.912718310
## 11    0.254522430   0.145805660   0.356001150  -0.448768130  -0.809832870
## 12   -0.079862491   0.285900260   0.592807730  -0.481187270  -0.825431490
## 13    0.010884870   0.047539322   0.493172330  -0.398551980  -0.781288210
## 14    0.251979660   0.305631470   0.478070120  -0.718743620  -0.978880200
## 15   -0.048520309  -0.108859640  -0.321729440   0.233673300  -0.048397972
## 16    0.035257506  -0.176954130   0.372847820  -0.688308510  -0.956378040
## 17    0.018894579  -0.173779080   0.077119723  -0.605306100  -0.916962910
## 18    0.133031400   0.072583636   0.430647350  -0.701320950  -0.951419230
## 19    0.046132032   0.263345640   0.327178700  -0.573449990  -0.868581470
```

```
## 20   -0.020005744   0.212347960   0.465525080  -0.686221870  -0.955864040
## 21    0.090345729   0.357718940   0.408063410  -0.598641670  -0.896080620
## 22    0.126628140   0.441211880   0.556190750  -0.780047450  -0.986359180
## 23    0.097081780   0.433271020   0.412495060  -0.567761110  -0.891178300
## 24    0.182788550   0.295654780   0.195596950  -0.613211110  -0.900090140
## 25    0.215814210   0.303852350   0.360945980  -0.448099710  -0.824916560
## 26    0.082183504   0.306265460   0.556160050  -0.710789810  -0.971645900
## 27    0.408972510   0.471611370   0.477710810  -0.454835250  -0.786045100
## 28   -0.354898410  -0.181464160  -0.124365290   0.507073050   0.277924640
## 29   -0.165870140  -0.160817350  -0.343135230   0.395777040   0.117553540
## 30   -0.039967658  -0.068091694   0.323463040   0.052091594  -0.302379870
## 31   -0.336933090  -0.136361960  -0.270671810  -0.205773710  -0.666265950
## 32   -0.688826820  -0.405454070  -0.985542460   0.233649160  -0.128233850
## 33   -0.193260510  -0.308542860   0.054190525   0.719615240   0.592356420
## 34   -0.378113450  -0.061498425  -0.499064350   0.528699090   0.299071030
## 35   -0.372789540   0.086423859   0.038592924   0.495378390   0.251729360
## 36   -0.348773320   0.335100240   0.285822400   0.336177600   0.079416258
## 37   -0.018697562   0.593239320   0.317781300  -0.039570262  -0.354170430
## 38   -0.116631450   0.351530920   0.246204700  -0.200606640  -0.516144930
## 39   -0.293920570  -0.037053012   0.074115336   0.438017320   0.221690110
## 40   -0.216498090  -0.212063210   0.347982470  -0.404551420  -0.783207070
## 41    0.076414562   0.400241320   0.227315020  -0.547962490  -0.899217250
## 42   -0.083038861   0.190729900   0.327612950  -0.682152750  -0.954178050
## 43    0.136091280   0.034563870   0.304579060  -0.442767230  -0.810104760
## 44   -0.125200540   0.164533090   0.201581340  -0.194237500  -0.571932270
## 45   -0.020814968   0.034065020   0.280497250  -0.058266881  -0.344200640
## 46    0.157196050   0.220534140   0.044666053  -0.631288240  -0.936662870
## 47    0.079523072   0.038019561   0.270158510  -0.664547090  -0.937916170
## 48    0.182696370   0.035678404   0.340798900  -0.660569460  -0.924819280
## 49    0.003979131   0.084257428   0.088955209  -0.652961650  -0.943842080
## 50    0.076734385  -0.108785250   0.181796010  -0.314276460  -0.680826880
## 51    0.394354750   0.087044170   0.381738100  -0.680770550  -0.941907740
## 52   -0.234099950   0.007941230  -0.136077670   0.378034600   0.121342320
## 53   -0.330893840   0.282159370   0.229796330   0.228383470  -0.077214333
## 54    0.068314314   0.483545040   0.507525030  -0.222315800  -0.661822820
## 55    0.089330554   0.324073390   0.518544920  -0.260760000  -0.631330730
## 56   -0.004917186   0.353775680   0.460722880  -0.531936570  -0.870193730
## 57    0.037372839   0.517639170   0.335514550  -0.214777250  -0.563444730
## 58   -0.001207646   0.311363430   0.543155720  -0.110465070  -0.412651440
## 59    0.044484925   0.207680290   0.202496020  -0.528044690  -0.867715350
## 60    0.043309032   0.437823430   0.163150560  -0.587949090  -0.902559350
## 61    0.042898076   0.430695190   0.477597720  -0.636521630  -0.942923120
## 62    0.148558820   0.387643590   0.472104070  -0.279004040  -0.615612320
## 63    0.192915770   0.343347860   0.584649030  -0.501437450  -0.854468720
## 64    0.174556310   0.274686210   0.491336150  -0.554826450  -0.860132970
## 65   -0.302944700  -0.081920210   0.064381548   0.200505290  -0.140469550
## 66   -0.643378300  -0.419317780   0.835380830   0.737054820   0.627932190
## 67   -0.621766000  -0.601298050  -0.476124520   0.485527090   0.213816710
## 68   -0.855559110  -0.624785910  -0.686023770   0.775504910   0.679392270
## 69   -0.329547320  -0.328918040  -0.094863916   0.297075810  -0.064881407
```

```
## 70   -0.442773720   0.027422686  -0.215580530  -0.016035036  -0.462731680
## 71   -0.357483850  -0.350224850  -0.335307260   0.429941730   0.229615730
## 72   -0.481127630   0.055190131  -0.447975490   0.219972700  -0.056636833
## 73   -0.237063820  -0.520658700  -0.037411443  -0.443785110  -0.820608060
## 74   -0.163526920  -0.105496930  -0.092662135  -0.105616680  -0.476342130
## 75    0.120611080  -0.145732920   0.134222400  -0.409631450  -0.735817050
## 76    0.095890060   0.035107332   0.484510860  -0.687567320  -0.953747150
## 77    0.219337900  -0.016730184   0.609048990  -0.526704780  -0.863091790
## 78    0.183080200   0.269478440   0.542536050  -0.503223990  -0.853301430
## 79   -0.240348280   0.021220418  -0.126705200  -0.441075280  -0.840473530
## 80   -0.283878380   0.071734673   0.278242520  -0.345494180  -0.753141520
## 81   -0.332162900   0.224495850  -0.007875473  -0.208063260  -0.605588940
## 82   -0.217969170   0.242777150  -0.195926080  -0.240286440  -0.645104830
## 83   -0.213274570   0.041467697  -0.186821980  -0.075238516  -0.475190320
## 84   -0.426292250   0.242474820   0.132657120   0.010349316  -0.418456600
## 85   -0.180099960  -0.052365360   0.075798266  -0.311475070  -0.734727070
## 86   -0.222311370  -0.087085120   0.188658940  -0.442885330  -0.850703980
## 87   -0.249070800   0.001343957  -0.226522120  -0.337745080  -0.755275680
## 88   -0.169230380  -0.027292108   0.039915751  -0.244654680  -0.703037020
## 89   -0.222927290  -0.009351593  -0.011300085  -0.202853840  -0.615721640
## 90   -0.082171576   0.206853300  -0.020155954  -0.018076328  -0.374625420
## 91   -0.211789500   0.081188845   0.113498500  -0.019487972  -0.403510240
## 92   -0.372982760   0.122672370   0.186485160   0.047533705  -0.364224150
## 93   -0.302958750   0.081152493   0.028091615  -0.164150370  -0.613019330
## 94   -0.153396230   0.119661280   0.059080818  -0.303062700  -0.704540890
## 95   -0.140274080   0.124215620  -0.060416758  -0.234645130  -0.651131000
## 96   -0.109024020   0.174649310  -0.045429966  -0.379558470  -0.804521030
## 97   -0.206497060  -0.033235637  -0.205587120  -0.480964170  -0.879859480
## 98    0.098227535   0.237496500   0.262500140  -0.455294670  -0.848573110
## 99   -0.270824820   0.030794718  -0.086579051  -0.225332460  -0.614187390
## 100  -0.110157410   0.278263430   0.362051010  -0.124441080  -0.531601490
## 101  -0.294581800   0.306688670  -0.079576775  -0.180963770  -0.582865040
## 102  -0.075308812   0.223795680   0.234116740   0.008291773  -0.342036590
## 103  -0.236208450   0.128200650   0.082928652   0.037425166  -0.294817770
## 104  -0.309968130   0.077258576  -0.134911590  -0.276658500  -0.695340980
## 105  -0.380026270   0.172825780   0.022206895  -0.296035100  -0.721594030
## 106  -0.122201000   0.194789620  -0.141752570  -0.180453640  -0.640461130
## 107  -0.287658360   0.084663752  -0.027889144  -0.237562040  -0.681257830
## 108  -0.150504000   0.109444250   0.055989769  -0.200608350  -0.603138540
## 109  -0.152666360   0.007156860  -0.066465617  -0.149297870  -0.547325860
## 110  -0.164420580   0.006481364  -0.069085815  -0.453923630  -0.846373630
## 111  -0.225401040  -0.057658710   0.046596110  -0.437674540  -0.850665950
## 112  -0.362364780   0.181166640   0.140637270  -0.201679520  -0.602451190
## 113  -0.225293680   0.399891070  -0.057525506  -0.133200200  -0.487156440
## 114  -0.033257916   0.195037370   0.165857470  -0.029338901  -0.397497120
## 115  -0.221945650  -0.088626233   0.079297746  -0.126372040  -0.542080850
## 116  -0.295842850   0.111368800   0.226614700  -0.261647910  -0.706875120
## 117  -0.252189860  -0.038222874  -0.169308910  -0.367301780  -0.785246600
## 118  -0.289382600   0.107201820  -0.127516620  -0.422153630  -0.832935870
## 119  -0.328342980   0.254049930  -0.188265200  -0.435675130  -0.830227100
```

```
## 120 -0.310331940  0.126321110 -0.326286510 -0.486689190 -0.871652790
## 121 -0.231637470 -0.002231202 -0.037053922 -0.522442440 -0.902947920
## 122 -0.191179150  0.343224370 -0.173756230 -0.501167920 -0.883015390
## 123 -0.235682470  0.080290144 -0.182337290 -0.579120510 -0.915450410
## 124 -0.170839630  0.191155220  0.024331833 -0.472302810 -0.870968690
## 125 -0.272940970 -0.080116902 -0.030486945 -0.452512130 -0.826062620
## 126 -0.284572030  0.153175410  0.252387970  0.330701290  0.058120599
## 127 -0.326094180  0.091641710  0.261049450  0.326832690  0.039342805
## 128 -0.306663280 -0.004135631  0.390362210  0.205863580 -0.096662668
## 129 -0.418593410 -0.018114351  0.290815860  0.097212596 -0.211504080
## 130 -0.457310410 -0.054104254  0.292477610  0.043280035 -0.314897150
## 131 -0.396392570 -0.063954326  0.216626030  0.090102863 -0.250465130
## 132 -0.333730100  0.062968488  0.228821080  0.178969580 -0.144335600
## 133 -0.427207800  0.218681530  0.358163490  0.142123330 -0.189694490
## 134 -0.486426490  0.079932054  0.571063960 -0.004358099 -0.402518780
## 135 -0.057546152  0.271587900  0.633592640 -0.096982120 -0.539397730
## 136 -0.460963970  0.301732620  0.191299170 -0.109552900 -0.473709340
## 137 -0.027967766  0.123469670  0.808301820  0.170404760 -0.116059790
## 138  0.021608073 -0.019847893  0.172898730 -0.166481890 -0.531436290
## 139 -0.499606380 -0.130532430  0.321448150 -0.090193869 -0.556965540
## 140 -0.031296514 -0.090099327  0.123685460  0.091493483 -0.227911650
## 141 -0.346624960  0.236209940  0.423874620 -0.015915636 -0.375416510
## 142 -0.361073570  0.152744070  0.397616110  0.582684700  0.422217520
## 143 -0.503518630  0.098072185  0.003456490  0.090267146 -0.271669110
## 144 -0.299264360  0.333987450  0.106459670  0.379448800  0.163535140
## 145 -0.138372260 -0.041243658  0.347564370 -0.202978470 -0.610105850
## 146 -0.408635880 -0.028305017  0.008081099 -0.104110850 -0.503499450
## 147 -0.212486550  0.119139230  0.000329444 -0.202344900 -0.652069550
## 148 -0.341874740 -0.103093610  0.126739300  0.351685120  0.098150519
## 149 -0.295186020 -0.050389402  0.396540980  0.111690500 -0.239002270
## 150 -0.417028390  0.254225170  0.287757490 -0.064810182 -0.483549620
## 151 -0.355900890 -0.223282160 -0.505641010  0.256773330 -0.032439317
## 152 -0.495136100 -0.219319150 -0.355861100  0.197020080 -0.142865780
## 153 -0.672439140 -0.083581598 -0.436884440  0.174799130 -0.137235290
## 154 -0.573193920  0.059780980 -0.395822950  0.220527720 -0.067054587
## 155 -0.538693500 -0.240293470 -0.424789930  0.368902610  0.123128700
## 156 -0.612832620  0.217394560 -0.463049750 -0.365243670 -0.769098280
## 157 -0.423525860 -0.202014130 -0.537153950  0.192138950 -0.087384090
## 158 -0.408594400 -0.135920120 -0.491008040  0.382699990  0.142054890
## 159 -0.417480870 -0.273819990 -0.507825000  0.225214050 -0.091775018
## 160 -0.611223290 -0.245240330 -0.537244390  0.250595920 -0.044243960
## 161 -0.547567560 -0.229253880 -0.580060570  0.150319850 -0.182108840
## 162 -0.549723960 -0.290310640 -0.506013680 -0.002120565 -0.355463720
## 163 -0.348302210 -0.227589820 -0.356864430  0.112811700 -0.205011700
## 164 -0.272938670 -0.195962940 -0.365122140 -0.101140420 -0.483835550
## 165 -0.419517060 -0.150120270 -0.724930910  0.320212250 -0.002444142
## 166 -0.620410250 -0.331616240 -0.623493600  0.315693820  0.009652356
## 167 -0.718089100 -0.157782980 -0.561279310  0.315080960  0.043070947
## 168 -0.532807400 -0.216228370 -0.699424820  0.354982870  0.061611888
## 169 -0.428322710 -0.132150760 -0.455012780  0.330258680  0.034652260
```

```
## 170 -0.546565740 -0.293621010 -0.519002750  0.017590580 -0.327418070
## 171 -0.567264380 -0.325461750 -0.477094270  0.066841072 -0.251942420
## 172 -0.479839170 -0.153976180 -0.546456540  0.236208950 -0.030120158
## 173  0.034748800 -0.219806280 -0.460499200 -0.112354800 -0.525641860
## 174 -0.187047110 -0.347308980 -0.533022390  0.062877530 -0.260776210
## 175 -0.244304310 -0.203545940 -0.588604320  0.405575150  0.167640610
## 176 -0.034075210 -0.056973364 -0.502966670 -0.034454842 -0.363657950
## 177 -0.424537920 -0.261370090 -0.209182400  0.433098230  0.171431780
##              NA           NA           NA           NA           NA
NA
## 1   -0.220546940 -0.558738530  0.24676868 -0.007415521 -0.99996279 -
0.9999865
## 2   -0.049709103 -0.331973860  0.05667537 -0.289001440 -0.99999619 -
0.9999818
## 3    0.163062890 -0.092152785 -0.04493677 -0.288365900 -0.99998945 -
0.9999616
## 4   -0.460914540 -0.813056750 -0.56683479 -0.771246060 -0.99998860 -
0.9999767
## 5   -0.180382820 -0.533726250 -0.58551700 -0.790432550 -0.99999401 -
0.9999860
## 6   -0.660782110 -0.899381370 -0.88068961 -0.963631110 -0.99999034 -
0.9999831
## 7   -0.099405696 -0.428190070 -0.26292013 -0.506013360 -0.99999107 -
0.9999738
## 8    0.166992640 -0.118357130  0.23017444  0.055736207 -0.99998527 -
0.9999689
## 9    0.413777030  0.227564500  0.33388459  0.162478910 -0.99998535 -
0.9999832
## 10  -0.578818400 -0.876062940 -0.58303800 -0.806902110 -0.99998294 -
0.9999384
## 11  -0.425610370 -0.737956480 -0.62345101 -0.800782270 -0.99997880 -
0.9999512
## 12  -0.408176700 -0.742110300 -0.68350962 -0.877032760 -0.99999005 -
0.9999859
## 13   0.259190340  0.042725934 -0.78583987 -0.935550650 -0.99999322 -
0.9999922
## 14  -0.382321590 -0.691596120 -0.71457536 -0.911576660 -0.99999893 -
0.9999878
## 15   0.691045540  0.548323090  0.70641396  0.585589370 -0.99988407 -
0.9999376
## 16   0.014086344 -0.432125440 -0.36811009 -0.666350720 -0.99998522 -
0.9999784
## 17  -0.011284113 -0.421538170  0.04023511 -0.204543320 -0.99998484 -
0.9999860
## 18  -0.192444960 -0.569461910 -0.49040390 -0.744265430 -0.99999410 -
0.9999795
## 19  -0.653947030 -0.930334740 -0.80433115 -0.942945110 -0.99998750 -
0.9999835
## 20  -0.190494420 -0.513246320 -0.80022173 -0.948472790 -0.99999280 -
0.9999679
```

```
## 21   -0.490413050 -0.820760850 -0.87393960 -0.963496400 -0.99999541 -
0.9999667
## 22   -0.404960210 -0.719532230 -0.80856105 -0.931359990 -0.99999180 -
0.9999844
## 23   -0.721881590 -0.931664040 -0.75990957 -0.923039310 -0.99999040 -
0.9999884
## 24   -0.479703140 -0.811107970 -0.75511097 -0.919434930 -0.99999201 -
0.9999910
## 25   -0.210050610 -0.474102920 -0.61150675 -0.814346970 -0.99999645 -
0.9999792
## 26   -0.078008715 -0.355841290 -0.48044227 -0.646933780 -0.99999483 -
0.9999812
## 27   -0.799175090 -0.984272540 -0.73206150 -0.849984990 -0.99999801 -
0.9999974
## 28    0.457123510  0.207668000  0.39337846  0.166128300 -0.99353977 -
0.9994492
## 29    0.572606100  0.366667460  0.81456260  0.745894970 -0.99972524 -
0.9999596
## 30    0.468435330  0.252424890 -0.22961912 -0.525561630 -0.99993630 -
0.9999724
## 31   -0.243416130 -0.602372840 -0.25323733 -0.650133860 -0.97956498 -
0.9932658
## 32    0.209997150 -0.105982190  0.11033814 -0.231286640 -0.96181253 -
0.9956963
## 33    0.699621810  0.552020990  0.52245800  0.373476870 -0.97505203 -
0.9985798
## 34    0.332835940  0.038570052  0.76965196  0.694319040 -0.99848484 -
0.9999351
## 35    0.466594650  0.232032580  0.21436817 -0.040950183 -0.99953761 -
0.9999583
## 36   -0.071049483 -0.389152510 -0.39480413 -0.693767300 -0.99993791 -
0.9999915
## 37   -0.730278830 -0.957135160 -0.68924394 -0.848565460 -0.99997069 -
0.9999910
## 38   -0.771794660 -0.962311530 -0.33747987 -0.558766000 -0.99997111 -
0.9999832
## 39    0.336961760  0.046965427  0.08435644 -0.168038360 -0.99965722 -
0.9999553
## 40    0.257461190 -0.046075422 -0.56600377 -0.801703610 -0.99992054 -
0.9999556
## 41    0.172396660 -0.114250250 -0.81382843 -0.942333880 -0.99998078 -
0.9999566
## 42    0.224728070 -0.004461222 -0.68431630 -0.869211820 -0.99996966 -
0.9999501
## 43    0.437586750  0.238626090 -0.75366768 -0.891342390 -0.99997375 -
0.9999712
## 44    0.683811670  0.566406210 -0.54683043 -0.802619740 -0.99995817 -
0.9999908
## 45    0.419078530  0.210260440 -0.07061464 -0.328681820 -0.99996393 -
0.9999701
```

```
## 46   -0.120104450 -0.514334040 -0.44114572 -0.706840790 -0.99998786 -
0.9999616
## 47    0.379192890  0.176768610 -0.59007658 -0.802604720 -0.99998969 -
0.9999706
## 48    0.241601770  0.013406547 -0.19766119 -0.448739600 -0.99998515 -
0.9999799
## 49    0.316694400  0.090976585 -0.44155414 -0.720781730 -0.99998138 -
0.9999772
## 50    0.598363240  0.460023880 -0.46536960 -0.716181610 -0.99997837 -
0.9999782
## 51    0.423297390  0.210272100  0.23625058  0.065478177 -0.99998529 -
0.9999647
## 52   -0.669639950 -0.940464730  0.07904072 -0.250306170 -0.99548334 -
0.9980120
## 53   -0.616466010 -0.889741490 -0.31650715 -0.574423160 -0.99977161 -
0.9999581
## 54   -0.613837400 -0.871006390 -0.61966797 -0.838588350 -0.99996422 -
0.9999431
## 55   -0.673696940 -0.911417910 -0.86384648 -0.953546380 -0.99999140 -
0.9999363
## 56   -0.761123530 -0.962309080 -0.59573855 -0.820883110 -0.99999111 -
0.9999550
## 57   -0.892908720 -1.000000000 -0.73744583 -0.918967160 -0.99999255 -
0.9999050
## 58   -0.703983510 -0.931232250 -0.73206408 -0.903547600 -0.99998980 -
0.9998976
## 59   -0.692216550 -0.945516620 -0.69180234 -0.880416270 -0.99999226 -
0.9999441
## 60   -0.533972140 -0.787364930 -0.59187873 -0.821517960 -0.99999114 -
0.9999410
## 61   -0.366064510 -0.656512790 -0.63911550 -0.850771670 -0.99997926 -
0.9999397
## 62   -0.547941100 -0.851747900 -0.66957006 -0.859898860 -0.99999330 -
0.9999217
## 63   -0.644821080 -0.906512710 -0.66540174 -0.838025600 -0.99999811 -
0.9999310
## 64   -0.639301220 -0.917238380 -0.55173249 -0.769365350 -0.99999225 -
0.9999387
## 65    0.462115710  0.238218320 -0.26567627 -0.632327090 -0.92606641 -
0.9892890
## 66    0.591134820  0.384492740 -0.77385061 -0.901000980 -0.99867751 -
0.9997794
## 67   -0.234301090 -0.628115730  0.06210063 -0.271254880 -0.90901427 -
0.9915369
## 68   -0.008266300 -0.329510160  0.43526564  0.242321070 -0.91005876 -
0.9932366
## 69    0.089888119 -0.298855260  0.16583693 -0.176492060 -0.97410290 -
0.9975823
## 70   -0.195070760 -0.584588330 -0.35358872 -0.677658660 -0.96139375 -
0.9974720
```

```
## 71  -0.136505760 -0.498432120 -0.02812197 -0.309579920 -0.90670598 -
0.9740150
## 72  -0.399966890 -0.767921480 -0.45661858 -0.749059690 -0.90642042 -
0.9661891
## 73   0.520420830  0.291314610  0.36339896  0.148639280 -0.99725270 -
0.9966624
## 74   0.283689400 -0.032326835  0.17089609 -0.051464893 -0.99964270 -
0.9999145
## 75   0.572076600  0.391527510 -0.53326975 -0.774798820 -0.99990369 -
0.9999003
## 76   0.063231951 -0.259737560 -0.84914745 -0.961189730 -0.99997908 -
0.9999726
## 77  -0.206280950 -0.593898680 -0.87597184 -0.971642540 -0.99997028 -
0.9999702
## 78  -0.556657430 -0.876097770 -0.88985407 -0.978303360 -0.99997673 -
0.9999212
## 79  -0.569817270 -0.891682170 -0.11506746 -0.415295710 -0.84374996 -
0.7099061
## 80  -0.413953110 -0.786613470 -0.36813498 -0.680725470 -0.75583508 -
0.6936381
## 81  -0.469957290 -0.823475640 -0.31768629 -0.653098010 -0.75580311 -
0.7961180
## 82  -0.449642410 -0.807574560 -0.34008665 -0.644652750 -0.73322062 -
0.7728396
## 83  -0.331757420 -0.700145240 -0.44225664 -0.731840970 -0.70461379 -
0.8076930
## 84  -0.352859260 -0.712074190 -0.17011068 -0.515013810 -0.65736226 -
0.8671242
## 85  -0.473703020 -0.831667960 -0.14731554 -0.423882790 -0.72443601 -
0.8171487
## 86  -0.455339560 -0.813631290 -0.28812432 -0.596422060 -0.79662900 -
0.7628442
## 87  -0.355027740 -0.734184650 -0.07823757 -0.380726900 -0.83698894 -
0.7359580
## 88  -0.524758550 -0.858089750 -0.35700236 -0.652810160 -0.74915784 -
0.7846714
## 89  -0.408469080 -0.765885260 -0.33159892 -0.665764100 -0.73939389 -
0.8052734
## 90  -0.228099520 -0.615737420 -0.21397285 -0.536116970 -0.73916682 -
0.7840833
## 91  -0.020740218 -0.422076250 -0.38762751 -0.693715960 -0.69724771 -
0.7535389
## 92  -0.299109390 -0.686748890 -0.31631017 -0.620693070 -0.62091362 -
0.8140653
## 93  -0.428193480 -0.788056020 -0.28600463 -0.583917250 -0.69470670 -
0.7840646
## 94  -0.517934260 -0.854120940 -0.26825925 -0.573197790 -0.73963643 -
0.8018894
## 95  -0.462341650 -0.807789500 -0.40447917 -0.704308310 -0.75844948 -
0.7550041
```

```
## 96  -0.461307510 -0.842469320 -0.28134184 -0.559341580 -0.78962369 -
0.7479766
## 97  -0.477799110 -0.793998510 -0.25407873 -0.536178900 -0.83807250 -
0.7787534
## 98  -0.358750560 -0.746037660 -0.05410506 -0.331843620 -0.87063034 -
0.8102219
## 99  -0.442088920 -0.779694880 -0.43861203 -0.726674280 -0.72176355 -
0.6472948
## 100 -0.106882640 -0.508597300 -0.20963470 -0.560129480 -0.63289071 -
0.6795056
## 101 -0.034732226 -0.441591140 -0.22194193 -0.548722410 -0.67252609 -
0.6383281
## 102 -0.207360610 -0.588637900 -0.45549512 -0.759365630 -0.68153257 -
0.7816872
## 103 -0.485757780 -0.815440630 -0.37492849 -0.675674030 -0.71572376 -
0.8257964
## 104 -0.530123450 -0.861690550 -0.36162102 -0.653971550 -0.73688944 -
0.8037652
## 105 -0.501373360 -0.842087210 -0.31986427 -0.613514460 -0.71641410 -
0.7922065
## 106 -0.361074580 -0.723737180  0.04323525 -0.256022320 -0.69716860 -
0.7390948
## 107 -0.517655880 -0.846429900 -0.30869273 -0.626643920 -0.72109202 -
0.6849193
## 108 -0.307036230 -0.677459110 -0.43147530 -0.756708770 -0.75031335 -
0.7760766
## 109 -0.530204290 -0.841310820 -0.38764669 -0.711598030 -0.76332153 -
0.8090372
## 110 -0.405978690 -0.799276430 -0.17524591 -0.459490730 -0.80114685 -
0.7929418
## 111 -0.497647040 -0.842671950 -0.17797374 -0.454669030 -0.81825603 -
0.7654616
## 112 -0.373721470 -0.761742920 -0.40374054 -0.686780130 -0.68812593 -
0.6970053
## 113 -0.300230120 -0.669525860 -0.37095359 -0.691008280 -0.72849362 -
0.7350219
## 114 -0.196796770 -0.580014840 -0.20605672 -0.525895340 -0.76047876 -
0.7310015
## 115 -0.299603250 -0.675537750 -0.24851560 -0.568212890 -0.74603334 -
0.7327561
## 116 -0.440382670 -0.794454080 -0.19968149 -0.511977930 -0.71128083 -
0.7911079
## 117 -0.455937450 -0.820094570 -0.05854278 -0.332932490 -0.74430770 -
0.7231515
## 118 -0.437384460 -0.811172730 -0.31055318 -0.604241600 -0.79302448 -
0.7286808
## 119 -0.428918150 -0.803765180 -0.22955040 -0.545927410 -0.84057426 -
0.8634712
## 120 -0.405662090 -0.782719280 -0.27569669 -0.584250270 -0.85675141 -
0.8038273
```

```
## 121 -0.539121270 -0.846179930 -0.21033461 -0.535160270 -0.86628456 -
0.7786014
## 122 -0.452652400 -0.806687980 -0.21455985 -0.552036430 -0.86495727 -
0.8741774
## 123 -0.603259650 -0.903934050 -0.11938406 -0.425573030 -0.87485463 -
0.7349359
## 124 -0.504172490 -0.851826180 -0.23710117 -0.530047770 -0.84963283 -
0.7024975
## 125 -0.445849040 -0.825885180 -0.08429186 -0.357776860 -0.85047636 -
0.8315538
## 126 -0.345308170 -0.657621470  0.30104235  0.131891690 -0.60773790 -
0.9094344
## 127 -0.287377310 -0.615134800  0.18980223  0.006344461 -0.46540104 -
0.8856171
## 128 -0.486896420 -0.799854260 -0.28552956 -0.475259220 -0.53318083 -
0.8963455
## 129 -0.545601440 -0.880473700 -0.36471577 -0.539229190 -0.59685286 -
0.8297111
## 130 -0.600058010 -0.888643850 -0.33040806 -0.529504660 -0.36897317 -
0.7003819
## 131 -0.626230710 -0.894136510 -0.56752536 -0.766862080 -0.30831529 -
0.6812750
## 132 -0.585842560 -0.852341420 -0.44961877 -0.691323530 -0.48112141 -
0.7747305
## 133 -0.637083250 -0.929774520 -0.29144491 -0.508843720 -0.47063757 -
0.8477923
## 134 -0.703169950 -0.957674310 -0.41434712 -0.611292820 -0.53759893 -
0.7371527
## 135 -0.592026460 -0.904432670 -0.40490478 -0.628325620 -0.38516641 -
0.5596118
## 136 -0.607274610 -0.915786460 -0.45505233 -0.645868980 -0.35832651 -
0.6178042
## 137 -0.519711650 -0.840009400 -0.44637460 -0.687526000 -0.45648190 -
0.4955510
## 138 -0.657801240 -0.917867250 -0.57242437 -0.807481810 -0.44756734 -
0.6822834
## 139 -0.527800370 -0.855374400 -0.16226816 -0.390283060 -0.34557956 -
0.5472188
## 140 -0.561238930 -0.888341470 -0.45526092 -0.718900030 -0.39012356 -
0.7978061
## 141 -0.557019620 -0.876814920 -0.72709566 -0.885296230 -0.34757433 -
0.5284775
## 142 -0.157129910 -0.437344090 -0.67561614 -0.880786480 -0.08430579 -
0.7341619
## 143 -0.507421830 -0.824581620 -0.31172875 -0.562629990 -0.32780290 -
0.7927734
## 144 -0.126325590 -0.437249070 -0.19600992 -0.438482130 -0.36027501 -
0.7454066
## 145 -0.602759750 -0.902609080 -0.55446501 -0.763424370 -0.62461776 -
0.8514669
```

```
## 146 -0.591226420 -0.889492920 -0.61866163 -0.848711020 -0.48217321 -
0.6260423
## 147 -0.450407350 -0.778999090 -0.31676129 -0.556073470 -0.42074555 -
0.4327210
## 148 -0.307034430 -0.638816900 -0.35793794 -0.590592420 -0.48366590 -
0.8376771
## 149 -0.496924280 -0.806491860 -0.24866825 -0.462352690 -0.45867657 -
0.8795808
## 150 -0.610927280 -0.884340360 -0.41477195 -0.642768300 -0.40493557 -
0.8128349
## 151  0.177806140 -0.110955300  0.33291851  0.108861350 -0.77158573 -
0.9136557
## 152  0.213216690 -0.106384830  0.46392143  0.282516650 -0.75142238 -
0.9322969
## 153 -0.058672171 -0.405642780  0.51510466  0.341556120 -0.74736398 -
0.9402910
## 154  0.050138564 -0.274419800  0.26375448  0.016975631 -0.76313004 -
0.9253283
## 155 -0.220660780 -0.556962320  0.54827152  0.384337790 -0.74085548 -
0.9316344
## 156 -0.192680540 -0.573527070  0.41502001  0.188460370 -0.81030005 -
0.8990710
## 157 -0.227863950 -0.562420940  0.36067108  0.149984460 -0.80967358 -
0.9154513
## 158  0.033374967 -0.296665050  0.35441092  0.123345180 -0.75078436 -
0.9399634
## 159  0.267615290  0.027608221  0.43355850  0.239224090 -0.65932886 -
0.9189475
## 160  0.421007030  0.221873070  0.41545691  0.208549880 -0.72847789 -
0.9148094
## 161  0.139095360 -0.148840390  0.30559810  0.052830369 -0.76440458 -
0.8918954
## 162  0.220855610 -0.054634512  0.33453768  0.063231331 -0.78335651 -
0.8666559
## 163 -0.006995476 -0.364229480  0.52864645  0.339855340 -0.81716195 -
0.9431549
## 164  0.132241680 -0.153679000  0.39153396  0.165287320 -0.82140125 -
0.9155167
## 165  0.453699770  0.266933500  0.56252261  0.388139940 -0.77998962 -
0.9545408
## 166  0.399219770  0.201724620  0.58342460  0.421290820 -0.79382159 -
0.9703140
## 167  0.356809470  0.145104270  0.59637044  0.428090460 -0.80992642 -
0.9725534
## 168  0.432969290  0.236294770  0.44250654  0.223337690 -0.74003013 -
0.9462090
## 169  0.254748170 -0.015660176  0.52037480  0.324056270 -0.74586235 -
0.9510712
## 170 -0.200550190 -0.566380560  0.27110207 -0.004032498 -0.78253628 -
0.9440927
```

```
## 171  0.182350080 -0.093195996  0.27245538 -0.031274407 -0.82545937 -
0.9142995
## 172 -0.098106221 -0.418165290  0.42318897  0.211719430 -0.82126155 -
0.9471819
## 173 -0.169812360 -0.554224300  0.25470839 -0.013766864 -0.85882740 -
0.9304014
## 174 -0.376550830 -0.706160450  0.17517743 -0.107402210 -0.79868839 -
0.9075203
## 175  0.076720965 -0.229412480  0.53528776  0.344635560 -0.75932846 -
0.9334933
## 176 -0.394576480 -0.737018710  0.58417028  0.449425090 -0.80550962 -
0.8262649
## 177  0.525827150  0.330349870  0.39314178  0.181887210 -0.99939353 -
0.9999566
##              NA          NA          NA          NA          NA          NA
## 1    -0.99997907 -0.99996244 -0.9999322 -0.99972512 -0.9996704 -0.99998582
## 2    -0.99994400 -0.99996988 -0.9999189 -0.99986573 -0.9999651 -0.99999945
## 3    -0.99981536 -0.99984728 -0.9999391 -0.99992169 -0.9999232 -0.99999664
## 4    -0.99983433 -0.99987093 -0.9999924 -0.99994916 -0.9999645 -0.99999581
## 5    -0.99993593 -0.99994545 -0.9999694 -0.99993489 -0.9999697 -0.99998622
## 6    -0.99992128 -0.99992673 -0.9999410 -0.99990815 -0.9999635 -0.99999743
## 7    -0.99991793 -0.99990630 -0.9999299 -0.99994530 -0.9999055 -0.99990413
## 8    -0.99993606 -0.99995498 -0.9999471 -0.99989541 -0.9999620 -0.99999107
## 9    -0.99995918 -0.99994701 -0.9999598 -0.99994591 -0.9999615 -0.99999957
## 10   -0.99991895 -0.99979085 -0.9998973 -0.99993871 -0.9999286 -0.99999959
## 11   -0.99993492 -0.99977376 -0.9998670 -0.99987948 -0.9998718 -0.99995441
## 12   -0.99997237 -0.99997189 -0.9999897 -0.99997134 -0.9999544 -0.99999872
## 13   -0.99998775 -0.99997495 -0.9999616 -0.99998642 -0.9999881 -0.99999576
## 14   -0.99996057 -0.99995594 -0.9999434 -0.99997400 -0.9999782 -0.99998984
## 15   -0.99984605 -0.99979232 -0.9998436 -0.99981059 -0.9998918 -0.99996550
## 16   -0.99993683 -0.99993763 -0.9999246 -0.99994567 -0.9999506 -0.99999404
## 17   -0.99994599 -0.99984814 -0.9999642 -0.99994776 -0.9999738 -0.99999919
## 18   -0.99993800 -0.99989735 -0.9999533 -0.99993299 -0.9999610 -0.99999975
## 19   -0.99996118 -0.99993739 -0.9999154 -0.99994085 -0.9999797 -0.99999986
## 20   -0.99998913 -0.99995399 -0.9999124 -0.99997155 -0.9999755 -0.99999993
## 21   -0.99998546 -0.99991855 -0.9999622 -0.99992172 -0.9999661 -0.99999912
## 22   -0.99994804 -0.99990863 -0.9999588 -0.99990140 -0.9999580 -0.99999378
## 23   -0.99994177 -0.99994269 -0.9999399 -0.99996579 -0.9999561 -0.99999969
## 24   -0.99996728 -0.99992796 -0.9999436 -0.99995930 -0.9999699 -0.99999229
## 25   -0.99996815 -0.99994793 -0.9999531 -0.99997037 -0.9999880 -0.99999601
## 26   -0.99993034 -0.99996897 -0.9999618 -0.99994373 -0.9999729 -0.99999740
## 27   -0.99994422 -0.99994587 -0.9999482 -0.99995033 -0.9999626 -0.99998386
## 28   -0.99816199 -0.99910725 -0.9983768 -0.99693684 -0.9969826 -0.99522545
## 29   -0.99989963 -0.99978181 -0.9997766 -0.99987384 -0.9997518 -0.99972381
## 30   -0.99996000 -0.99985755 -0.9998621 -0.99986965 -0.9999297 -0.99996693
## 31   -0.98551943 -0.99160633 -0.9887599 -0.98463238 -0.9904518 -0.98205609
## 32   -0.98020452 -0.99489082 -0.9918239 -0.99385022 -0.9977569 -0.99906747
## 33   -0.99390055 -0.99525246 -0.9897745 -0.98943142 -0.9839882 -0.97772969
## 34   -0.99985894 -0.99955673 -0.9995268 -0.99938840 -0.9995030 -0.99906535
## 35   -0.99990836 -0.99982414 -0.9997364 -0.99980297 -0.9998291 -0.99976122
```

```
## 36   -0.99997338 -0.99998607 -0.9999007 -0.99995882 -0.9999792 -0.99999939
## 37   -0.99994871 -0.99993607 -0.9999428 -0.99997826 -0.9999316 -0.99998341
## 38   -0.99991759 -0.99991715 -0.9999497 -0.99997185 -0.9999431 -0.99999977
## 39   -0.99967706 -0.99967562 -0.9996896 -0.99985148 -0.9998801 -0.99999136
## 40   -0.99982577 -0.99979037 -0.9999129 -0.99997203 -0.9999171 -0.99997272
## 41   -0.99990456 -0.99995140 -0.9999037 -0.99992778 -0.9999482 -0.99995486
## 42   -0.99993867 -0.99985348 -0.9998769 -0.99986723 -0.9999769 -0.99998907
## 43   -0.99997088 -0.99984417 -0.9998829 -0.99986294 -0.9999758 -0.99996638
## 44   -0.99996719 -0.99991900 -0.9998411 -0.99992433 -0.9999799 -0.99999687
## 45   -0.99997099 -0.99985322 -0.9998699 -0.99989576 -0.9999722 -0.99999163
## 46   -0.99992387 -0.99976829 -0.9999214 -0.99992409 -0.9999467 -0.99997942
## 47   -0.99996553 -0.99973668 -0.9999701 -0.99987736 -0.9999850 -0.99999880
## 48   -0.99995258 -0.99977593 -0.9998558 -0.99991186 -0.9999877 -0.99998994
## 49   -0.99989173 -0.99987863 -0.9999231 -0.99993276 -0.9999609 -0.99999634
## 50   -0.99990832 -0.99989618 -0.9999412 -0.99991123 -0.9999604 -0.99998664
## 51   -0.99994818 -0.99979511 -0.9997970 -0.99983987 -0.9998093 -0.99989116
## 52   -0.99878772 -0.99562506 -0.9986839 -0.99839408 -0.9977415 -0.99735554
## 53   -0.99993695 -0.99987938 -0.9999388 -0.99985431 -0.9998873 -0.99985372
## 54   -0.99997120 -0.99992670 -0.9998618 -0.99990261 -0.9999512 -0.99992393
## 55   -0.99996756 -0.99990163 -0.9999001 -0.99995756 -0.9999715 -0.99998884
## 56   -0.99996995 -0.99989591 -0.9999310 -0.99996729 -0.9999451 -0.99999987
## 57   -0.99993695 -0.99987109 -0.9998984 -0.99992569 -0.9999384 -0.99999993
## 58   -0.99992356 -0.99987936 -0.9998562 -0.99995497 -0.9999454 -0.99999929
## 59   -0.99995891 -0.99992814 -0.9999153 -0.99992695 -0.9999802 -0.99999088
## 60   -0.99996669 -0.99991582 -0.9999083 -0.99991295 -0.9999906 -0.99999225
## 61   -0.99993142 -0.99986420 -0.9998928 -0.99983968 -0.9999814 -0.99997742
## 62   -0.99993401 -0.99992387 -0.9998319 -0.99988292 -0.9999890 -0.99999324
## 63   -0.99991387 -0.99992217 -0.9999560 -0.99983518 -0.9999776 -0.99999019
## 64   -0.99987304 -0.99983637 -0.9998721 -0.99985520 -0.9999544 -0.99999564
## 65   -0.98436143 -0.96791342 -0.9694759 -0.95868012 -0.9544089 -0.91033444
## 66   -0.99970900 -0.99964643 -0.9997434 -0.99984139 -0.9999643 -0.99999630
## 67   -0.99275939 -0.98503169 -0.9864934 -0.99078389 -0.9826304 -0.97894852
## 68   -0.99236923 -0.99242657 -0.9925671 -0.99582404 -0.9968274 -0.99833285
## 69   -0.99431377 -0.99471059 -0.9890827 -0.98869513 -0.9874733 -0.97326054
## 70   -0.98443608 -0.95597992 -0.9889585 -0.98772984 -0.9911828 -0.98616815
## 71   -0.92831563 -0.90240646 -0.9607251 -0.97459322 -0.9750932 -0.99582943
## 72   -0.92961986 -0.93685733 -0.9744359 -0.97788085 -0.9755694 -0.99270902
## 73   -0.99085145 -0.99814536 -0.9974445 -0.99847478 -0.9986677 -0.99864965
## 74   -0.99917002 -0.99941273 -0.9995253 -0.99970628 -0.9997505 -0.99994983
## 75   -0.99919590 -0.99950246 -0.9996038 -0.99973624 -0.9998307 -0.99996967
## 76   -0.99990747 -0.99985871 -0.9998582 -0.99988169 -0.9999362 -0.99997687
## 77   -0.99989808 -0.99984332 -0.9998761 -0.99982747 -0.9998678 -0.99992759
## 78   -0.99987209 -0.99966090 -0.9997402 -0.99984391 -0.9999570 -0.99998178
## 79   -0.53380839 -0.80195963 -0.8511504 -0.93570271 -0.9522212 -0.96071427
## 80   -0.50801474 -0.69529275 -0.9281905 -0.83390176 -0.9292045 -0.95076685
## 81   -0.65766249 -0.58501586 -0.8480305 -0.91375994 -0.9163264 -0.99672416
## 82   -0.53397862 -0.49201416 -0.8183221 -0.88997860 -0.8933589 -0.86493100
## 83   -0.59305858 -0.67810244 -0.8704548 -0.81873327 -0.9024703 -0.89757933
## 84   -0.81448489 -0.67521942 -0.9021491 -0.95199507 -0.9288856 -0.99536580
## 85   -0.51078761 -0.44486706 -0.8766521 -0.86778164 -0.8665399 -0.89854921
```

```
## 86    -0.11095978 -0.39630101 -0.9518641 -0.89957880 -0.9204739 -0.91761654
## 87    -0.76081140 -0.76003308 -0.9244931 -0.81587839 -0.9153914 -0.91998812
## 88    -0.59958771 -0.75191098 -0.8160347 -0.85586646 -0.8595352 -0.87948314
## 89    -0.66123115 -0.59848218 -0.7266187 -0.86629690 -0.8949671 -0.88687165
## 90    -0.53143888 -0.56600191 -0.7048097 -0.81414356 -0.8750997 -0.78354182
## 91    -0.59177740 -0.63694310 -0.8964445 -0.87801090 -0.8905700 -0.86777525
## 92    -0.72884976 -0.74426645 -0.8976436 -0.84584669 -0.9550268 -0.99650769
## 93    -0.59288680 -0.62245906 -0.9234964 -0.85445934 -0.7976042 -0.97911781
## 94    -0.20555809 -0.62556094 -0.8783388 -0.81665517 -0.8085420 -0.87348560
## 95     0.02422136 -0.73689758 -0.8514646 -0.88158232 -0.8326464 -0.85507677
## 96    -0.19960589 -0.68691621 -0.7765211 -0.88166127 -0.7362401 -0.80028199
## 97    -0.08139966 -0.79822433 -0.9203952 -0.80897203 -0.9271690 -0.94146631
## 98    -0.29514322 -0.72860787 -0.7218419 -0.73773366 -0.6017013 -0.61953962
## 99    -0.55065048 -0.60583413 -0.9462786 -0.79877336 -0.8194812 -0.95735076
## 100   -0.54576428 -0.48880771 -0.8257297 -0.73148922 -0.6030324 -0.79752521
## 101   -0.55994882 -0.63246836 -0.8451787 -0.86539530 -0.8015464 -0.99702119
## 102   -0.30092115 -0.80616897 -0.5980885 -0.77647680 -0.7140794 -0.82225791
## 103   -0.51936521 -0.69348499 -0.8299977 -0.89544481 -0.8784402 -0.98852580
## 104   -0.54702656 -0.65192968 -0.8762880 -0.85791731 -0.9495664 -0.97564805
## 105   -0.54617370 -0.73137609 -0.8086733 -0.91016783 -0.9354057 -0.99046854
## 106   -0.65514571 -0.67769191 -0.6332004 -0.78404111 -0.8125171 -0.77195091
## 107   -0.62446864 -0.54299907 -0.8209841 -0.82414537 -0.9011530 -0.99633033
## 108   -0.51556458 -0.63153700 -0.7119569 -0.73198043 -0.8207827 -0.94308668
## 109   -0.48770133 -0.73917725 -0.8329680 -0.78413008 -0.7775653 -0.93172127
## 110   -0.41721213 -0.59384200 -0.8994224 -0.63018991 -0.8124414 -0.88406900
## 111   -0.51304347 -0.57882142 -0.9472770 -0.78460388 -0.8080009 -0.95307737
## 112   -0.68139115 -0.55555678 -0.8170680 -0.76922789 -0.9346444 -0.99753636
## 113   -0.63306395 -0.55396138 -0.7721548 -0.73360746 -0.8840264 -0.98383465
## 114   -0.65605300 -0.60696854 -0.7188637 -0.75548331 -0.7985418 -0.76557938
## 115   -0.67415016 -0.64296064 -0.8997905 -0.77597220 -0.9402361 -0.88890644
## 116   -0.53279501 -0.62813694 -0.8791399 -0.82770428 -0.9402527 -0.95559486
## 117   -0.39558968 -0.59764559 -0.8927222 -0.85080831 -0.9113802 -0.96299441
## 118   -0.42314177 -0.48808470 -0.9242819 -0.86200593 -0.9398045 -0.97822701
## 119   -0.57862724 -0.79388033 -0.8981361 -0.88806129 -0.9515975 -0.99723339
## 120   -0.40963044 -0.89253091 -0.8530501 -0.91125721 -0.9549748 -0.98812259
## 121   -0.41918812 -0.83766683 -0.8375322 -0.85991832 -0.8980329 -0.96224248
## 122   -0.68157578 -0.81029178 -0.8793045 -0.85502907 -0.8821614 -0.95101629
## 123   -0.50488063 -0.75754530 -0.8304832 -0.89594892 -0.9573185 -0.97370204
## 124   -0.45832344 -0.72319907 -0.8521077 -0.85284087 -0.8969351 -0.90458158
## 125   -0.48091850 -0.70942587 -0.9223382 -0.86737563 -0.9268390 -0.96570509
## 126   -0.56093565 -0.70982266 -0.8596164 -0.84915600 -0.9028822 -0.97127450
## 127   -0.44199519 -0.64517721 -0.8488924 -0.89459002 -0.8741519 -0.99197983
## 128   -0.47023997 -0.54270556 -0.8314337 -0.88614632 -0.9246315 -0.97926329
## 129   -0.51501495 -0.63368053 -0.9179591 -0.88378825 -0.9630635 -0.99464554
## 130   -0.57346531 -0.60468378 -0.7811159 -0.82206648 -0.8967922 -0.99867392
## 131   -0.56581143 -0.33316825 -0.7459474 -0.80479196 -0.9133137 -0.99813834
## 132   -0.56084478 -0.42981332 -0.5364983 -0.87756801 -0.9756900 -0.99827769
## 133   -0.68121794 -0.70765585 -0.5846760 -0.90474475 -0.9452704 -0.98986365
## 134   -0.59756201 -0.61249597 -0.8405462 -0.91380153 -0.9593218 -0.99912092
## 135   -0.42477799 -0.03878889 -0.6471517  0.05860266 -0.5350100 -0.35639657
```

```
## 136 -0.31179839 -0.51650492 -0.7660768 -0.68878688 -0.9282711 -0.95194620
## 137 -0.13029422 -0.49285785 -0.6425150 -0.42326360 -0.3304135 -0.23971161
## 138 -0.49491235 -0.13403767 -0.2614569  0.49373800 -0.3206670 -0.07297324
## 139 -0.69910692 -0.45425280 -0.6905428 -0.72514544 -0.9416392 -0.99776063
## 140 -0.26616679 -0.45985367 -0.3218948 -0.52157270 -0.4388743 -0.03005584
## 141 -0.30962989 -0.35452503 -0.7708044 -0.72792208 -0.8962957 -0.92124558
## 142 -0.39315151 -0.59783497 -0.7871872 -0.61942105 -0.8772999 -0.98230952
## 143 -0.43312244 -0.78110108 -0.8317529 -0.86429264 -0.8795781 -0.98043607
## 144 -0.39184316 -0.57475954 -0.8619528 -0.77016615 -0.8832215 -0.83926158
## 145  0.09554899 -0.56970349 -0.6667584 -0.73378852 -0.7751946 -0.63933147
## 146 -0.35365380 -0.61563658 -0.6575223 -0.72704861 -0.9517244 -0.98225804
## 147 -0.65089665 -0.70369622 -0.6183609 -0.35934707 -0.6511756 -0.48568532
## 148 -0.38778537 -0.86854754 -0.8611114 -0.74482554 -0.8270264 -0.99722879
## 149 -0.33040590 -0.66967350 -0.8047937 -0.62234126 -0.8314819 -0.89014932
## 150 -0.53636701 -0.62666643 -0.7139432 -0.75515850 -0.9003359 -0.88431886
## 151 -0.81389511 -0.96056641 -0.9184411 -0.93379164 -0.9134548 -0.95792973
## 152 -0.87194044 -0.94315731 -0.9463080 -0.92688382 -0.9671948 -0.99062650
## 153 -0.90143908 -0.96532652 -0.9702238 -0.96753964 -0.9826189 -0.99855391
## 154 -0.86230494 -0.92694035 -0.9576929 -0.96431023 -0.9677962 -0.98069482
## 155 -0.75593629 -0.92837273 -0.9650809 -0.96813197 -0.9793373 -0.99924537
## 156 -0.82051741 -0.89824103 -0.9393020 -0.97199025 -0.9836074 -0.99699901
## 157 -0.76816916 -0.92387598 -0.9226467 -0.95211025 -0.9436802 -0.99336514
## 158 -0.70018530 -0.91387291 -0.9273119 -0.93644207 -0.9102252 -0.99973704
## 159 -0.66275507 -0.79301545 -0.9517010 -0.91316614 -0.9242611 -0.96716240
## 160 -0.77946898 -0.89564726 -0.9792569 -0.94371968 -0.9828353 -0.99982260
## 161 -0.86978891 -0.93792736 -0.9768937 -0.92852789 -0.9872101 -0.99633741
## 162 -0.81389636 -0.92556874 -0.9589354 -0.93202198 -0.9838864 -0.99991069
## 163 -0.76172756 -0.91500159 -0.9569112 -0.94429820 -0.9335770 -0.92745583
## 164 -0.77806223 -0.93935869 -0.9019563 -0.88713199 -0.9284841 -0.92097664
## 165 -0.82853577 -0.93647054 -0.9409146 -0.94956284 -0.9750026 -0.99986813
## 166 -0.93275652 -0.93742327 -0.9863051 -0.98084165 -0.9827423 -0.99988102
## 167 -0.93376579 -0.97341126 -0.9923834 -0.98483521 -0.9931460 -0.99887486
## 168 -0.85172936 -0.94544261 -0.9763869 -0.95874295 -0.9849672 -0.99453989
## 169 -0.81864022 -0.86935800 -0.9189205 -0.97728379 -0.9711448 -0.99366863
## 170 -0.86534174 -0.90735993 -0.8731340 -0.97509877 -0.9805995 -0.99234213
## 171 -0.88837358 -0.95999225 -0.9636607 -0.96035768 -0.9791869 -0.98995262
## 172 -0.84145717 -0.94119808 -0.9584007 -0.95440052 -0.9869796 -0.98397420
## 173 -0.81438844 -0.76802696 -0.8667770 -0.84286509 -0.8013473 -0.67110622
## 174 -0.80231190 -0.84931716 -0.9005459 -0.85012659 -0.8517484 -0.76299743
## 175 -0.83971503 -0.86389090 -0.9621922 -0.90159772 -0.9253927 -0.91303134
## 176 -0.68632489 -0.77913024 -0.8446586 -0.70247644 -0.7105702 -0.71174377
## 177 -0.99989470 -0.99981415 -0.9997823 -0.99972465 -0.9998757 -0.99972671
##              NA          NA          NA          NA          NA          NA
## 1    -0.9999687 -0.99997686 -0.99986966 -0.9997761 -0.9999712 -0.99991925
## 2    -0.9999939 -0.99994898 -0.99991401 -0.9999766 -0.9999921 -0.99994590
## 3    -0.9999826 -0.99980201 -0.99994764 -0.9999478 -0.9999725 -0.99987456
## 4    -0.9999864 -0.99982535 -0.99999125 -0.9999750 -0.9999773 -0.99991242
## 5    -0.9999934 -0.99993477 -0.99997153 -0.9999753 -0.9999911 -0.99995613
## 6    -0.9999897 -0.99991661 -0.99994379 -0.9999749 -0.9999865 -0.99992942
## 7    -0.9999875 -0.99990764 -0.99995073 -0.9999050 -0.9999843 -0.99991818
```

```
## 8    -0.9999814 -0.99993773 -0.99994280 -0.9999717 -0.9999799 -0.99994911
## 9    -0.9999857 -0.99995519 -0.99996966 -0.9999743 -0.9999856 -0.99995634
## 10   -0.9999706 -0.99987406 -0.99992791 -0.9999524 -0.9999687 -0.99982479
## 11   -0.9999711 -0.99988265 -0.99988673 -0.9998995 -0.9999702 -0.99979278
## 12   -0.9999903 -0.99997394 -0.99999786 -0.9999693 -0.9999907 -0.99998767
## 13   -0.9999947 -0.99998804 -0.99998600 -0.9999907 -0.9999959 -0.99998415
## 14   -0.9999979 -0.99995905 -0.99996996 -0.9999821 -0.9999970 -0.99996286
## 15   -0.9998914 -0.99981194 -0.99984629 -0.9999165 -0.9998899 -0.99978658
## 16   -0.9999842 -0.99993321 -0.99994758 -0.9999652 -0.9999826 -0.99993903
## 17   -0.9999861 -0.99991436 -0.99997310 -0.9999823 -0.9999850 -0.99988742
## 18   -0.9999916 -0.99992219 -0.99996075 -0.9999740 -0.9999895 -0.99991661
## 19   -0.9999875 -0.99995404 -0.99994003 -0.9999865 -0.9999874 -0.99993522
## 20   -0.9999872 -0.99998297 -0.99994967 -0.9999837 -0.9999891 -0.99995171
## 21   -0.9999889 -0.99996925 -0.99996211 -0.9999772 -0.9999904 -0.99993239
## 22   -0.9999912 -0.99993417 -0.99995232 -0.9999700 -0.9999899 -0.99992061
## 23   -0.9999913 -0.99993896 -0.99996466 -0.9999708 -0.9999895 -0.99995085
## 24   -0.9999933 -0.99995645 -0.99996456 -0.9999774 -0.9999932 -0.99994030
## 25   -0.9999934 -0.99996316 -0.99997464 -0.9999907 -0.9999934 -0.99995939
## 26   -0.9999927 -0.99993700 -0.99997011 -0.9999811 -0.9999900 -0.99997224
## 27   -1.0000000 -0.99994201 -0.99996408 -0.9999697 -0.9999978 -0.99995284
## 28   -0.9946821 -0.99816239 -0.99785207 -0.9963937 -0.9949312 -0.99833828
## 29   -0.9997711 -0.99985477 -0.99982809 -0.9997424 -0.9997820 -0.99977032
## 30   -0.9999434 -0.99992919 -0.99987999 -0.9999422 -0.9999463 -0.99984935
## 31   -0.9817035 -0.98507499 -0.98722766 -0.9876378 -0.9819764 -0.98787323
## 32   -0.9682448 -0.98149486 -0.99259848 -0.9981961 -0.9690966 -0.99280132
## 33   -0.9796648 -0.99335503 -0.98966086 -0.9818905 -0.9806783 -0.99164641
## 34   -0.9987735 -0.99975267 -0.99949000 -0.9993564 -0.9988524 -0.99944702
## 35   -0.9996209 -0.99987491 -0.99977641 -0.9998064 -0.9996431 -0.99977567
## 36   -0.9999503 -0.99997904 -0.99993755 -0.9999860 -0.9999537 -0.99996879
## 37   -0.9999763 -0.99994294 -0.99997118 -0.9999489 -0.9999761 -0.99994927
## 38   -0.9999743 -0.99991058 -0.99997309 -0.9999621 -0.9999721 -0.99993668
## 39   -0.9997155 -0.99963209 -0.99976534 -0.9999174 -0.9997145 -0.99966434
## 40   -0.9999259 -0.99979396 -0.99995012 -0.9999358 -0.9999205 -0.99983513
## 41   -0.9999742 -0.99990963 -0.99992780 -0.9999504 -0.9999710 -0.99993934
## 42   -0.9999634 -0.99990967 -0.99988835 -0.9999810 -0.9999634 -0.99985047
## 43   -0.9999729 -0.99993453 -0.99989051 -0.9999727 -0.9999745 -0.99984486
## 44   -0.9999662 -0.99995370 -0.99988736 -0.9999856 -0.9999681 -0.99989676
## 45   -0.9999647 -0.99993732 -0.99989467 -0.9999787 -0.9999669 -0.99985332
## 46   -0.9999814 -0.99987154 -0.99993745 -0.9999577 -0.9999790 -0.99981328
## 47   -0.9999855 -0.99989785 -0.99995041 -0.9999897 -0.9999858 -0.99979694
## 48   -0.9999846 -0.99989845 -0.99989190 -0.9999885 -0.9999841 -0.99979681
## 49   -0.9999808 -0.99987690 -0.99994181 -0.9999728 -0.9999762 -0.99989413
## 50   -0.9999787 -0.99989638 -0.99994505 -0.9999692 -0.9999754 -0.99990823
## 51   -0.9999802 -0.99990041 -0.99982816 -0.9998368 -0.9999797 -0.99977985
## 52   -0.9958107 -0.99765982 -0.99859031 -0.9976121 -0.9960241 -0.99620766
## 53   -0.9998077 -0.99991592 -0.99992218 -0.9998760 -0.9998186 -0.99988523
## 54   -0.9999570 -0.99995944 -0.99989216 -0.9999421 -0.9999598 -0.99990456
## 55   -0.9999767 -0.99994883 -0.99993669 -0.9999773 -0.9999778 -0.99990809
## 56   -0.9999820 -0.99994917 -0.99995967 -0.9999634 -0.9999829 -0.99991506
## 57   -0.9999684 -0.99991345 -0.99992373 -0.9999590 -0.9999679 -0.99988005
```

```
## 58   -0.9999641 -0.99990443 -0.99990831 -0.9999635 -0.9999629 -0.99987854
## 59   -0.9999797 -0.99994933 -0.99993471 -0.9999838 -0.9999800 -0.99992606
## 60   -0.9999779 -0.99995233 -0.99992510 -0.9999912 -0.9999789 -0.99991265
## 61   -0.9999680 -0.99990665 -0.99988795 -0.9999801 -0.9999672 -0.99985792
## 62   -0.9999740 -0.99992669 -0.99986611 -0.9999904 -0.9999729 -0.99989002
## 63   -0.9999805 -0.99990889 -0.99992581 -0.9999818 -0.9999775 -0.99991752
## 64   -0.9999781 -0.99984824 -0.99988086 -0.9999682 -0.9999724 -0.99983465
## 65   -0.9378172 -0.97700867 -0.96544384 -0.9396363 -0.9411271 -0.96048174
## 66   -0.9988815 -0.99965078 -0.99979516 -0.9999751 -0.9989420 -0.99965784
## 67   -0.9248639 -0.98932479 -0.98811666 -0.9813963 -0.9296914 -0.98360762
## 68   -0.9261984 -0.99119748 -0.99380301 -0.9973320 -0.9309032 -0.99162164
## 69   -0.9786132 -0.99354786 -0.98895243 -0.9827095 -0.9797309 -0.99091883
## 70   -0.9684333 -0.97351041 -0.98851291 -0.9895020 -0.9695724 -0.96305991
## 71   -0.9178619 -0.90936241 -0.96593846 -0.9820435 -0.9186066 -0.91395819
## 72   -0.9153297 -0.92076560 -0.97574215 -0.9813142 -0.9163471 -0.94326640
## 73   -0.9968261 -0.99160225 -0.99784579 -0.9986616 -0.9964032 -0.99764862
## 74   -0.9996919 -0.99911854 -0.99960824 -0.9998173 -0.9996566 -0.99940110
## 75   -0.9998961 -0.99916754 -0.99966854 -0.9998773 -0.9998481 -0.99949416
## 76   -0.9999776 -0.99988446 -0.99988211 -0.9999499 -0.9999743 -0.99985119
## 77   -0.9999699 -0.99987180 -0.99987292 -0.9998879 -0.9999665 -0.99983579
## 78   -0.9999606 -0.99979505 -0.99979415 -0.9999653 -0.9999560 -0.99966768
## 79   -0.7898332 -0.54086069 -0.88285944 -0.9550679 -0.7716374 -0.80229224
## 80   -0.7148487 -0.48688625 -0.89286017 -0.9364316 -0.7001491 -0.73095974
## 81   -0.7449965 -0.58237611 -0.87268362 -0.9432737 -0.7387906 -0.64253429
## 82   -0.7201118 -0.44848373 -0.84519680 -0.8838306 -0.7068836 -0.56292414
## 83   -0.7075330 -0.55472873 -0.85108070 -0.9008310 -0.6993980 -0.69859169
## 84   -0.6873040 -0.74386857 -0.92084855 -0.9511680 -0.6963450 -0.73009367
## 85   -0.7261439 -0.41451003 -0.87334107 -0.8772686 -0.7108386 -0.54280673
## 86   -0.7677966 -0.05692998 -0.93227926 -0.9195162 -0.7211124 -0.53648902
## 87   -0.7921054 -0.72313073 -0.88379257 -0.9169321 -0.7898827 -0.77281224
## 88   -0.7363204 -0.58236409 -0.83097959 -0.8662212 -0.7266034 -0.74161006
## 89   -0.7345904 -0.58945818 -0.77899115 -0.8922538 -0.7293778 -0.60707878
## 90   -0.7281700 -0.46839081 -0.74580717 -0.8444119 -0.7141885 -0.56793077
## 91   -0.6857069 -0.54134275 -0.88954879 -0.8829298 -0.6790322 -0.68771458
## 92   -0.6425797 -0.69099867 -0.87824145 -0.9689301 -0.6487129 -0.75888717
## 93   -0.6926658 -0.53797100 -0.89763184 -0.8584428 -0.6855753 -0.68126343
## 94   -0.7337877 -0.20653973 -0.85523039 -0.8303094 -0.6962444 -0.66308157
## 95   -0.7350042 -0.04260717 -0.86276842 -0.8401645 -0.6810425 -0.74618409
## 96   -0.7578258 -0.21974770 -0.81594707 -0.7577053 -0.7181509 -0.68798320
## 97   -0.8055709 -0.15154486 -0.87864187 -0.9319611 -0.7541009 -0.79759707
## 98   -0.8408317 -0.31417147 -0.72781201 -0.6076802 -0.8020477 -0.67534930
## 99   -0.6739996 -0.49676629 -0.89099985 -0.8656915 -0.6652339 -0.66620575
## 100  -0.6125240 -0.45763955 -0.79041671 -0.6682214 -0.6077803 -0.53428473
## 101  -0.6320464 -0.51269565 -0.85277097 -0.8670645 -0.6269234 -0.66682932
## 102  -0.6814471 -0.34228243 -0.66497071 -0.7503381 -0.6544021 -0.70048735
## 103  -0.7217339 -0.49608617 -0.85454484 -0.9153380 -0.7073517 -0.71123870
## 104  -0.7321467 -0.50741685 -0.86941578 -0.9583083 -0.7189905 -0.68872814
## 105  -0.7123951 -0.53040089 -0.84673293 -0.9538613 -0.7005821 -0.73452917
## 106  -0.6813910 -0.60788162 -0.68975649 -0.7989204 -0.6795270 -0.62069785
## 107  -0.6845413 -0.54135069 -0.82218285 -0.9330540 -0.6802730 -0.58824895
```

```
## 108  -0.7347124  -0.47433260  -0.71947577  -0.8617758  -0.7191376  -0.60204631
## 109  -0.7548033  -0.48255594  -0.81467457  -0.8292344  -0.7358202  -0.72467711
## 110  -0.7802656  -0.37868630  -0.79851290  -0.8364491  -0.7544625  -0.61315686
## 111  -0.7858351  -0.45643297  -0.88631243  -0.8566268  -0.7664476  -0.64466823
## 112  -0.6617784  -0.59394315  -0.79914844  -0.9557241  -0.6631739  -0.58613305
## 113  -0.7052029  -0.55199851  -0.75771838  -0.9174796  -0.7000770  -0.56506534
## 114  -0.7295574  -0.58754823  -0.73260380  -0.7874937  -0.7243344  -0.59082325
## 115  -0.7185402  -0.61382110  -0.85339057  -0.9230317  -0.7153866  -0.67461717
## 116  -0.7079730  -0.48810264  -0.85987301  -0.9453950  -0.6955235  -0.66715363
## 117  -0.7143344  -0.36126804  -0.87702472  -0.9286800  -0.6916806  -0.65363807
## 118  -0.7548598  -0.35220436  -0.90095179  -0.9526828  -0.7312840  -0.58693862
## 119  -0.8325121  -0.57690686  -0.89437377  -0.9668935  -0.8144684  -0.80206357
## 120  -0.8278675  -0.46134343  -0.87488345  -0.9660851  -0.7981422  -0.86310899
## 121  -0.8280518  -0.45316695  -0.84593767  -0.9195543  -0.7989927  -0.81002121
## 122  -0.8551327  -0.67014351  -0.87021885  -0.9052398  -0.8427985  -0.80215963
## 123  -0.8220380  -0.50278019  -0.85503733  -0.9628099  -0.7994971  -0.75720441
## 124  -0.7923490  -0.45257779  -0.85239647  -0.8994980  -0.7686091  -0.73141639
## 125  -0.8310208  -0.46785457  -0.90174954  -0.9398659  -0.8061383  -0.74532453
## 126  -0.6601394  -0.53663375  -0.85570927  -0.9258055  -0.6530898  -0.72346131
## 127  -0.5394795  -0.41527631  -0.86603642  -0.9136448  -0.5325519  -0.68228240
## 128  -0.5967563  -0.40892325  -0.85195695  -0.9429426  -0.5877653  -0.60236149
## 129  -0.6279752  -0.47450085  -0.90516437  -0.9736490  -0.6199478  -0.69289709
## 130  -0.4079484  -0.51599973  -0.79647993  -0.9309403  -0.4197140  -0.61991825
## 131  -0.3538911  -0.42838097  -0.76801887  -0.9417447  -0.3689549  -0.41240916
## 132  -0.5193826  -0.45296911  -0.66436244  -0.9832608  -0.5223309  -0.43153706
## 133  -0.5325237  -0.63919821  -0.70466811  -0.9602169  -0.5430937  -0.64926015
## 134  -0.5534124  -0.53900857  -0.86802035  -0.9726615  -0.5565518  -0.65990755
## 135  -0.3794305  -0.21948732  -0.38260680  -0.4751434  -0.3826549  -0.01687701
## 136  -0.3751342  -0.26514717  -0.73711742  -0.9362064  -0.3706337  -0.52841787
## 137  -0.4175101  -0.10234394  -0.56033935  -0.3000126  -0.3970970  -0.42650318
## 138  -0.4653723  -0.30810098   0.02162404  -0.2376465  -0.4674732   0.10957528
## 139  -0.3441739  -0.57890396  -0.70352660  -0.9604496  -0.3694025  -0.46782183
## 140  -0.4535206  -0.20908064  -0.39675552  -0.3018490  -0.4402053  -0.32425575
## 141  -0.3402486  -0.21493319  -0.75474300  -0.9046583  -0.3380735  -0.42126848
## 142  -0.1906047  -0.35923243  -0.72431228  -0.9124964  -0.2050021  -0.58031493
## 143  -0.4022795  -0.44823798  -0.84396446  -0.9133831  -0.4044729  -0.76869315
## 144  -0.4142602  -0.35122144  -0.82755990  -0.8684873  -0.4126681  -0.61350733
## 145  -0.6565494   0.06850707  -0.69189771  -0.7296568  -0.6030943  -0.54464138
## 146  -0.4764438  -0.33065446  -0.68359725  -0.9619585  -0.4677176  -0.57343753
## 147  -0.3704776  -0.61199825  -0.52127981  -0.5957076  -0.3904100  -0.55821946
## 148  -0.5399477  -0.43543935  -0.81753478  -0.8840738  -0.5291339  -0.81840262
## 149  -0.5323331  -0.32683677  -0.73641366  -0.8511457  -0.5179821  -0.63741720
## 150  -0.4697720  -0.49072872  -0.72940596  -0.8949674  -0.4745066  -0.60334616
## 151  -0.7922049  -0.82854253  -0.92420979  -0.9283617  -0.7937481  -0.93540260
## 152  -0.7815942  -0.87315295  -0.93904138  -0.9750485  -0.7880173  -0.93010963
## 153  -0.7807075  -0.90508282  -0.96923245  -0.9879599  -0.7892903  -0.96045753
## 154  -0.7888903  -0.86004397  -0.96018823  -0.9721195  -0.7941099  -0.92870546
## 155  -0.7729621  -0.76919924  -0.96623941  -0.9860100  -0.7717535  -0.93263871
## 156  -0.8188217  -0.81561997  -0.95157003  -0.9880959  -0.8189438  -0.90407317
## 157  -0.8231444  -0.77835362  -0.93370582  -0.9603333  -0.8192385  -0.91377932
```

```
## 158  -0.7833420  -0.71703229  -0.93074892  -0.9402273  -0.7774331  -0.90521639
## 159  -0.7041326  -0.64883670  -0.93727063  -0.9386405  -0.7011931  -0.82208060
## 160  -0.7581255  -0.77962305  -0.96595040  -0.9885290  -0.7596441  -0.90913894
## 161  -0.7800642  -0.86974555  -0.95877832  -0.9902694  -0.7864431  -0.93587022
## 162  -0.7877648  -0.81809632  -0.94886147  -0.9892573  -0.7896237  -0.92227791
## 163  -0.8372802  -0.77017711  -0.95219789  -0.9315254  -0.8319118  -0.91633954
## 164  -0.8325275  -0.79146442  -0.89641364  -0.9259678  -0.8286579  -0.90689307
## 165  -0.8109527  -0.83391238  -0.94417108  -0.9833369  -0.8122041  -0.92780386
## 166  -0.8266409  -0.92362603  -0.98427207  -0.9884867  -0.8341848  -0.94777348
## 167  -0.8401590  -0.93523498  -0.98956891  -0.9950662  -0.8468138  -0.97601106
## 168  -0.7765943  -0.85649251  -0.96978782  -0.9881757  -0.7819362  -0.94653075
## 169  -0.7826826  -0.80538722  -0.94081285  -0.9786942  -0.7852399  -0.87828085
## 170  -0.8099098  -0.85680475  -0.91137036  -0.9845354  -0.8138513  -0.89124561
## 171  -0.8354092  -0.89227928  -0.96243730  -0.9827953  -0.8391754  -0.95338108
## 172  -0.8417392  -0.84641115  -0.95691598  -0.9859723  -0.8417208  -0.93730917
## 173  -0.8667925  -0.77149015  -0.85782753  -0.7576939  -0.8630694  -0.76602879
## 174  -0.8120382  -0.78539382  -0.88166018  -0.8220014  -0.8113485  -0.83552105
## 175  -0.7882590  -0.82183899  -0.93949266  -0.9212495  -0.7919179  -0.87374317
## 176  -0.7935604  -0.66491646  -0.79137448  -0.7109635  -0.7859400  -0.74198925
## 177  -0.9995053  -0.99986020  -0.99977577  -0.9998258  -0.9995348  -0.99976824
##              NA           NA           NA          NA          NA          NA
## 1    -0.9996568  -0.99986046  -0.99986695  -0.9998630  -0.9997378  -0.9997322
## 2    -0.9994166  -0.99981329  -0.99956858  -0.9998737  -0.9995489  -0.9997371
## 3    -0.9990060  -0.99971528  -0.99965771  -0.9998174  -0.9996359  -0.9996789
## 4    -0.9997191  -0.99974980  -0.99994419  -0.9999397  -0.9995535  -0.9998987
## 5    -0.9995640  -0.99985973  -0.99986270  -0.9998976  -0.9996505  -0.9997118
## 6    -0.9998785  -0.99992713  -0.99981454  -0.9997641  -0.9998370  -0.9997239
## 7    -0.9990482  -0.99964844  -0.99981858  -0.9994600  -0.9995864  -0.9993649
## 8    -0.9989219  -0.99976643  -0.99982399  -0.9996014  -0.9994693  -0.9994606
## 9    -0.9986573  -0.99972041  -0.99966910  -0.9994224  -0.9990566  -0.9991289
## 10   -0.9996184  -0.99943907  -0.99944926  -0.9993374  -0.9993005  -0.9990416
## 11   -0.9995083  -0.99959235  -0.99949523  -0.9994646  -0.9991258  -0.9997171
## 12   -0.9997814  -0.99988557  -0.99995862  -0.9997005  -0.9995426  -0.9996752
## 13   -0.9996485  -0.99995774  -0.99988735  -0.9998069  -0.9996655  -0.9997860
## 14   -0.9998443  -0.99994614  -0.99986623  -0.9999157  -0.9997799  -0.9997402
## 15   -0.9742333  -0.99910870  -0.99892054  -0.9979498  -0.9956195  -0.9950936
## 16   -0.9991800  -0.99997640  -0.99995062  -0.9998889  -0.9998080  -0.9996987
## 17   -0.9995302  -0.99992876  -0.99995018  -0.9999112  -0.9998759  -0.9997563
## 18   -0.9997703  -0.99990834  -0.99988405  -0.9999226  -0.9997602  -0.9997789
## 19   -0.9999123  -0.99993957  -0.99987974  -0.9999164  -0.9997929  -0.9998826
## 20   -0.9998419  -0.99993738  -0.99988025  -0.9999080  -0.9998744  -0.9998748
## 21   -0.9999473  -0.99990487  -0.99994099  -0.9999175  -0.9997846  -0.9997739
## 22   -0.9998807  -0.99988763  -0.99987225  -0.9998763  -0.9992567  -0.9996108
## 23   -0.9999224  -0.99989689  -0.99971669  -0.9998283  -0.9992313  -0.9995062
## 24   -0.9998104  -0.99992464  -0.99973150  -0.9997199  -0.9996335  -0.9997002
## 25   -0.9998409  -0.99989027  -0.99983854  -0.9997714  -0.9995276  -0.9998828
## 26   -0.9997464  -0.99993902  -0.99977448  -0.9997856  -0.9996168  -0.9994568
## 27   -0.9999401  -0.99995120  -0.99983656  -0.9997732  -0.9997828  -0.9996857
## 28   -0.5260664  -0.98127681  -0.98709102  -0.9726800  -0.9334172  -0.9084230
## 29   -0.9903164  -0.99964439  -0.99971124  -0.9992916  -0.9989289  -0.9978281
```

```
## 30   -0.9967942 -0.99977279 -0.99975996 -0.9995342 -0.9995344 -0.9990611
## 31   -0.9627835 -0.98747175 -0.98888559 -0.9979311 -0.9908248 -0.9859296
## 32   -0.8826201 -0.98691949 -0.98880525 -0.9963775 -0.9876282 -0.9873977
## 33   -0.8656346 -0.99773175 -0.99367143 -0.9958257 -0.9918886 -0.9866586
## 34   -0.9799109 -0.99937601 -0.99881827 -0.9978785 -0.9961930 -0.9930867
## 35   -0.9986014 -0.99993380 -0.99988651 -0.9997962 -0.9994497 -0.9993759
## 36   -0.9998846 -0.99996860 -0.99993906 -0.9998422 -0.9996922 -0.9998864
## 37   -0.9999696 -0.99995056 -0.99988853 -0.9998461 -0.9997675 -0.9995945
## 38   -0.9999687 -0.99989990 -0.99990698 -0.9998526 -0.9997799 -0.9998214
## 39   -0.9864617 -0.99870505 -0.99899417 -0.9985332 -0.9977512 -0.9955145
## 40   -0.9961745 -0.99985212 -0.99983738 -0.9994799 -0.9992360 -0.9990388
## 41   -0.9996381 -0.99997035 -0.99988218 -0.9997637 -0.9996160 -0.9996729
## 42   -0.9996592 -0.99994202 -0.99986028 -0.9998648 -0.9995949 -0.9998424
## 43   -0.9995292 -0.99997587 -0.99982924 -0.9998775 -0.9998008 -0.9997670
## 44   -0.9990141 -0.99994807 -0.99978224 -0.9998346 -0.9997048 -0.9995632
## 45   -0.9994401 -0.99994691 -0.99988907 -0.9998405 -0.9998281 -0.9997275
## 46   -0.9997768 -0.99996332 -0.99992888 -0.9998700 -0.9997445 -0.9998592
## 47   -0.9995967 -0.99993950 -0.99985772 -0.9998172 -0.9998586 -0.9998769
## 48   -0.9996643 -0.99993920 -0.99984252 -0.9998241 -0.9999287 -0.9997554
## 49   -0.9997415 -0.99996318 -0.99991723 -0.9998649 -0.9998693 -0.9998442
## 50   -0.9994714 -0.99996229 -0.99994249 -0.9997511 -0.9998488 -0.9998846
## 51   -0.9994451 -0.99993546 -0.99983357 -0.9997898 -0.9997169 -0.9996846
## 52   -0.9948637 -0.99589071 -0.99658928 -0.9914946 -0.9969230 -0.9972082
## 53   -0.9998880 -0.99991652 -0.99984424 -0.9998736 -0.9997237 -0.9997544
## 54   -0.9999894 -0.99993624 -0.99986998 -0.9998890 -0.9997677 -0.9998530
## 55   -0.9999399 -0.99996950 -0.99994958 -0.9998633 -0.9996493 -0.9999301
## 56   -0.9999574 -0.99998279 -0.99995363 -0.9998455 -0.9997745 -0.9998507
## 57   -0.9999970 -0.99996864 -0.99989626 -0.9998758 -0.9998446 -0.9998458
## 58   -0.9999557 -0.99991956 -0.99992008 -0.9998800 -0.9998687 -0.9998321
## 59   -0.9999369 -0.99992340 -0.99993883 -0.9997975 -0.9998436 -0.9998290
## 60   -0.9999377 -0.99988396 -0.99990965 -0.9997310 -0.9995766 -0.9995947
## 61   -0.9999132 -0.99989712 -0.99984847 -0.9997529 -0.9995038 -0.9996660
## 62   -0.9999540 -0.99994848 -0.99991507 -0.9998750 -0.9997538 -0.9998760
## 63   -0.9999440 -0.99995896 -0.99994302 -0.9999306 -0.9997870 -0.9998564
## 64   -0.9999547 -0.99993934 -0.99992903 -0.9999524 -0.9998113 -0.9999166
## 65   -0.9424126 -0.99731529 -0.99366313 -0.9719783 -0.9832829 -0.9914178
## 66   -0.9926553 -0.99992441 -0.99978050 -0.9995940 -0.9996156 -0.9994962
## 67   -0.5674249 -0.93005376 -0.97938014 -0.9862192 -0.9728796 -0.9675888
## 68   -0.4965761 -0.92176545 -0.97967488 -0.9843463 -0.9721133 -0.9691387
## 69   -0.9523334 -0.99571101 -0.99667908 -0.9943835 -0.9958433 -0.9928545
## 70   -0.9223976 -0.98445238 -0.97706987 -0.9696886 -0.9709008 -0.9595600
## 71    0.5563794 -0.81802387 -0.95875020 -0.8113364 -0.4943074 -0.7486060
## 72   -0.4400556 -0.76300604 -0.94261349 -0.7775816 -0.3354062 -0.7747966
## 73   -0.1694551 -0.97667220 -0.99087157 -0.9800914 -0.9588386 -0.9672273
## 74   -0.8786953 -0.99391026 -0.99401149 -0.9911116 -0.9772919 -0.9635381
## 75   -0.9912418 -0.99946611 -0.99945754 -0.9990193 -0.9983435 -0.9987238
## 76   -0.9994563 -0.99996131 -0.99991319 -0.9996345 -0.9997094 -0.9998244
## 77   -0.9997056 -0.99995531 -0.99991101 -0.9999034 -0.9998415 -0.9998335
## 78   -0.9998477 -0.99993245 -0.99984281 -0.9998454 -0.9998243 -0.9996135
## 79   -0.8170078 -0.57655790 -0.71313840 -0.9020238 -0.8892989 -0.9330547
```

```
## 80   -0.7561811 -0.35302634 -0.77217801 -0.7560142 -0.7626055 -0.8840621
## 81   -0.7193030 -0.48887961 -0.61283323 -0.6766509 -0.7393686 -0.7739103
## 82   -0.6237027 -0.23083742 -0.65216295 -0.8043058 -0.6910274 -0.5293849
## 83   -0.5746301 -0.32591673 -0.64231503 -0.7618398 -0.6798610 -0.7320772
## 84   -0.6592843 -0.59159170 -0.53819143 -0.7141580 -0.6045896 -0.5331333
## 85   -0.7009486 -0.37119176 -0.77262969 -0.9123209 -0.8942211 -0.8495879
## 86   -0.7149349 -0.33419100 -0.71546039 -0.8795765 -0.7844499 -0.7576019
## 87   -0.7345490 -0.44483880 -0.80590483 -0.7495052 -0.7890868 -0.8792988
## 88   -0.6430993 -0.34827352 -0.68267180 -0.6588020 -0.7292071 -0.8288055
## 89   -0.6419864 -0.50866679 -0.71993024 -0.8275963 -0.7719697 -0.8090218
## 90   -0.6875223 -0.40558395 -0.55716130 -0.8532556 -0.6860280 -0.6271219
## 91   -0.6466257 -0.30364992 -0.60730095 -0.8222128 -0.6894346 -0.7589653
## 92   -0.6386364 -0.29313917 -0.32902767 -0.6872027 -0.6138605 -0.7188376
## 93   -0.5771626 -0.25632521 -0.35072042 -0.6965414 -0.7021422 -0.7437955
## 94   -0.6479124 -0.23269667 -0.58626277 -0.6762602 -0.7530904 -0.7165318
## 95   -0.6659380 -0.34155382 -0.60234311 -0.8538369 -0.7708398 -0.6592811
## 96   -0.6406908 -0.24439472 -0.80263404 -0.8777360 -0.6001756 -0.5732365
## 97   -0.6794401 -0.18554443 -0.67660198 -0.7352387 -0.7783093 -0.7749326
## 98   -0.7041168 -0.45940323 -0.61858493 -0.7005150 -0.6874479 -0.5781014
## 99   -0.5870285 -0.39818631 -0.53854473 -0.8355462 -0.7060119 -0.5491852
## 100 -0.6396500 -0.43237312 -0.46191046 -0.7592303 -0.7368273 -0.5023038
## 101 -0.6642138 -0.57266565 -0.44777752 -0.7690444 -0.5756803 -0.8252485
## 102 -0.5799477 -0.46939594 -0.03150221 -0.7258103 -0.4302061 -0.5636322
## 103 -0.6192808 -0.28316418 -0.24427268 -0.5826254 -0.5031726 -0.6931414
## 104 -0.6056759 -0.08683438 -0.48427943 -0.5379804 -0.5963879 -0.8080130
## 105 -0.6774773 -0.13898613 -0.61778471 -0.6732444 -0.6328023 -0.7214895
## 106 -0.6882336 -0.53929502 -0.69679933 -0.7223755 -0.7435022 -0.6627008
## 107 -0.6758912 -0.26324027 -0.59212385 -0.7953168 -0.6782572 -0.8439342
## 108 -0.5206180 -0.22918120 -0.15649484 -0.7825928 -0.7195246 -0.6752301
## 109 -0.5103310 -0.30314008 -0.33334767 -0.7030746 -0.5594201 -0.6913622
## 110 -0.6046492 -0.21748384 -0.65223053 -0.7510537 -0.5742663 -0.7237098
## 111 -0.6278878 -0.33454705 -0.64764713 -0.7848021 -0.6411916 -0.7996628
## 112 -0.5902578 -0.37346757  0.02215398 -0.5579409 -0.7727923 -0.4721665
## 113 -0.6762022 -0.49512908 -0.47648008 -0.7283771 -0.5594990 -0.3884296
## 114 -0.6645005 -0.51110486 -0.57521152 -0.8112027 -0.5113550 -0.7520854
## 115 -0.5515113 -0.47267214 -0.69441224 -0.8732111 -0.7628413 -0.8949021
## 116 -0.6521433 -0.31828091 -0.61659186 -0.7483361 -0.8921748 -0.8325600
## 117 -0.6272951 -0.33284505 -0.66778997 -0.7871894 -0.8571215 -0.8749924
## 118 -0.6767025 -0.39448031 -0.72424285 -0.8281204 -0.7238313 -0.7186050
## 119 -0.7295766 -0.48042246 -0.76545683 -0.8353197 -0.5827772 -0.7536974
## 120 -0.7351772 -0.53648732 -0.83120792 -0.9040418 -0.7650545 -0.7345205
## 121 -0.7801368 -0.51661629 -0.76647223 -0.8461162 -0.8393668 -0.8151986
## 122 -0.8225938 -0.33373045 -0.67636506 -0.8012140 -0.6984979 -0.2104264
## 123 -0.7675021 -0.32205727 -0.69476804 -0.8966710 -0.6966262 -0.4308689
## 124 -0.7243847 -0.40616303 -0.71339434 -0.7580502 -0.6910401 -0.6910649
## 125 -0.6745469 -0.46672038 -0.70620372 -0.8761637 -0.8105441 -0.8857601
## 126 -0.7650562 -0.76386031 -0.75755642 -0.6702427 -0.7590800 -0.7774381
## 127 -0.7209579 -0.76389484 -0.70484823 -0.6720097 -0.7252291 -0.8319733
## 128 -0.6662646 -0.57612819 -0.67981535 -0.7214986 -0.8060947 -0.8726635
## 129 -0.5743123 -0.41907712 -0.62668258 -0.6921179 -0.6786452 -0.7530706
```

```
## 130 -0.6430474 -0.48273687 -0.62845044 -0.8138923 -0.5469190 -0.7993833
## 131 -0.6081419 -0.48803380 -0.60398986 -0.7660378 -0.6207725 -0.7509083
## 132 -0.7037539 -0.62340752 -0.53990156 -0.7684370 -0.7772528 -0.7463949
## 133 -0.8501742 -0.76750882 -0.60802197 -0.8753416 -0.9016070 -0.8021373
## 134 -0.8407772 -0.69813326 -0.64296653 -0.8114547 -0.8904188 -0.7707554
## 135 -0.6696014 -0.39542595 -0.71501208 -0.6162695 -0.4734492 -0.4222552
## 136 -0.7194270 -0.51406284 -0.54992502 -0.6652532 -0.5731387 -0.4687977
## 137 -0.4439600 -0.22376689 -0.53688238 -0.6381013 -0.6911559 -0.2695113
## 138 -0.4125762 -0.37585757 -0.45543775 -0.6915813 -0.7902002 -0.7658926
## 139 -0.6394979 -0.65767213 -0.82626390 -0.6678348 -0.7962588 -0.8940443
## 140 -0.6540801 -0.61212593 -0.71345390 -0.6021677 -0.8592547 -0.9266598
## 141 -0.7820677 -0.71747498 -0.69244330 -0.6062662 -0.7932504 -0.7036816
## 142 -0.7143964 -0.86156867 -0.80477671 -0.6903339 -0.7561326 -0.7554590
## 143 -0.7072975 -0.71956299 -0.61916405 -0.8116136 -0.7346568 -0.7746088
## 144 -0.6920729 -0.78399099 -0.54713681 -0.8046395 -0.5982535 -0.6261533
## 145 -0.5822030 -0.49655441 -0.53351328 -0.7723234 -0.7538329 -0.5918447
## 146 -0.5321864 -0.47208290 -0.42643120 -0.6394520 -0.7324182 -0.6818007
## 147 -0.6285686 -0.68008938 -0.76650276 -0.6879933 -0.6321327 -0.6342859
## 148 -0.6813740 -0.72323983 -0.84878462 -0.8914591 -0.8887069 -0.9432420
## 149 -0.7172848 -0.82173073 -0.76711111 -0.8753517 -0.8246498 -0.7767168
## 150 -0.8235914 -0.80399121 -0.57112648 -0.8246764 -0.7402154 -0.6950512
## 151 -0.4843363 -0.90669576 -0.94505592 -0.9497467 -0.9165449 -0.8287295
## 152 -0.5005299 -0.92771772 -0.94891435 -0.9696006 -0.8898594 -0.8430857
## 153 -0.4016732 -0.85616515 -0.88474008 -0.8991170 -0.7865248 -0.8260314
## 154 -0.3071321 -0.79225259 -0.88866987 -0.8647848 -0.7788192 -0.5335740
## 155 -0.4599369 -0.80861732 -0.88250531 -0.9100729 -0.9110173 -0.9055373
## 156 -0.5217697 -0.88234380 -0.85684038 -0.8392493 -0.7668933 -0.6096163
## 157 -0.5458865 -0.75682322 -0.94871858 -0.9080614 -0.9300072 -0.9044025
## 158 -0.5954686 -0.86470925 -0.89746243 -0.9065124 -0.9229197 -0.8967518
## 159 -0.4677009 -0.89641456 -0.93587859 -0.9148866 -0.9658670 -0.9250721
## 160 -0.5059909 -0.90645990 -0.93839190 -0.9147840 -0.9772732 -0.9146776
## 161 -0.3334306 -0.86777763 -0.87520159 -0.8756862 -0.9522275 -0.9269338
## 162 -0.3489496 -0.86677289 -0.93480786 -0.9041749 -0.9462418 -0.9186327
## 163 -0.5071777 -0.93554253 -0.89367641 -0.9303092 -0.9181630 -0.9215275
## 164 -0.3939593 -0.88263628 -0.86227986 -0.9232144 -0.8873523 -0.8717405
## 165 -0.4857484 -0.93776015 -0.84804088 -0.9264952 -0.9180407 -0.8988145
## 166 -0.6265555 -0.94162431 -0.94530103 -0.9445047 -0.9844204 -0.9570464
## 167 -0.6161875 -0.91692156 -0.92664406 -0.9606094 -0.9654827 -0.9055829
## 168 -0.3631134 -0.91447959 -0.92138362 -0.9205732 -0.8570928 -0.9290388
## 169 -0.3555221 -0.83717855 -0.85001831 -0.7986553 -0.8748033 -0.8730771
## 170 -0.2257269 -0.74521896 -0.84257641 -0.8159082 -0.8946677 -0.8397393
## 171 -0.2357218 -0.81709591 -0.88451707 -0.9223373 -0.9357908 -0.8764798
## 172 -0.4590286 -0.75647717 -0.85419129 -0.9151816 -0.9180126 -0.8532326
## 173 -0.4267698 -0.80849957 -0.82829804 -0.9092269 -0.8972811 -0.9505807
## 174 -0.5136337 -0.75673418 -0.84963798 -0.9247102 -0.9271488 -0.9595732
## 175 -0.6127273 -0.81074752 -0.92692440 -0.9604734 -0.9487261 -0.9242763
## 176 -0.6607327 -0.82662420 -0.83383975 -0.9025079 -0.9005287 -0.8410142
## 177 -0.9955752 -0.99975931 -0.99975184 -0.9995569 -0.9995167 -0.9992676
##            NA          NA          NA          NA          NA          NA
## 1    -0.9994926 -0.9998136 -0.9996818 -0.99983940 -0.9997382 -0.9996120
```

```
## 2      -0.9995658 -0.9999053 -0.9994735 -0.99955418 -0.9996020 -0.9996953
## 3      -0.9996157 -0.9998796 -0.9991085 -0.99962404 -0.9996433 -0.9997150
## 4      -0.9995122 -0.9998656 -0.9996727 -0.99993621 -0.9996673 -0.9996458
## 5      -0.9995164 -0.9999108 -0.9996103 -0.99984529 -0.9996666 -0.9996675
## 6      -0.9996215 -0.9999073 -0.9998860 -0.99976016 -0.9998075 -0.9997302
## 7      -0.9991852 -0.9990447 -0.9991064 -0.99967617 -0.9994867 -0.9990998
## 8      -0.9998634 -0.9999988 -0.9990703 -0.99972227 -0.9994377 -0.9999164
## 9      -0.9994193 -0.9995200 -0.9988439 -0.99952086 -0.9990088 -0.9994433
## 10     -0.9997213 -0.9999990 -0.9994356 -0.99928386 -0.9991536 -0.9998298
## 11     -0.9996135 -0.9999223 -0.9994301 -0.99936505 -0.9992850 -0.9997316
## 12     -0.9997751 -0.9996934 -0.9997902 -0.99988102 -0.9995736 -0.9997337
## 13     -0.9998181 -0.9999795 -0.9997255 -0.99984291 -0.9997060 -0.9998806
## 14     -0.9995734 -0.9997972 -0.9998696 -0.99985392 -0.9997721 -0.9996544
## 15     -0.9927121 -0.9894902 -0.9798145 -0.99837189 -0.9949480 -0.9911158
## 16     -0.9998309 -0.9998085 -0.9993761 -0.99992775 -0.9997766 -0.9998163
## 17     -0.9998263 -0.9999922 -0.9996200 -0.99993376 -0.9998484 -0.9998910
## 18     -0.9998455 -0.9999664 -0.9997934 -0.99987314 -0.9997725 -0.9998918
## 19     -0.9998312 -0.9999457 -0.9999183 -0.99986720 -0.9998362 -0.9998744
## 20     -0.9997354 -0.9998930 -0.9998632 -0.99986526 -0.9998928 -0.9997936
## 21     -0.9998552 -0.9999372 -0.9999273 -0.99992670 -0.9997884 -0.9998854
## 22     -0.9997708 -0.9998996 -0.9998674 -0.99984838 -0.9993399 -0.9998181
## 23     -0.9998160 -0.9999850 -0.9999041 -0.99968417 -0.9992812 -0.9998817
## 24     -0.9998101 -0.9999489 -0.9998325 -0.99966714 -0.9996497 -0.9998628
## 25     -0.9997875 -0.9999729 -0.9998382 -0.99978547 -0.9996424 -0.9998592
## 26     -0.9998216 -0.9998941 -0.9997909 -0.99972767 -0.9995441 -0.9998467
## 27     -0.9997575 -0.9999328 -0.9999456 -0.99978408 -0.9997533 -0.9998240
## 28     -0.8512761 -0.7907431 -0.6272356 -0.97963691 -0.9162247 -0.8208942
## 29     -0.9970401 -0.9965428 -0.9924137 -0.99952379 -0.9984163 -0.9967343
## 30     -0.9988764 -0.9983432 -0.9974433 -0.99964098 -0.9993321 -0.9986152
## 31     -0.9828126 -0.9814355 -0.9650544 -0.98866981 -0.9879271 -0.9816731
## 32     -0.9914682 -0.9891403 -0.9033456 -0.98814309 -0.9861536 -0.9902087
## 33     -0.9791886 -0.9734588 -0.8958930 -0.99268576 -0.9889844 -0.9760942
## 34     -0.9915793 -0.9878416 -0.9843024 -0.99825247 -0.9945972 -0.9897284
## 35     -0.9991507 -0.9990154 -0.9989109 -0.99983900 -0.9993909 -0.9990663
## 36     -0.9998182 -0.9999993 -0.9999120 -0.99990305 -0.9997641 -0.9998891
## 37     -0.9999158 -0.9999316 -0.9999679 -0.99985535 -0.9997070 -0.9999201
## 38     -0.9998566 -0.9999937 -0.9999411 -0.99987508 -0.9998032 -0.9999102
## 39     -0.9923496 -0.9919483 -0.9889767 -0.99861168 -0.9966678 -0.9919319
## 40     -0.9993181 -0.9987193 -0.9970093 -0.99970009 -0.9991054 -0.9990436
## 41     -0.9995463 -0.9994147 -0.9997240 -0.99982542 -0.9996264 -0.9994763
## 42     -0.9997587 -0.9997993 -0.9997257 -0.99983348 -0.9996760 -0.9997683
## 43     -0.9998605 -0.9999368 -0.9996434 -0.99980716 -0.9997976 -0.9998885
## 44     -0.9995030 -0.9994764 -0.9992344 -0.99974934 -0.9996493 -0.9994760
## 45     -0.9997684 -0.9998597 -0.9995602 -0.99985428 -0.9998024 -0.9997998
## 46     -0.9997705 -0.9998262 -0.9998267 -0.99990125 -0.9997918 -0.9997869
## 47     -0.9998617 -0.9999653 -0.9996765 -0.99981725 -0.9998820 -0.9999012
## 48     -0.9999237 -0.9999891 -0.9997281 -0.99980455 -0.9998866 -0.9999491
## 49     -0.9999631 -0.9999779 -0.9997995 -0.99988854 -0.9998773 -0.9999685
## 50     -0.9999486 -0.9999975 -0.9995921 -0.99988006 -0.9998778 -0.9999679
## 51     -0.9997483 -0.9998639 -0.9995582 -0.99978599 -0.9997047 -0.9997893
```

```
## 52    -0.9969521 -0.9999844 -0.9939669 -0.99425334 -0.9967122 -0.9981332
## 53    -0.9998858 -0.9999516 -0.9998879 -0.99982053 -0.9997364 -0.9999102
## 54    -0.9998998 -0.9999942 -0.9999756 -0.99984985 -0.9998064 -0.9999367
## 55    -0.9998135 -0.9999820 -0.9999549 -0.99991934 -0.9997495 -0.9998789
## 56    -0.9998747 -0.9999968 -0.9999751 -0.99991810 -0.9998105 -0.9999225
## 57    -0.9998986 -0.9999996 -0.9999982 -0.99987142 -0.9998599 -0.9999383
## 58    -0.9997905 -0.9999886 -0.9999413 -0.99989565 -0.9998722 -0.9998676
## 59    -0.9998039 -0.9999990 -0.9999288 -0.99988992 -0.9998527 -0.9998802
## 60    -0.9999541 -0.9999998 -0.9999091 -0.99984250 -0.9995677 -0.9999722
## 61    -0.9998094 -0.9999921 -0.9998971 -0.99978973 -0.9995417 -0.9998807
## 62    -0.9999054 -0.9999868 -0.9999548 -0.99988938 -0.9998051 -0.9999370
## 63    -0.9999216 -0.9999418 -0.9999526 -0.99993245 -0.9998219 -0.9999279
## 64    -0.9998601 -0.9999833 -0.9999507 -0.99992522 -0.9998627 -0.9999079
## 65    -0.9862068 -0.9948145 -0.9545094 -0.98578467 -0.9845197 -0.9893918
## 66    -0.9989186 -0.9993127 -0.9943499 -0.99967812 -0.9995584 -0.9990501
## 67    -0.9899933 -0.9942692 -0.6325741 -0.97609945 -0.9677723 -0.9914731
## 68    -0.9890793 -0.9945970 -0.5740226 -0.97584291 -0.9678068 -0.9910535
## 69    -0.9914920 -0.9889220 -0.9612858 -0.99517516 -0.9942525 -0.9901312
## 70    -0.9564993 -0.9544490 -0.9325556 -0.96908891 -0.9632453 -0.9542205
## 71    -0.4497659 -0.9092408  0.2861688 -0.90561521 -0.5339198 -0.6258077
## 72    -0.1659074 -0.7077261 -0.4490388 -0.88026567 -0.4278128 -0.3674773
## 73    -0.9188029 -0.8888280 -0.3516155 -0.98543228 -0.9573697 -0.9035130
## 74    -0.9498060 -0.9275751 -0.9039347 -0.99165174 -0.9694435 -0.9387922
## 75    -0.9977441 -0.9968790 -0.9930310 -0.99919993 -0.9983321 -0.9973060
## 76    -0.9997069 -0.9998950 -0.9995801 -0.99981804 -0.9997528 -0.9997772
## 77    -0.9998948 -0.9999554 -0.9997680 -0.99989366 -0.9998529 -0.9999173
## 78    -0.9998743 -0.9999394 -0.9998651 -0.99981099 -0.9997559 -0.9998980
## 79    -0.8737462 -0.9358620 -0.6419561 -0.69449594 -0.8934253 -0.8958596
## 80    -0.7832220 -0.9211320 -0.4803501 -0.70934142 -0.7820158 -0.8343828
## 81    -0.7015348 -0.7323007 -0.5219835 -0.53242813 -0.7227667 -0.7048196
## 82    -0.3615551 -0.4030071 -0.3159780 -0.60733060 -0.5936102 -0.3583001
## 83    -0.8528330 -0.9270903 -0.3272909 -0.58553990 -0.6632165 -0.8793910
## 84    -0.6206036 -0.6940532 -0.5288358 -0.47114386 -0.5318629 -0.6392730
## 85    -0.9168989 -0.9989322 -0.4473739 -0.75495817 -0.8649988 -0.9488212
## 86    -0.9634299 -0.9904627 -0.4390554 -0.69025129 -0.7494637 -0.9736511
## 87    -0.8854308 -0.9982746 -0.5110084 -0.74004991 -0.7995458 -0.9293341
## 88    -0.7902091 -0.9860025 -0.3912567 -0.59475329 -0.7364009 -0.8660271
## 89    -0.9248490 -0.9808104 -0.4729198 -0.67954561 -0.7600695 -0.9460257
## 90    -0.7313638 -0.7704120 -0.4547795 -0.52968031 -0.6274553 -0.7391136
## 91    -0.8437560 -0.9921459 -0.3710018 -0.56915690 -0.6805311 -0.9013073
## 92    -0.7822444 -0.9026715 -0.3594726 -0.26123944 -0.6098908 -0.8259946
## 93    -0.6273855 -0.8980309 -0.2934294 -0.28490030 -0.6840000 -0.7295033
## 94    -0.7407198 -0.8368736 -0.3354851 -0.50664042 -0.7107823 -0.7728756
## 95    -0.4417285 -0.7345546 -0.4052997 -0.57350709 -0.7017910 -0.5471737
## 96    -0.3547957 -0.5504067 -0.3359697 -0.77395437 -0.5440230 -0.4163851
## 97    -0.7896698 -0.9634115 -0.3353851 -0.61098203 -0.7516243 -0.8561632
## 98    -0.5614735 -0.8689807 -0.4951827 -0.54488386 -0.6096851 -0.6770069
## 99    -0.8711608 -0.9825465 -0.3739709 -0.50657238 -0.6121607 -0.9139849
## 100   -0.7864419 -0.7552626 -0.4318796 -0.41046238 -0.6166992 -0.7663418
## 101   -0.5487505 -0.7710341 -0.5228762 -0.39964261 -0.6228090 -0.6279011
```

```
## 102 -0.6449169 -0.9893230 -0.4051798  0.01509716 -0.4160914 -0.7787358
## 103 -0.6916040 -0.9856860 -0.3395098 -0.14911352 -0.5191195 -0.8057006
## 104 -0.7205733 -0.9626898 -0.2280814 -0.36812522 -0.6313332 -0.8136790
## 105 -0.4783619 -0.8000721 -0.3099287 -0.53622806 -0.6247546 -0.5971886
## 106 -0.6980593 -0.7094677 -0.5241134 -0.62678046 -0.6831195 -0.6930611
## 107 -0.8781723 -0.8604475 -0.3726371 -0.54671712 -0.7049614 -0.8667322
## 108 -0.6104947 -0.8806325 -0.2361380 -0.12209501 -0.6703993 -0.7118493
## 109 -0.6118104 -0.9778116 -0.2663045 -0.27000157 -0.5595535 -0.7536677
## 110 -0.8121902 -0.9963531 -0.2945085 -0.59200346 -0.5828170 -0.8838138
## 111 -0.8566624 -0.9975051 -0.3725393 -0.59732951 -0.6608806 -0.9114478
## 112 -0.5546498 -0.9468652 -0.3637285  0.11546712 -0.6314263 -0.7057132
## 113 -0.3196464 -0.3728721 -0.4921729 -0.41562278 -0.4433821 -0.3199985
## 114 -0.8636948 -0.8250903 -0.4914254 -0.53496671 -0.5477164 -0.8429717
## 115 -0.9196383 -0.9997658 -0.3850760 -0.66807274 -0.7863472 -0.9508452
## 116 -0.6266276 -0.6955502 -0.3827566 -0.55678062 -0.8569697 -0.6435821
## 117 -0.9571417 -0.9797475 -0.3712095 -0.61748337 -0.8476265 -0.9652901
## 118 -0.7769381 -0.8693999 -0.4407765 -0.68386436 -0.6901895 -0.8087128
## 119 -0.3866039 -0.7274833 -0.5255047 -0.72576999 -0.6005441 -0.5105387
## 120 -0.7235184 -0.8667869 -0.5586392 -0.80916871 -0.7264299 -0.7750002
## 121 -0.9154177 -0.9754519 -0.5828664 -0.72987187 -0.8117063 -0.9380069
## 122 -0.3177992 -0.7434837 -0.5213115 -0.62982322 -0.4766933 -0.4752904
## 123 -0.5074065 -0.9897757 -0.4730924 -0.67519761 -0.5599043 -0.6949845
## 124 -0.7013487 -0.6991513 -0.4833229 -0.65312782 -0.6556528 -0.6907150
## 125 -0.9382837 -0.9988437 -0.4762893 -0.68032018 -0.8177100 -0.9618380
## 126 -0.8868577 -0.9485324 -0.6985081 -0.67042055 -0.7385291 -0.9092110
## 127 -0.8523332 -0.9925137 -0.6647358 -0.61999987 -0.7347084 -0.9066984
## 128 -0.7902042 -0.9465386 -0.5262290 -0.61011554 -0.8094327 -0.8493680
## 129 -0.9157068 -0.9321023 -0.3749747 -0.55028138 -0.6703825 -0.9198874
## 130 -0.9508293 -0.9956559 -0.4603929 -0.58718840 -0.5918607 -0.9681509
## 131 -0.9564461 -0.9997715 -0.4363718 -0.54972008 -0.6272482 -0.9733167
## 132 -0.8098463 -0.9642793 -0.5792783 -0.48848565 -0.7399027 -0.8688461
## 133 -0.7242589 -0.8902857 -0.7656062 -0.58521042 -0.8521920 -0.7853702
## 134 -0.8584881 -0.9799079 -0.7227149 -0.60051060 -0.8319730 -0.9051353
## 135 -0.3131522 -0.4071011 -0.4358218 -0.61370942 -0.3934584 -0.3304808
## 136 -0.5097349 -0.5961644 -0.5350342 -0.46834602 -0.4841882 -0.5302791
## 137 -0.3372467 -0.5103842 -0.1746138 -0.44789481 -0.4939959 -0.3887806
## 138 -0.6109524 -0.8247151 -0.2288107 -0.38465397 -0.7568481 -0.6885283
## 139 -0.9502599 -0.9880261 -0.5476703 -0.73611595 -0.8104461 -0.9645831
## 140 -0.8910720 -0.9924447 -0.5354121 -0.60812767 -0.8690096 -0.9303172
## 141 -0.6450209 -0.8817819 -0.6876796 -0.58900998 -0.7352086 -0.7334107
## 142 -0.7967836 -0.9773495 -0.7099573 -0.72185641 -0.7279416 -0.8663883
## 143 -0.8646907 -0.9633639 -0.6314616 -0.57755640 -0.7195904 -0.9019391
## 144 -0.6945669 -0.7108641 -0.6529415 -0.50594128 -0.5629211 -0.6915185
## 145 -0.8546993 -0.9640175 -0.4208798 -0.48343607 -0.6634852 -0.8961158
## 146 -0.8882703 -0.9986013 -0.3699653 -0.34155726 -0.6823455 -0.9312054
## 147 -0.7756040 -0.8656438 -0.5508285 -0.68419610 -0.5908069 -0.8063131
## 148 -0.8501265 -0.9595154 -0.6134894 -0.82251589 -0.8969012 -0.8914242
## 149 -0.9172447 -0.9948579 -0.6916755 -0.73893972 -0.7861835 -0.9473126
## 150 -0.7857681 -0.8920250 -0.7640060 -0.53491392 -0.6931291 -0.8236522
## 151 -0.9420146 -0.9815997 -0.5568912 -0.93238995 -0.8733144 -0.9568375
```

```
## 152 -0.9509381 -0.9947404 -0.5801144 -0.94185706 -0.8593157 -0.9678310
## 153 -0.8719980 -0.8477503 -0.4675552 -0.85947282 -0.7772354 -0.8576041
## 154 -0.6995553 -0.6441334 -0.3622333 -0.85334646 -0.6593927 -0.6663995
## 155 -0.9337112 -0.9803905 -0.4877379 -0.86048018 -0.8987434 -0.9512584
## 156 -0.5249843 -0.3562147 -0.5730462 -0.81520892 -0.6798508 -0.4383153
## 157 -0.9067610 -0.9188707 -0.5269503 -0.92388003 -0.9121895 -0.9088419
## 158 -0.9658106 -0.9945186 -0.6204453 -0.87390395 -0.9040732 -0.9768162
## 159 -0.9290511 -0.9763186 -0.5388552 -0.91344569 -0.9463333 -0.9466951
## 160 -0.9492805 -0.9963457 -0.5733626 -0.91584464 -0.9506830 -0.9674966
## 161 -0.7837159 -0.9687660 -0.4212389 -0.84348323 -0.9370772 -0.8547885
## 162 -0.8599187 -0.9914640 -0.4326133 -0.90931484 -0.9295167 -0.9108859
## 163 -0.9254558 -0.9444967 -0.5892338 -0.87712400 -0.9101020 -0.9310697
## 164 -0.9098022 -0.9620111 -0.4752628 -0.84473507 -0.8684773 -0.9289062
## 165 -0.9134609 -0.9943422 -0.5739546 -0.83192437 -0.9012980 -0.9447852
## 166 -0.9695156 -0.9997188 -0.6838351 -0.93111158 -0.9721636 -0.9812726
## 167 -0.9257127 -0.9434131 -0.6631822 -0.91773858 -0.9385748 -0.9307692
## 168 -0.9474359 -0.9781294 -0.4680094 -0.90108306 -0.8683420 -0.9586822
## 169 -0.9770647 -0.9934139 -0.4224243 -0.79688316 -0.8598168 -0.9832200
## 170 -0.9572485 -0.9998610 -0.2756601 -0.79467904 -0.8615466 -0.9738443
## 171 -0.9411603 -0.9695145 -0.3202964 -0.86596916 -0.9057039 -0.9512154
## 172 -0.8873813 -0.9200879 -0.4602179 -0.83459728 -0.8837887 -0.8975254
## 173 -0.8967201 -0.9742422 -0.4622633 -0.80785568 -0.9059846 -0.9260825
## 174 -0.9270674 -0.9973376 -0.5021910 -0.83295170 -0.9312679 -0.9543554
## 175 -0.9811307 -0.9959936 -0.6059085 -0.91797015 -0.9334981 -0.9867908
## 176 -0.8671097 -0.9413068 -0.6508603 -0.81126844 -0.8663201 -0.8941064
## 177 -0.9989999 -0.9992418 -0.9965023 -0.99963971 -0.9993983 -0.9990699
##              NA         NA         NA         NA         NA         NA
## 1   -0.9996872 -0.9998386 -0.9935923 -0.9994758 -0.9996620 -0.9996423
## 2   -0.9994442 -0.9998042 -0.9982346 -0.9997692 -0.9996922 -0.9998749
## 3   -0.9991263 -0.9997753 -0.9993882 -0.9997249 -0.9997185 -0.9997982
## 4   -0.9996925 -0.9998733 -0.9998071 -0.9997748 -0.9998102 -0.9999293
## 5   -0.9996211 -0.9998419 -0.9998057 -0.9998344 -0.9998251 -0.9997864
## 6   -0.9998646 -0.9997870 -0.9999423 -0.9998171 -0.9998803 -0.9998224
## 7   -0.9991528 -0.9994622 -0.9996016 -0.9998515 -0.9994768 -0.9998120
## 8   -0.9991208 -0.9995516 -0.9994658 -0.9998942 -0.9996188 -0.9998091
## 9   -0.9988866 -0.9992857 -0.9994570 -0.9999054 -0.9999613 -0.9998386
## 10  -0.9993885 -0.9992679 -0.9998124 -0.9994197 -0.9997868 -0.9998820
## 11  -0.9993916 -0.9994029 -0.9998691 -0.9993285 -0.9996441 -0.9997795
## 12  -0.9998024 -0.9996672 -0.9999403 -0.9997432 -0.9997050 -0.9998243
## 13  -0.9997308 -0.9997871 -0.9999586 -0.9998527 -0.9998131 -0.9998410
## 14  -0.9998587 -0.9998881 -0.9998731 -0.9998352 -0.9998534 -0.9998334
## 15  -0.9813638 -0.9969330 -0.9917645 -0.9996129 -0.9998033 -0.9997419
## 16  -0.9994226 -0.9998698 -0.9994996 -0.9998840 -0.9998328 -0.9998495
## 17  -0.9996454 -0.9999086 -0.9994246 -0.9998623 -0.9999243 -0.9999314
## 18  -0.9997922 -0.9998934 -0.9997970 -0.9997666 -0.9998619 -0.9998911
## 19  -0.9999056 -0.9999086 -0.9999254 -0.9998524 -0.9998744 -0.9998972
## 20  -0.9998554 -0.9999200 -0.9999728 -0.9997943 -0.9998995 -0.9999545
## 21  -0.9999246 -0.9998945 -0.9999450 -0.9998126 -0.9998843 -0.9998691
## 22  -0.9998577 -0.9997246 -0.9999601 -0.9998464 -0.9998898 -0.9998070
## 23  -0.9998638 -0.9996708 -0.9998917 -0.9999219 -0.9998362 -0.9997638
```

```
## 24    -0.9998010 -0.9997052 -0.9997989 -0.9997594 -0.9999456 -0.9998291
## 25    -0.9998251 -0.9997410 -0.9998334 -0.9999286 -0.9998992 -0.9998067
## 26    -0.9997706 -0.9997209 -0.9998786 -0.9998535 -0.9998923 -0.9997873
## 27    -0.9999229 -0.9997769 -0.9999103 -0.9998512 -0.9998482 -0.9997676
## 28    -0.6570603 -0.9537476 -0.7973108 -0.9847282 -0.9925832 -0.9916736
## 29    -0.9930175 -0.9990047 -0.9965170 -0.9998173 -0.9998991 -0.9998643
## 30    -0.9976226 -0.9994690 -0.9995311 -0.9995803 -0.9998766 -0.9998341
## 31    -0.9661048 -0.9947350 -0.8809539 -0.9839767 -0.9943295 -0.9950632
## 32    -0.9096958 -0.9930339 -0.7869902 -0.9913546 -0.9976407 -0.9985211
## 33    -0.9037433 -0.9935063 -0.9086204 -0.9906802 -0.9934165 -0.9945386
## 34    -0.9854472 -0.9967711 -0.9966410 -0.9998358 -0.9999091 -0.9999456
## 35    -0.9989861 -0.9996812 -0.9983623 -0.9997301 -0.9998418 -0.9998843
## 36    -0.9999103 -0.9998312 -0.9998324 -0.9998689 -0.9999064 -0.9999129
## 37    -0.9999524 -0.9998164 -0.9999409 -0.9999394 -0.9999046 -0.9998621
## 38    -0.9999312 -0.9998512 -0.9998544 -0.9998941 -0.9998983 -0.9999186
## 39    -0.9897500 -0.9978996 -0.9988530 -0.9996011 -0.9997213 -0.9997614
## 40    -0.9972396 -0.9993583 -0.9998187 -0.9997566 -0.9998497 -0.9998626
## 41    -0.9997285 -0.9997304 -0.9998422 -0.9996999 -0.9998948 -0.9998326
## 42    -0.9997261 -0.9998206 -0.9998609 -0.9998436 -0.9997390 -0.9998014
## 43    -0.9996455 -0.9998678 -0.9998788 -0.9998823 -0.9997638 -0.9998511
## 44    -0.9992634 -0.9997899 -0.9997438 -0.9998235 -0.9998205 -0.9998987
## 45    -0.9995800 -0.9998419 -0.9996574 -0.9998901 -0.9998373 -0.9999280
## 46    -0.9998305 -0.9998604 -0.9998053 -0.9999331 -0.9998601 -0.9999531
## 47    -0.9996807 -0.9998495 -0.9998582 -0.9998980 -0.9998944 -0.9999324
## 48    -0.9997252 -0.9998560 -0.9997457 -0.9998754 -0.9999132 -0.9999154
## 49    -0.9998037 -0.9998833 -0.9997225 -0.9997038 -0.9999448 -0.9999066
## 50    -0.9996186 -0.9997993 -0.9998373 -0.9998188 -0.9999699 -0.9998557
## 51    -0.9995684 -0.9997740 -0.9997697 -0.9999006 -0.9999165 -0.9998050
## 52    -0.9938863 -0.9927060 -0.9905284 -0.9993224 -0.9995088 -0.9993419
## 53    -0.9998715 -0.9998459 -0.9995382 -0.9996677 -0.9998565 -0.9997537
## 54    -0.9999563 -0.9998791 -0.9999787 -0.9996702 -0.9999478 -0.9998453
## 55    -0.9999513 -0.9998424 -0.9999592 -0.9999038 -0.9999373 -0.9999060
## 56    -0.9999705 -0.9998482 -0.9998701 -0.9999524 -0.9998762 -0.9999399
## 57    -0.9999815 -0.9998860 -0.9998255 -0.9998828 -0.9998242 -0.9998009
## 58    -0.9999337 -0.9998929 -0.9998979 -0.9998587 -0.9999216 -0.9998021
## 59    -0.9999256 -0.9998257 -0.9998308 -0.9997450 -0.9999810 -0.9998175
## 60    -0.9999025 -0.9996879 -0.9998017 -0.9996909 -0.9999829 -0.9997654
## 61    -0.9998807 -0.9996961 -0.9998658 -0.9997983 -0.9999280 -0.9998512
## 62    -0.9999452 -0.9998683 -0.9998574 -0.9999383 -0.9998211 -0.9998812
## 63    -0.9999481 -0.9999147 -0.9999008 -0.9998929 -0.9998630 -0.9997835
## 64    -0.9999439 -0.9999435 -0.9998861 -0.9999035 -0.9998301 -0.9998040
## 65    -0.9573105 -0.9744743 -0.9428786 -0.9922320 -0.9946590 -0.9887094
## 66    -0.9947992 -0.9995837 -0.9997760 -0.9996172 -0.9997326 -0.9994394
## 67    -0.6605790 -0.9798002 -0.6994168 -0.9738102 -0.9911593 -0.9904941
## 68    -0.6071216 -0.9784253 -0.6369555 -0.9824229 -0.9927880 -0.9932249
## 69    -0.9640354 -0.9940782 -0.8962718 -0.9928120 -0.9944677 -0.9953867
## 70    -0.9343206 -0.9661620 -0.9444950 -0.9814789 -0.9905117 -0.9932114
## 71     0.1826863 -0.7154492 -0.4102357 -0.8069230 -0.9875444 -0.9810192
## 72    -0.4863638 -0.6574675 -0.6222003 -0.7742686 -0.9894213 -0.9887250
## 73    -0.4058417 -0.9720305 -0.9130208 -0.9831695 -0.9963202 -0.9949714
```

```
## 74   -0.9111525 -0.9839397 -0.9989115 -0.9998281 -0.9995776 -0.9998908
## 75   -0.9935369 -0.9987770 -0.9997255 -0.9998231 -0.9997065 -0.9998978
## 76   -0.9996024 -0.9996741 -0.9999507 -0.9997493 -0.9998891 -0.9998540
## 77   -0.9997737 -0.9999042 -0.9999832 -0.9997792 -0.9998029 -0.9998749
## 78   -0.9998505 -0.9998311 -0.9999387 -0.9998543 -0.9997836 -0.9998761
## 79   -0.6221936 -0.8943811 -0.6225738 -0.9145649 -0.9179145 -0.9461661
## 80   -0.4849175 -0.7517000 -0.7401235 -0.8822496 -0.8449161 -0.9186303
## 81   -0.4948605 -0.6745526 -0.7321170 -0.9175940 -0.8681826 -0.9422009
## 82   -0.3135319 -0.7288168 -0.6898990 -0.8477047 -0.8774554 -0.9205687
## 83   -0.3221336 -0.7190528 -0.6160777 -0.7989469 -0.8585096 -0.9168299
## 84   -0.4879575 -0.6429135 -0.6082474 -0.7949500 -0.8852571 -0.8877192
## 85   -0.4548606 -0.8931560 -0.6627370 -0.7944056 -0.8843536 -0.8715691
## 86   -0.4371750 -0.8329889 -0.7030654 -0.8463744 -0.8481947 -0.8824718
## 87   -0.5188844 -0.7523378 -0.5798565 -0.8501165 -0.9031414 -0.9638960
## 88   -0.3877092 -0.6655889 -0.7033338 -0.8530716 -0.8451722 -0.8809487
## 89   -0.4689116 -0.7978315 -0.7019845 -0.8653011 -0.8804447 -0.8958938
## 90   -0.4236244 -0.7755604 -0.7051662 -0.8925847 -0.8921803 -0.9090284
## 91   -0.3559046 -0.7691052 -0.6923907 -0.9265396 -0.7921340 -0.9155525
## 92   -0.2962867 -0.6472447 -0.6593379 -0.8437609 -0.7463586 -0.8741875
## 93   -0.2397569 -0.6772084 -0.6604782 -0.8682974 -0.7683966 -0.8920157
## 94   -0.3197358 -0.6705354 -0.6937928 -0.8747341 -0.8160989 -0.9502146
## 95   -0.3863746 -0.7991155 -0.7018640 -0.8389912 -0.8196305 -0.9486216
## 96   -0.3583420 -0.7677169 -0.6856541 -0.7794652 -0.8573353 -0.9352661
## 97   -0.3355783 -0.7268751 -0.6703035 -0.7858308 -0.8761347 -0.9418349
## 98   -0.4713822 -0.6570296 -0.7289337 -0.8377188 -0.9014357 -0.8888918
## 99   -0.3464909 -0.7577003 -0.7028605 -0.8522394 -0.8682680 -0.9287549
## 100  -0.3858962 -0.7026512 -0.6995557 -0.9086792 -0.8221173 -0.9144645
## 101  -0.4665641 -0.7118127 -0.7175282 -0.9164394 -0.8658660 -0.9405628
## 102  -0.2855806 -0.6155190 -0.7498442 -0.8714083 -0.8281559 -0.8927262
## 103  -0.2630940 -0.5416370 -0.7185114 -0.8729220 -0.8032240 -0.9061149
## 104  -0.2035933 -0.5435156 -0.6793760 -0.8307559 -0.8216000 -0.9272544
## 105  -0.3019399 -0.6415418 -0.6729791 -0.7934228 -0.8214961 -0.9333838
## 106  -0.5116169 -0.6960474 -0.6273578 -0.8827500 -0.9354287 -0.9477655
## 107  -0.3547223 -0.7568066 -0.6551587 -0.8236592 -0.9258517 -0.9001710
## 108  -0.1531417 -0.7366411 -0.6946370 -0.8250615 -0.8760917 -0.9123606
## 109  -0.2119036 -0.6433279 -0.7005722 -0.8735570 -0.8437108 -0.9271695
## 110  -0.2939232 -0.6860615 -0.6899918 -0.8689371 -0.8855400 -0.9350113
## 111  -0.3644260 -0.7353144 -0.7167817 -0.8597724 -0.9006456 -0.9505355
## 112  -0.2382350 -0.5583120 -0.6682131 -0.8466703 -0.7527639 -0.8266908
## 113  -0.4435672 -0.6259079 -0.7470566 -0.9086891 -0.8971382 -0.9348051
## 114  -0.4602983 -0.7196423 -0.7305013 -0.8966686 -0.9000422 -0.9207707
## 115  -0.3841315 -0.8397537 -0.6938804 -0.8697272 -0.9371545 -0.8901685
## 116  -0.3682859 -0.7693369 -0.6966755 -0.8678680 -0.8891788 -0.9022718
## 117  -0.3667635 -0.7951752 -0.6805195 -0.8843580 -0.8741237 -0.9163888
## 118  -0.4402969 -0.7764804 -0.7179790 -0.8369202 -0.9157338 -0.9350700
## 119  -0.5249981 -0.7539190 -0.7243265 -0.8473516 -0.9325140 -0.9232796
## 120  -0.5668765 -0.8439236 -0.7478903 -0.8699718 -0.9333049 -0.9385637
## 121  -0.5775993 -0.8275969 -0.7258645 -0.8398940 -0.9316201 -0.9456910
## 122  -0.5054521 -0.6901578 -0.6864281 -0.7963437 -0.9441420 -0.9250547
## 123  -0.4646312 -0.7866661 -0.6685140 -0.8165162 -0.9150044 -0.9344632
```

```
## 124 -0.4772661 -0.7138962 -0.6834112 -0.7724617 -0.8843864 -0.9459851
## 125 -0.4695699 -0.8516947 -0.7103571 -0.8456723 -0.9225373 -0.9403089
## 126 -0.6817101 -0.6747152 -0.8232797 -0.9518848 -0.8607825 -0.9241442
## 127 -0.6415494 -0.6748339 -0.7976845 -0.9022421 -0.8667266 -0.8386545
## 128 -0.5105547 -0.7346933 -0.8561192 -0.8516451 -0.8251794 -0.8010693
## 129 -0.3629539 -0.6696995 -0.8424769 -0.8593914 -0.8315243 -0.7801738
## 130 -0.4413283 -0.7353650 -0.7982587 -0.8160991 -0.7185776 -0.7875813
## 131 -0.4150614 -0.7109693 -0.8311170 -0.8379995 -0.4837683 -0.7937736
## 132 -0.5343579 -0.7477899 -0.8021680 -0.8641892 -0.4388129 -0.8386055
## 133 -0.7166554 -0.8618134 -0.8305690 -0.7863174 -0.6818301 -0.8643676
## 134 -0.6836211 -0.8082579 -0.8703224 -0.8354375 -0.7417230 -0.7985917
## 135 -0.4341408 -0.5274362 -0.6904671 -0.4640221 -0.5676024 -0.5982486
## 136 -0.4956918 -0.5919010 -0.7100961 -0.6478592 -0.4680691 -0.7162478
## 137 -0.1640080 -0.5748642 -0.8248996 -0.8182962 -0.5393441 -0.8014074
## 138 -0.1991727 -0.6962010 -0.7819689 -0.7538987 -0.7989676 -0.7323762
## 139 -0.5559801 -0.6953063 -0.7182709 -0.7206564 -0.8805985 -0.6370781
## 140 -0.5248801 -0.6649421 -0.7734829 -0.7809354 -0.7453069 -0.9323252
## 141 -0.6603295 -0.6263502 -0.8291633 -0.7843599 -0.6554006 -0.8295130
## 142 -0.7005021 -0.6862857 -0.7958001 -0.7461947 -0.6176678 -0.7159456
## 143 -0.5960277 -0.7734144 -0.7342976 -0.9091325 -0.8339999 -0.9078323
## 144 -0.6029538 -0.7195166 -0.7708446 -0.9100150 -0.8107709 -0.9146224
## 145 -0.3884729 -0.7268925 -0.8223613 -0.7344424 -0.6578261 -0.8636306
## 146 -0.3230558 -0.6344570 -0.7546688 -0.7320605 -0.7165438 -0.9057393
## 147 -0.5483257 -0.6418928 -0.7633715 -0.8507210 -0.8189993 -0.9323677
## 148 -0.6201035 -0.8876463 -0.7990660 -0.9162517 -0.7535589 -0.8816635
## 149 -0.6771512 -0.8412865 -0.8208377 -0.8471947 -0.7708839 -0.7993324
## 150 -0.7086854 -0.7748469 -0.8273278 -0.8719392 -0.7303772 -0.8512347
## 151 -0.5853594 -0.9234319 -0.3537832 -0.9310847 -0.9141296 -0.9821563
## 152 -0.6072633 -0.9337656 -0.5057878 -0.9176736 -0.9552454 -0.9784692
## 153 -0.4930780 -0.8560851 -0.5041763 -0.9275280 -0.9800775 -0.9832810
## 154 -0.3975188 -0.7940254 -0.3885292 -0.9506002 -0.9598625 -0.9783899
## 155 -0.5111285 -0.9019905 -0.3306145 -0.9494409 -0.9231065 -0.9733123
## 156 -0.5845639 -0.7814977 -0.3746220 -0.9640765 -0.9585633 -0.9680311
## 157 -0.5586429 -0.9046852 -0.3399086 -0.9264760 -0.9473147 -0.9861415
## 158 -0.6350461 -0.9010143 -0.3468206 -0.9254724 -0.9455450 -0.9845903
## 159 -0.5672579 -0.9203566 -0.4070179 -0.9520474 -0.9529440 -0.9819950
## 160 -0.5992370 -0.9216338 -0.4643131 -0.9263864 -0.9498459 -0.9813977
## 161 -0.4490677 -0.8884753 -0.4857862 -0.9400957 -0.9451884 -0.9710340
## 162 -0.4699759 -0.9072002 -0.4839889 -0.9767593 -0.9380989 -0.9788162
## 163 -0.6058546 -0.9204955 -0.4634577 -0.9735499 -0.9719226 -0.9806032
## 164 -0.4961604 -0.9022976 -0.3825206 -0.9558035 -0.9600211 -0.9896937
## 165 -0.5838420 -0.9149349 -0.3957281 -0.9704991 -0.9829258 -0.9806941
## 166 -0.7014149 -0.9503045 -0.4361156 -0.9815114 -0.9774459 -0.9867182
## 167 -0.6792498 -0.9517702 -0.3393472 -0.9715689 -0.9690401 -0.9887069
## 168 -0.4999562 -0.9003014 -0.3386885 -0.9624303 -0.9782538 -0.9930784
## 169 -0.4457093 -0.8074504 -0.4539421 -0.9601642 -0.9656126 -0.9907372
## 170 -0.3102709 -0.8207528 -0.4162928 -0.9592297 -0.9610876 -0.9830102
## 171 -0.3584608 -0.9132295 -0.2854988 -0.9412665 -0.9631812 -0.9860246
## 172 -0.4809844 -0.9011178 -0.4056409 -0.9302630 -0.9726968 -0.9889222
## 173 -0.4782866 -0.9036173 -0.4279388 -0.9561669 -0.9752745 -0.9748231
```

```
## 174 -0.5185399 -0.9229377 -0.2772042 -0.9701386 -0.9795781 -0.9661960
## 175 -0.6269576 -0.9500903 -0.3748502 -0.9738108 -0.9805107 -0.9850725
## 176 -0.6516202 -0.8863071 -0.4144185 -0.9770045 -0.9682064 -0.9847752
## 177 -0.9967612 -0.9995065 -0.9877970 -0.9990353 -0.9991946 -0.9994175
##              NA          NA          NA          NA          NA          NA
## 1   -0.9992934 -0.9978922 -0.9959325 -0.9951464 -0.9947399 -0.9996883
## 2   -0.9996656 -0.9994483 -0.9989302 -0.9987544 -0.9985456 -0.9997918
## 3   -0.9997528 -0.9996292 -0.9996862 -0.9999119 -0.9994535 -0.9997807
## 4   -0.9998582 -0.9996655 -0.9996813 -0.9999836 -0.9998044 -0.9998867
## 5   -0.9997453 -0.9996557 -0.9990258 -0.9994359 -0.9998225 -0.9998445
## 6   -0.9997649 -0.9994852 -0.9996778 -0.9999048 -0.9999262 -0.9998927
## 7   -0.9997145 -0.9995434 -0.9994032 -0.9992934 -0.9996649 -0.9996316
## 8   -0.9998877 -0.9995167 -0.9997102 -0.9999651 -0.9995701 -0.9997211
## 9   -0.9998883 -0.9996515 -0.9996088 -0.9995679 -0.9995667 -0.9999502
## 10  -0.9996032 -0.9996273 -0.9998205 -0.9999559 -0.9996941 -0.9998547
## 11  -0.9996604 -0.9993880 -0.9997013 -0.9999984 -0.9997101 -0.9997265
## 12  -0.9997473 -0.9995249 -0.9995517 -0.9998643 -0.9999008 -0.9997816
## 13  -0.9997862 -0.9998197 -0.9999003 -0.9999975 -0.9999507 -0.9998566
## 14  -0.9998340 -0.9997195 -0.9997993 -0.9996662 -0.9998767 -0.9998795
## 15  -0.9996677 -0.9992761 -0.9987040 -0.9980496 -0.9933230 -0.9998144
## 16  -0.9998424 -0.9995642 -0.9985300 -0.9984925 -0.9995938 -0.9998722
## 17  -0.9998706 -0.9995768 -0.9995259 -0.9995907 -0.9995269 -0.9999602
## 18  -0.9998134 -0.9997368 -0.9995721 -0.9991689 -0.9997937 -0.9999058
## 19  -0.9999512 -0.9995912 -0.9998724 -0.9999606 -0.9999240 -0.9999160
## 20  -0.9999332 -0.9996437 -0.9998167 -0.9998434 -0.9999432 -0.9999528
## 21  -0.9997997 -0.9996804 -0.9997746 -0.9999689 -0.9999268 -0.9999122
## 22  -0.9997000 -0.9997744 -0.9997159 -0.9999983 -0.9999498 -0.9998932
## 23  -0.9998278 -0.9996333 -0.9996805 -0.9999899 -0.9999195 -0.9998434
## 24  -0.9998188 -0.9997123 -0.9996572 -0.9999671 -0.9997929 -0.9999368
## 25  -0.9995873 -0.9997422 -0.9996875 -0.9999965 -0.9998751 -0.9998991
## 26  -0.9995848 -0.9995896 -0.9997377 -0.9997975 -0.9998870 -0.9998877
## 27  -0.9997386 -0.9995173 -0.9997652 -0.9999983 -0.9999115 -0.9998524
## 28  -0.9846324 -0.9610202 -0.9169007 -0.8187446 -0.8330749 -0.9922869
## 29  -0.9998725 -0.9995723 -0.9996947 -0.9998955 -0.9971880 -0.9999199
## 30  -0.9997630 -0.9991288 -0.9994040 -0.9991917 -0.9995211 -0.9998946
## 31  -0.9904537 -0.9817950 -0.9646199 -0.9184727 -0.8996978 -0.9946286
## 32  -0.9976943 -0.9964429 -0.9990438 -0.9999032 -0.8269612 -0.9979930
## 33  -0.9886504 -0.9757159 -0.9494483 -0.8924586 -0.9239762 -0.9938563
## 34  -0.9999031 -0.9998050 -0.9998548 -0.9999012 -0.9972931 -0.9999557
## 35  -0.9997855 -0.9992704 -0.9993125 -0.9981353 -0.9986351 -0.9998906
## 36  -0.9998686 -0.9997943 -0.9998815 -0.9998595 -0.9998550 -0.9999421
## 37  -0.9998693 -0.9998456 -0.9999067 -0.9999950 -0.9999645 -0.9999226
## 38  -0.9998634 -0.9998705 -0.9998647 -0.9999541 -0.9998807 -0.9999390
## 39  -0.9996969 -0.9992971 -0.9994413 -0.9996400 -0.9989857 -0.9997692
## 40  -0.9998675 -0.9993456 -0.9999436 -0.9999157 -0.9998078 -0.9998878
## 41  -0.9999290 -0.9992676 -0.9997937 -0.9999841 -0.9998084 -0.9999056
## 42  -0.9998963 -0.9996110 -0.9996433 -0.9999720 -0.9998697 -0.9997950
## 43  -0.9998463 -0.9996708 -0.9997123 -0.9999998 -0.9998964 -0.9998288
## 44  -0.9998124 -0.9995744 -0.9996606 -0.9999934 -0.9997696 -0.9998822
## 45  -0.9998459 -0.9997575 -0.9995190 -0.9995746 -0.9997219 -0.9999035
```

```
## 46    -0.9999759 -0.9997843 -0.9999254 -0.9999940 -0.9998541 -0.9999272
## 47    -0.9999362 -0.9997516 -0.9997755 -0.9998811 -0.9998850 -0.9999415
## 48    -0.9997759 -0.9996671 -0.9996759 -0.9998210 -0.9997878 -0.9999473
## 49    -0.9998123 -0.9997422 -0.9999094 -0.9999962 -0.9997139 -0.9999643
## 50    -0.9999598 -0.9997957 -0.9998929 -0.9999767 -0.9998428 -0.9999619
## 51    -0.9999061 -0.9996906 -0.9994475 -0.9999741 -0.9998151 -0.9999095
## 52    -0.9985524 -0.9977369 -0.9975046 -0.9948269 -0.9922410 -0.9994817
## 53    -0.9995800 -0.9998816 -0.9993591 -0.9995921 -0.9995550 -0.9998526
## 54    -0.9998065 -0.9997557 -0.9996818 -0.9999970 -0.9999079 -0.9999440
## 55    -0.9998165 -0.9996367 -0.9995428 -0.9999891 -0.9999676 -0.9999594
## 56    -0.9997298 -0.9996655 -0.9996439 -0.9998619 -0.9999121 -0.9999326
## 57    -0.9997780 -0.9998720 -0.9995525 -0.9999467 -0.9998539 -0.9998491
## 58    -0.9998354 -0.9996223 -0.9994949 -0.9999170 -0.9999041 -0.9999117
## 59    -0.9999074 -0.9994211 -0.9997362 -0.9999943 -0.9998138 -0.9999551
## 60    -0.9998942 -0.9997039 -0.9995408 -0.9999998 -0.9997731 -0.9999375
## 61    -0.9997523 -0.9996760 -0.9995561 -0.9997735 -0.9998589 -0.9999336
## 62    -0.9997594 -0.9996555 -0.9996277 -0.9999136 -0.9998973 -0.9998762
## 63    -0.9998563 -0.9996037 -0.9997197 -0.9998458 -0.9999174 -0.9998676
## 64    -0.9998467 -0.9998222 -0.9996607 -0.9999579 -0.9999091 -0.9998540
## 65    -0.9889447 -0.9694145 -0.9652506 -0.9184975 -0.9518630 -0.9925370
## 66    -0.9996138 -0.9991988 -0.9977922 -0.9976198 -0.9997288 -0.9996598
## 67    -0.9735301 -0.9729723 -0.9653436 -0.9305920 -0.7512969 -0.9909515
## 68    -0.9784751 -0.9875143 -0.9932559 -0.9870872 -0.7041418 -0.9929795
## 69    -0.9889561 -0.9747066 -0.9575904 -0.9029734 -0.9147921 -0.9948339
## 70    -0.9941738 -0.9892083 -0.9775107 -0.9766238 -0.9496878 -0.9915229
## 71    -0.9613965 -0.8644106 -0.7520870 -0.9000690 -0.4663088 -0.9852137
## 72    -0.9707855 -0.8868420 -0.7711604 -0.9963706 -0.6252260 -0.9892022
## 73    -0.9844091 -0.9768230 -0.9599133 -0.9247175 -0.9250721 -0.9958649
## 74    -0.9998788 -0.9995779 -0.9996756 -0.9999466 -0.9991057 -0.9997244
## 75    -0.9999611 -0.9997200 -0.9997411 -0.9999535 -0.9997548 -0.9998092
## 76    -0.9999267 -0.9996999 -0.9997762 -0.9997629 -0.9999111 -0.9999098
## 77    -0.9998359 -0.9995852 -0.9997615 -0.9999432 -0.9999467 -0.9998623
## 78    -0.9998535 -0.9995379 -0.9998140 -0.9999020 -0.9999353 -0.9998505
## 79    -0.9805739 -0.8853018 -0.8328352 -0.7877352 -0.6707639 -0.9281810
## 80    -0.9022499 -0.7778262 -0.7297035 -0.4763450 -0.7543141 -0.8716507
## 81    -0.9639293 -0.9123106 -0.8941374 -0.8585759 -0.7593106 -0.8950278
## 82    -0.9496711 -0.9104971 -0.9734425 -0.9980064 -0.7030249 -0.8931051
## 83    -0.9341021 -0.8860361 -0.9465669 -0.9742873 -0.6282891 -0.8796679
## 84    -0.8985813 -0.8348493 -0.7877642 -0.7111566 -0.6207407 -0.8861805
## 85    -0.9640598 -0.8672736 -0.8815281 -0.6971429 -0.6641248 -0.8797537
## 86    -0.9342238 -0.8067515 -0.8078688 -0.8026853 -0.7131213 -0.8606428
## 87    -0.9785504 -0.9338679 -0.9062080 -0.8818409 -0.6158334 -0.9251823
## 88    -0.9430817 -0.8960822 -0.8689983 -0.8718534 -0.7154954 -0.8581635
## 89    -0.9289918 -0.8629542 -0.8712161 -0.9592433 -0.7183602 -0.8860727
## 90    -0.9580458 -0.8817386 -0.8554206 -0.9653202 -0.7297014 -0.8983153
## 91    -0.9210560 -0.8764680 -0.8395295 -0.7786784 -0.7304375 -0.8368738
## 92    -0.9010828 -0.8588736 -0.7975570 -0.6410494 -0.6773223 -0.7926953
## 93    -0.9146891 -0.8393588 -0.8601967 -0.9414594 -0.6861458 -0.8132086
## 94    -0.9440705 -0.7997718 -0.7151765 -0.9082300 -0.7148534 -0.8647143
## 95    -0.9765740 -0.8933991 -0.8661177 -0.9544081 -0.7097801 -0.8663895
```

```
## 96   -0.9700499 -0.8415315 -0.8230929 -0.9181305 -0.6776274 -0.8855977
## 97   -0.9538215 -0.9119844 -0.8920185 -0.9966342 -0.6674085 -0.8999667
## 98   -0.9163683 -0.8314646 -0.7698467 -0.6934965 -0.7310096 -0.8969232
## 99   -0.9499025 -0.9208142 -0.8523563 -0.9309439 -0.7148487 -0.8902113
## 100  -0.8819470 -0.6999288 -0.7306248 -0.4764688 -0.7304061 -0.8556016
## 101  -0.9461311 -0.8780382 -0.9035198 -0.9950944 -0.7472758 -0.8929570
## 102  -0.9382027 -0.8744752 -0.7962376 -0.7308883 -0.7585891 -0.8515778
## 103  -0.9634240 -0.9143196 -0.8688471 -0.8351278 -0.7340294 -0.8405276
## 104  -0.9701493 -0.9548769 -0.9041079 -0.9480945 -0.6891475 -0.8599050
## 105  -0.9638118 -0.9409160 -0.7372692 -0.6945966 -0.6719955 -0.8620592
## 106  -0.9365299 -0.8740545 -0.9265254 -0.9665932 -0.6643293 -0.9399302
## 107  -0.8782040 -0.9015898 -0.9258275 -0.9108576 -0.6674996 -0.9165807
## 108  -0.9642632 -0.7971761 -0.9094441 -0.7922782 -0.6995111 -0.8892619
## 109  -0.9749241 -0.8652711 -0.8976527 -0.9325149 -0.7198933 -0.8739755
## 110  -0.9633620 -0.8769995 -0.8557301 -0.9700349 -0.7099456 -0.9034930
## 111  -0.9360942 -0.9165888 -0.7276964 -0.7390007 -0.7284065 -0.9187506
## 112  -0.9215644 -0.8103328 -0.7371041 -0.8971375 -0.6853554 -0.7795741
## 113  -0.9657677 -0.8334634 -0.7343432 -0.9968737 -0.7683820 -0.9108152
## 114  -0.9007602 -0.8932834 -0.8205856 -0.8104202 -0.7512715 -0.9075831
## 115  -0.9159612 -0.8603401 -0.8015961 -0.8604466 -0.7133090 -0.9201656
## 116  -0.9045223 -0.8387521 -0.6558652 -0.5117761 -0.7149438 -0.8939534
## 117  -0.9678469 -0.9784379 -0.9262894 -0.9834979 -0.7073459 -0.8894660
## 118  -0.9259233 -0.9660891 -0.9233298 -0.9390198 -0.7219948 -0.9227705
## 119  -0.9605331 -0.9610505 -0.9547565 -0.9956078 -0.7304328 -0.9292010
## 120  -0.9791791 -0.9820030 -0.9798001 -0.9975667 -0.7565639 -0.9352422
## 121  -0.9519849 -0.9184633 -0.9124566 -0.8450315 -0.7292575 -0.9367497
## 122  -0.9589625 -0.9241608 -0.9514424 -0.9566231 -0.6836887 -0.9372599
## 123  -0.9736164 -0.9374554 -0.9333457 -0.9307100 -0.6758726 -0.9220856
## 124  -0.9417274 -0.9027630 -0.7730820 -0.7388066 -0.6735760 -0.9067327
## 125  -0.9486432 -0.9448579 -0.8957996 -0.8908911 -0.7187240 -0.9290073
## 126  -0.9756896 -0.9517067 -0.8773048 -0.8725662 -0.8432442 -0.8837671
## 127  -0.8792105 -0.8313297 -0.9676101 -0.9993838 -0.8067756 -0.8565883
## 128  -0.8667456 -0.8148303 -0.8354727 -0.9495057 -0.8371737 -0.8164756
## 129  -0.8918795 -0.8438332 -0.8715278 -0.9908347 -0.8287657 -0.8129525
## 130  -0.7953624 -0.8008484 -0.8855574 -0.9659310 -0.7794574 -0.7436037
## 131  -0.9100392 -0.8710513 -0.9377769 -0.9998994 -0.8127865 -0.5960963
## 132  -0.8518442 -0.8778977 -0.8815551 -0.9990400 -0.7980894 -0.5836667
## 133  -0.8471777 -0.8290229 -0.6415945 -0.9838801 -0.7956833 -0.7479846
## 134  -0.8853754 -0.7295463 -0.5478801 -0.9232244 -0.8433017 -0.7623534
## 135  -0.6974041 -0.2340441  0.2646711  0.1372168 -0.5797587 -0.5787305
## 136  -0.9236118 -0.6293301 -0.8927526 -0.9946645 -0.6547295 -0.5579994
## 137  -0.7978583 -0.5598213 -0.1995873  0.1456761 -0.8014629 -0.6343054
## 138  -0.8619845 -0.8963153 -0.9149428 -0.9888019 -0.7463783 -0.7748741
## 139  -0.8730233 -0.8324564 -0.7788404 -0.6873013 -0.6847384 -0.7924117
## 140  -0.8684024 -0.8734287 -0.9035915 -0.9298547 -0.7483127 -0.8130857
## 141  -0.8423655 -0.5707381 -0.7878874 -0.8161862 -0.7939284 -0.7185026
## 142  -0.8631056 -0.5934610 -0.7660138 -0.8254370 -0.7549509 -0.6532971
## 143  -0.8870566 -0.8542551 -0.9719913 -0.9566082 -0.7583253 -0.8607772
## 144  -0.9122957 -0.8417229 -0.9614937 -0.9560999 -0.7878259 -0.8484226
## 145  -0.9519238 -0.7576974 -0.8225632 -0.6415450 -0.7723947 -0.7324090
```

```
## 146 -0.9398117 -0.8678016 -0.9379343 -0.9776860 -0.7175125 -0.7851108
## 147 -0.9328887 -0.9510176 -0.8553040 -0.9454636 -0.7627323 -0.8600988
## 148 -0.9349610 -0.8910494 -0.8698492 -0.9488908 -0.8123975 -0.7999956
## 149 -0.9146816 -0.7780825 -0.7799277 -0.9150057 -0.8075342 -0.7812193
## 150 -0.9337264 -0.8252881 -0.7384495 -0.8729618 -0.8207014 -0.7741882
## 151 -0.9804660 -0.9735206 -0.9669967 -0.9574217 -0.4612166 -0.9388050
## 152 -0.9770070 -0.9781247 -0.9651087 -0.9664366 -0.5784063 -0.9636911
## 153 -0.9873696 -0.9856427 -0.9542479 -0.9384641 -0.5802956 -0.9812710
## 154 -0.9679405 -0.9348004 -0.9411263 -0.9006457 -0.4952858 -0.9666069
## 155 -0.9815722 -0.9778893 -0.9735252 -0.9702156 -0.4486144 -0.9413262
## 156 -0.9826440 -0.9706794 -0.9668780 -0.9451942 -0.4885138 -0.9620258
## 157 -0.9739307 -0.9348336 -0.9595362 -0.9975682 -0.4486390 -0.9614127
## 158 -0.9776647 -0.9282176 -0.9565934 -0.9998111 -0.4538409 -0.9597221
## 159 -0.9724067 -0.9429157 -0.9784622 -0.9978910 -0.5105326 -0.9635007
## 160 -0.9881269 -0.9707047 -0.9823581 -0.9844656 -0.5480604 -0.9613085
## 161 -0.9845321 -0.9862844 -0.9851921 -0.9999135 -0.5696469 -0.9545838
## 162 -0.9751587 -0.9695138 -0.9851720 -0.9962229 -0.5800324 -0.9528816
## 163 -0.9828817 -0.9631037 -0.9350733 -0.8800755 -0.5625847 -0.9751001
## 164 -0.9793816 -0.9542623 -0.8957892 -0.8191882 -0.4921603 -0.9708031
## 165 -0.9908101 -0.9904491 -0.9922821 -0.9988470 -0.5074572 -0.9821505
## 166 -0.9867162 -0.9884270 -0.9645983 -0.9922520 -0.5432944 -0.9808379
## 167 -0.9849636 -0.9660505 -0.9729693 -0.9799585 -0.4627307 -0.9761975
## 168 -0.9928177 -0.9672370 -0.9711954 -0.9998471 -0.4592574 -0.9836572
## 169 -0.9847727 -0.9589826 -0.9709013 -0.9692973 -0.5506616 -0.9747471
## 170 -0.9795985 -0.9471774 -0.9781013 -0.9711045 -0.5202630 -0.9690620
## 171 -0.9801106 -0.9528783 -0.9152653 -0.9152785 -0.4099125 -0.9714893
## 172 -0.9842458 -0.9584659 -0.9684298 -0.9673993 -0.5024072 -0.9786076
## 173 -0.9877249 -0.9674040 -0.8828724 -0.8719862 -0.5285853 -0.9751440
## 174 -0.9846440 -0.9465354 -0.9090472 -0.8870762 -0.4125917 -0.9747633
## 175 -0.9947529 -0.9525078 -0.9799845 -0.9951204 -0.4918350 -0.9821963
## 176 -0.9846259 -0.9679101 -0.9604604 -0.9609661 -0.5244962 -0.9742415
## 177 -0.9988027 -0.9972810 -0.9972815 -0.9955830 -0.9899650 -0.9993087
##             NA          NA          NA          NA          NA
NA
## 1   -0.9989246 -0.99567134 -0.9948773 -0.9994544 -0.9923324500 -9.871699e-
01
## 2   -0.9996312 -0.99887752 -0.9985534 -0.9998221 -0.9950322200 -9.813115e-
01
## 3   -0.9997489 -0.99976038 -0.9994343 -0.9998009 -0.9909937000 -9.816423e-
01
## 4   -0.9998438 -0.99977838 -0.9997918 -0.9999217 -0.9944466300 -9.887272e-
01
## 5   -0.9997497 -0.99914964 -0.9998123 -0.9997927 -0.9962920400 -9.887900e-
01
## 6   -0.9997213 -0.99975232 -0.9999238 -0.9998103 -0.9948507100 -9.882443e-
01
## 7   -0.9996955 -0.99937436 -0.9995880 -0.9997956 -0.9947551200 -9.832403e-
01
## 8   -0.9998290 -0.99979335 -0.9995261 -0.9998315 -0.9949470300 -9.807555e-
01
```

```
## 9    -0.9998646 -0.99960234 -0.9995939 -0.9998628 -0.9966927400 -9.801905e-
## 01
## 10   -0.9996271 -0.99986873 -0.9996806 -0.9998261 -0.9915342500 -9.708485e-
## 01
## 11   -0.9996112 -0.99979703 -0.9996663 -0.9997483 -0.9909857200 -9.734558e-
## 01
## 12   -0.9997173 -0.99965078 -0.9998628 -0.9998105 -0.9981915700 -9.896754e-
## 01
## 13   -0.9998255 -0.99993772 -0.9999334 -0.9998534 -0.9995380500 -9.897489e-
## 01
## 14   -0.9998382 -0.99976685 -0.9998705 -0.9998516 -0.9974909700 -9.920277e-
## 01
## 15   -0.9995880 -0.99850590 -0.9935403 -0.9997147 -0.9892482400 -9.835447e-
## 01
## 16   -0.9998047 -0.99851544 -0.9995934 -0.9998534 -0.9947890800 -9.947037e-
## 01
## 17   -0.9998307 -0.99955041 -0.9995479 -0.9999195 -0.9949489300 -9.923380e-
## 01
## 18   -0.9998261 -0.99945673 -0.9997922 -0.9998893 -0.9953079100 -9.913636e-
## 01
## 19   -0.9998999 -0.99990696 -0.9999204 -0.9999147 -0.9957524500 -9.924115e-
## 01
## 20   -0.9998989 -0.99983231 -0.9999442 -0.9999554 -0.9966077000 -9.930446e-
## 01
## 21   -0.9998002 -0.99984012 -0.9999252 -0.9998662 -0.9961221500 -9.935786e-
## 01
## 22   -0.9997438 -0.99980733 -0.9999486 -0.9998057 -0.9958259000 -9.869000e-
## 01
## 23   -0.9998108 -0.99977975 -0.9999081 -0.9997939 -0.9963097700 -9.829132e-
## 01
## 24   -0.9998240 -0.99975636 -0.9998088 -0.9998444 -0.9965272000 -9.864460e-
## 01
## 25   -0.9996441 -0.99978668 -0.9998784 -0.9997771 -0.9969473600 -9.857615e-
## 01
## 26   -0.9996023 -0.99976254 -0.9998885 -0.9997513 -0.9965452800 -9.870986e-
## 01
## 27   -0.9997082 -0.99984226 -0.9999030 -0.9997674 -0.9973631400 -9.891022e-
## 01
## 28   -0.9774456 -0.88677186 -0.8375137 -0.9876330 -0.9820904300 -9.691418e-
## 01
## 29   -0.9998311 -0.99976143 -0.9972873 -0.9998716 -0.9925243800 -9.890964e-
## 01
## 30   -0.9996270 -0.99934441 -0.9995324 -0.9997918 -0.9943364600 -9.933325e-
## 01
## 31   -0.9875697 -0.95049132 -0.9021207 -0.9929431 -0.8821483600 -8.588200e-
## 01
## 32   -0.9972509 -0.99930250 -0.8326692 -0.9981756 -0.8667756000 -8.435758e-
## 01
## 33   -0.9845261 -0.93193966 -0.9253425 -0.9917002 -0.9210963600 -9.376298e-
## 01
```

```
## 34   -0.9999165 -0.99987665 -0.9973907 -0.9999540 -0.9883563500 -9.810316e-
## 01
## 35   -0.9996821 -0.99896285 -0.9986708 -0.9998434 -0.9937540100 -9.906385e-
## 01
## 36   -0.9998857 -0.99988304 -0.9998606 -0.9999219 -0.9973290600 -9.922432e-
## 01
## 37   -0.9998996 -0.99994151 -0.9999657 -0.9998896 -0.9967061800 -9.915529e-
## 01
## 38   -0.9999013 -0.99989955 -0.9998837 -0.9999304 -0.9950279500 -9.906411e-
## 01
## 39   -0.9996172 -0.99950531 -0.9989838 -0.9997370 -0.9836515600 -9.695933e-
## 01
## 40   -0.9997681 -0.99994389 -0.9998033 -0.9998524 -0.9907521900 -9.906646e-
## 01
## 41   -0.9997977 -0.99985819 -0.9998132 -0.9998394 -0.9944987100 -9.927375e-
## 01
## 42   -0.9998605 -0.99974795 -0.9998399 -0.9998350 -0.9929579000 -9.911571e-
## 01
## 43   -0.9998356 -0.99980521 -0.9998709 -0.9998634 -0.9936041900 -9.906798e-
## 01
## 44   -0.9997829 -0.99976667 -0.9997603 -0.9998825 -0.9949542000 -9.907437e-
## 01
## 45   -0.9998577 -0.99954077 -0.9997179 -0.9999247 -0.9932205700 -9.898818e-
## 01
## 46   -0.9999701 -0.99995452 -0.9998500 -0.9999747 -0.9931271300 -9.933479e-
## 01
## 47   -0.9999294 -0.99981439 -0.9998870 -0.9999483 -0.9939842900 -9.897468e-
## 01
## 48   -0.9997774 -0.99972582 -0.9997971 -0.9998928 -0.9932696800 -9.897836e-
## 01
## 49   -0.9998265 -0.99994386 -0.9997324 -0.9999005 -0.9937044000 -9.937915e-
## 01
## 50   -0.9999600 -0.99992630 -0.9998620 -0.9999022 -0.9941015800 -9.923079e-
## 01
## 51   -0.9998891 -0.99960981 -0.9998242 -0.9998457 -0.9925762900 -9.913453e-
## 01
## 52   -0.9982833 -0.99668965 -0.9924358 -0.9990568 -0.9491757600 -8.980041e-
## 01
## 53   -0.9996744 -0.99943269 -0.9995609 -0.9997478 -0.9928883700 -9.901112e-
## 01
## 54   -0.9998253 -0.99978279 -0.9999202 -0.9998563 -0.9944849900 -9.920715e-
## 01
## 55   -0.9998025 -0.99968188 -0.9999756 -0.9998933 -0.9947378900 -9.931140e-
## 01
## 56   -0.9997397 -0.99971542 -0.9999093 -0.9998996 -0.9953079400 -9.940554e-
## 01
## 57   -0.9998325 -0.99967605 -0.9998424 -0.9998267 -0.9930334700 -9.926230e-
## 01
## 58   -0.9998141 -0.99962632 -0.9999111 -0.9998223 -0.9925004500 -9.898414e-
## 01
```

```
## 59   -0.9998201 -0.99982050 -0.9998363 -0.9998350 -0.9951249100 -9.924749e-
## 01
## 60   -0.9998830 -0.99968368 -0.9997975 -0.9998157 -0.9945340900 -9.868327e-
## 01
## 61   -0.9997606 -0.99962666 -0.9998688 -0.9998422 -0.9917498900 -9.865749e-
## 01
## 62   -0.9997611 -0.99971943 -0.9998837 -0.9998637 -0.9929998300 -9.928878e-
## 01
## 63   -0.9998262 -0.99976427 -0.9999118 -0.9998125 -0.9930804300 -9.942709e-
## 01
## 64   -0.9998752 -0.99975607 -0.9998969 -0.9998411 -0.9909276900 -9.936697e-
## 01
## 65   -0.9831257 -0.95094572 -0.9524918 -0.9871338 -0.9158276200 -8.596300e-
## 01
## 66   -0.9995242 -0.99773087 -0.9997027 -0.9994803 -0.9821090700 -9.823707e-
## 01
## 67   -0.9715523 -0.95463803 -0.7583597 -0.9851094 -0.8700987600 -6.691152e-
## 01
## 68   -0.9793447 -0.99135811 -0.7132268 -0.9892836 -0.8666829200 -6.594814e-
## 01
## 69   -0.9845115 -0.94086248 -0.9167047 -0.9923023 -0.9630919300 -9.134280e-
## 01
## 70   -0.9925145 -0.97706252 -0.9495325 -0.9930294 -0.8412869400 -7.774883e-
## 01
## 71   -0.9334745 -0.79435646 -0.4827961 -0.9674780 -0.6369862600 -2.105832e-
## 01
## 72   -0.9469224 -0.83674799 -0.6364291 -0.9768213 -0.6589298100 -2.443779e-
## 01
## 73   -0.9813752 -0.94902832 -0.9270026 -0.9911110 -0.9082204700 -8.793609e-
## 01
## 74   -0.9998377 -0.99976328 -0.9990697 -0.9998925 -0.9746514800 -9.682883e-
## 01
## 75   -0.9999414 -0.99981173 -0.9997224 -0.9999270 -0.9759805600 -9.779399e-
## 01
## 76   -0.9999083 -0.99977948 -0.9999110 -0.9998863 -0.9926700200 -9.890680e-
## 01
## 77   -0.9998048 -0.99982309 -0.9999274 -0.9998717 -0.9913250600 -9.921926e-
## 01
## 78   -0.9998068 -0.99984798 -0.9999125 -0.9998731 -0.9886746500 -9.898086e-
## 01
## 79   -0.9544587 -0.81789899 -0.6654830 -0.9485471 -0.2104644700 -2.635281e-
## 01
## 80   -0.8629933 -0.65144606 -0.7308822 -0.9027810 -0.1783384400 -1.208388e-
## 01
## 81   -0.9479881 -0.88258293 -0.7405347 -0.9438674 -0.1926534600 -1.096107e-
## 01
## 82   -0.9359552 -0.98059079 -0.6881855 -0.9249724 -0.1834189500 -2.597198e-
## 02
## 83   -0.9169684 -0.95443288 -0.6121815 -0.9168854 -0.2852402200 -1.110185e-
## 02
```

```
## 84   -0.8748517 -0.76299727 -0.6104603 -0.8840658 -0.2980468400 -5.172677e-
02
## 85   -0.9363788 -0.82524359 -0.6521076 -0.8900658 -0.1677531700 -1.498672e-
01
## 86   -0.8964433 -0.80468851 -0.6918414 -0.8864717 -0.1717009500 -1.272058e-
01
## 87   -0.9654511 -0.89811278 -0.6094443 -0.9643559 -0.3248855400 -1.582118e-
01
## 88   -0.9268626 -0.86874854 -0.6935028 -0.8940572 -0.2374701900 -3.971324e-
02
## 89   -0.9068206 -0.89652288 -0.7035943 -0.8990256 -0.2334397800 -1.682054e-
01
## 90   -0.9352650 -0.88715111 -0.7169691 -0.9165260 -0.1759528400 -1.384389e-
01
## 91   -0.9039012 -0.81992750 -0.6968908 -0.9122461 -0.2305614000 -1.243979e-
01
## 92   -0.8831293 -0.74891651 -0.6361607 -0.8767531 -0.2442747100  1.320116e-
02
## 93   -0.8890857 -0.88338146 -0.6492483 -0.8911961 -0.1942119500  9.323350e-
02
## 94   -0.9026119 -0.77064588 -0.6868427 -0.9366566 -0.1308761400  3.368739e-
02
## 95   -0.9533216 -0.89145998 -0.6826844 -0.9499782 -0.1176189600 -8.985511e-
02
## 96   -0.9345397 -0.85009203 -0.6595141 -0.9350752 -0.1654679800 -1.058541e-
01
## 97   -0.9397074 -0.92247615 -0.6535663 -0.9412445 -0.1965416000  1.408531e-
02
## 98   -0.8883938 -0.74500442 -0.7201537 -0.8887656 -0.2085443800 -3.831100e-
02
## 99   -0.9388266 -0.87467221 -0.6976781 -0.9316431 -0.0878689500 -9.030848e-
03
## 100  -0.8262680 -0.65213609 -0.7030906 -0.8893305 -0.0005865949 -8.471797e-
02
## 101  -0.9246415 -0.93016515 -0.7284483 -0.9360390 -0.0355643060 -1.053649e-
01
## 102  -0.9172861 -0.77491843 -0.7315220 -0.8997455 -0.0207911290  1.572441e-
01
## 103  -0.9481010 -0.85762974 -0.7026588 -0.9181036 -0.1645787800  2.489610e-
01
## 104  -0.9641040 -0.91648969 -0.6631977 -0.9377786 -0.2063346600  1.680966e-
01
## 105  -0.9553338 -0.72224737 -0.6466365 -0.9396593 -0.1905122600  9.169805e-
02
## 106  -0.9158203 -0.93792298 -0.6629174 -0.9386723 -0.2105618900 -1.296785e-
01
## 107  -0.8756897 -0.92071683 -0.6639845 -0.8932059 -0.1210870800 -3.119934e-
05
## 108  -0.9183098 -0.87355196 -0.6845138 -0.9140731 -0.1148217900  1.191155e-
01
```

```
## 109 -0.9446671 -0.90724373 -0.6974400 -0.9321752 -0.1912163700  1.566000e-
## 01
## 110 -0.9383429 -0.88878406 -0.6965389 -0.9359776 -0.1455503400  3.283585e-
## 02
## 111 -0.9265311 -0.72877734 -0.7174793 -0.9437068 -0.1905704100 -2.155064e-
## 02
## 112 -0.8871101 -0.78285944 -0.6452379 -0.8439352 -0.1324955700  1.417097e-
## 01
## 113 -0.9289688 -0.81080743 -0.7552988 -0.9331571 -0.0823610270 -9.792705e-
## 02
## 114 -0.8918185 -0.81601979 -0.7394025 -0.9125309 -0.1540100800 -1.358961e-
## 01
## 115 -0.8955749 -0.81756212 -0.7105068 -0.8917260 -0.2380180500 -1.572873e-
## 01
## 116 -0.8806842 -0.60974225 -0.7021148 -0.8961318 -0.1974153900 -8.763425e-
## 02
## 117 -0.9683658 -0.94282437 -0.6916599 -0.9312266 -0.0980267930 -1.156802e-
## 01
## 118 -0.9311603 -0.92739085 -0.7144317 -0.9339713 -0.1476413100 -8.913798e-
## 02
## 119 -0.9579127 -0.96662924 -0.7260550 -0.9331717 -0.2641462900 -9.464478e-
## 02
## 120 -0.9784818 -0.98496439 -0.7514175 -0.9499630 -0.2647575500 -1.963336e-
## 01
## 121 -0.9399036 -0.89150415 -0.7247360 -0.9440570 -0.2552340100 -1.857122e-
## 01
## 122 -0.9470433 -0.95259167 -0.6833960 -0.9313411 -0.2916964700 -3.393065e-
## 02
## 123 -0.9623835 -0.93199728 -0.6698048 -0.9424412 -0.1942936000 -1.135388e-
## 03
## 124 -0.9275023 -0.76088281 -0.6612282 -0.9407309 -0.2330217700 -1.350948e-
## 01
## 125 -0.9440598 -0.89345010 -0.7126912 -0.9413948 -0.2602361300 -2.172911e-
## 01
## 126 -0.9677717 -0.87484886 -0.8199338 -0.9366011 -0.2153957900 -2.315280e-
## 01
## 127 -0.8582296 -0.97687051 -0.7860024 -0.8442519 -0.1487637800 -2.170852e-
## 01
## 128 -0.8438306 -0.86827275 -0.8066823 -0.8132781 -0.1341515700 -1.264727e-
## 01
## 129 -0.8717546 -0.90621600 -0.7998929 -0.8063038 -0.1653609900 -2.961230e-
## 02
## 130 -0.7823131 -0.90869143 -0.7288766 -0.7860940 -0.0368225230 -3.932498e-
## 02
## 131 -0.8935593 -0.95588304 -0.7122261 -0.8222434  0.0790161120 -3.799568e-
## 03
## 132 -0.8481532 -0.91578237 -0.6887127 -0.8413435 -0.0200588350 -5.740529e-
## 02
## 133 -0.8316559 -0.74118279 -0.7368876 -0.8550552 -0.1676876800 -2.292573e-
## 01
```

```
## 134 -0.8367521 -0.65658295 -0.7952505 -0.8094885 -0.1497194000 -2.476412e-
01
## 135 -0.5554456  0.23721053 -0.5049379 -0.5860563  0.1903862200 -3.899316e-
03
## 136 -0.8416873 -0.92240579 -0.5565504 -0.7520324  0.0854634780 -3.093441e-
02
## 137 -0.7216402 -0.08926155 -0.7128545 -0.7786762  0.1241396900  1.054524e-
01
## 138 -0.8611662 -0.93637362 -0.7136824 -0.7691163  0.1002060300  7.492912e-
02
## 139 -0.8535058 -0.74952050 -0.6712049 -0.6988080  0.0221167870 -2.263460e-
01
## 140 -0.8604168 -0.91065475 -0.7043978 -0.9118361 -0.0787391930 -1.891413e-
01
## 141 -0.7605682 -0.79457625 -0.7297037 -0.8098682  0.0932294490 -1.334934e-
01
## 142 -0.7832959 -0.78184868 -0.6842777 -0.7351655  0.0199878120 -2.183669e-
01
## 143 -0.8705549 -0.96714964 -0.7324820 -0.8972184 -0.0865263130 -1.485919e-
01
## 144 -0.8877599 -0.95955786 -0.7561026 -0.9069784 -0.0554995420 -1.743257e-
01
## 145 -0.8980351 -0.76678638 -0.7094429 -0.8734570 -0.0545551430 -1.758486e-
02
## 146 -0.9168547 -0.94933417 -0.6687209 -0.9089249 -0.0254534050  5.414624e-
02
## 147 -0.9328876 -0.88111472 -0.7336147 -0.9325322 -0.0354591100 -1.751172e-
01
## 148 -0.9189688 -0.89245015 -0.7679091 -0.8923172 -0.1072552900 -3.476529e-
01
## 149 -0.8731402 -0.81856500 -0.7668193 -0.8203944 -0.0650503060 -2.924442e-
01
## 150 -0.9008618 -0.77656417 -0.7710998 -0.8654018 -0.1338758900 -1.968798e-
01
## 151 -0.9773189 -0.96385402 -0.4626313 -0.9807935 -0.4775860700 -4.901599e-
01
## 152 -0.9757118 -0.96521904 -0.5841799 -0.9776995 -0.5041293200 -5.473778e-
01
## 153 -0.9860698 -0.94913508 -0.5911615 -0.9840929 -0.5550028800 -4.255133e-
01
## 154 -0.9570907 -0.92849684 -0.5049866 -0.9723328 -0.5584011300 -3.478281e-
01
## 155 -0.9793522 -0.97231668 -0.4523443 -0.9750512 -0.5105772100 -3.367146e-
01
## 156 -0.9783458 -0.96010364 -0.4981864 -0.9709890 -0.4642458600 -4.443536e-
01
## 157 -0.9619564 -0.97060432 -0.4573981 -0.9792616 -0.4537482000 -4.725683e-
01
## 158 -0.9632631 -0.96919134 -0.4620466 -0.9785253 -0.4464113700 -4.232999e-
01
```

```
## 159 -0.9628230 -0.98411349 -0.5182514 -0.9765446 -0.3655635000 -4.988133e-
01
## 160 -0.9827982 -0.98284901 -0.5537956 -0.9818137 -0.5015275500 -5.325962e-
01
## 161 -0.9839360 -0.98948926 -0.5736436 -0.9747296 -0.4964199200 -4.195661e-
01
## 162 -0.9719732 -0.98836838 -0.5821852 -0.9768815 -0.4555331200 -4.397813e-
01
## 163 -0.9765680 -0.91803950 -0.5723885 -0.9794691 -0.5194847000 -5.212689e-
01
## 164 -0.9714301 -0.87194365 -0.5020057 -0.9845023 -0.4776007800 -4.029559e-
01
## 165 -0.9901098 -0.99419398 -0.5215156 -0.9833957 -0.5126210000 -4.647267e-
01
## 166 -0.9862643 -0.97259773 -0.5549346 -0.9866054 -0.6298557300 -6.086246e-
01
## 167 -0.9790226 -0.97484402 -0.4755008 -0.9859620 -0.6595433700 -5.670730e-
01
## 168 -0.9856996 -0.97955025 -0.4740660 -0.9909910 -0.5691510600 -4.877903e-
01
## 169 -0.9770293 -0.97018187 -0.5595800 -0.9868450 -0.4785984700 -3.201475e-
01
## 170 -0.9697630 -0.97582615 -0.5293265 -0.9792492 -0.4913826300 -2.624821e-
01
## 171 -0.9716612 -0.91455722 -0.4233512 -0.9819454 -0.5591378200 -4.344554e-
01
## 172 -0.9764677 -0.96786127 -0.5145205 -0.9853873 -0.5639507800 -3.775695e-
01
## 173 -0.9816136 -0.87862061 -0.5402996 -0.9767761 -0.5405529000 -3.629315e-
01
## 174 -0.9736871 -0.90169455 -0.4293417 -0.9683486 -0.4874363900 -3.662520e-
01
## 175 -0.9834374 -0.98436159 -0.5059494 -0.9846228 -0.5148498300 -4.904868e-
01
## 176 -0.9792325 -0.96028466 -0.5348878 -0.9832113 -0.3688376200 -3.801654e-
01
## 177 -0.9983677 -0.99675821 -0.9901758 -0.9991349 -0.9943183400 -9.812180e-
01
##                NA           NA           NA           NA           NA
NA
## 1   -0.98969609 -0.995820680 -0.990936310 -0.9970517 -0.993805470 -
9.905187e-01
## 2   -0.98973975 -0.996652350 -0.982083940 -0.9926268 -0.994976700 -
9.829295e-01
## 3   -0.98756628 -0.991248800 -0.981414760 -0.9904159 -0.987751010 -
9.810912e-01
## 4   -0.99135422 -0.991378270 -0.986926850 -0.9943908 -0.989430860 -
9.871450e-01
## 5   -0.99062442 -0.996902540 -0.988606660 -0.9929065 -0.996091400 -
9.888672e-01
```

```
## 6    -0.99015748 -0.995218000 -0.990178800 -0.9930667 -0.993126720 -
9.898364e-01
## 7    -0.98733724 -0.996242100 -0.988263430 -0.9879085 -0.995410870 -
9.878344e-01
## 8    -0.99083807 -0.996127660 -0.983369340 -0.9881628 -0.994736840 -
9.821684e-01
## 9    -0.99630723 -0.996506560 -0.981289760 -0.9954414 -0.995417770 -
9.809054e-01
## 10   -0.98677551 -0.991468110 -0.969318310 -0.9889748 -0.988991300 -
9.688906e-01
## 11   -0.98173220 -0.992331250 -0.974928990 -0.9870654 -0.990626370 -
9.742397e-01
## 12   -0.98895116 -0.998317070 -0.990667500 -0.9884720 -0.997527520 -
9.905629e-01
## 13   -0.99267475 -0.998805270 -0.991384890 -0.9913293 -0.998298140 -
9.916407e-01
## 14   -0.99290396 -0.996609100 -0.993391820 -0.9915230 -0.995633390 -
9.937274e-01
## 15   -0.98933823 -0.992534600 -0.986463670 -0.9913079 -0.989535070 -
9.843842e-01
## 16   -0.99357321 -0.995845170 -0.996453550 -0.9953270 -0.993880860 -
9.958551e-01
## 17   -0.99355517 -0.995093420 -0.993091470 -0.9976012 -0.994566720 -
9.923742e-01
## 18   -0.99479031 -0.995000320 -0.992185380 -0.9949361 -0.993351400 -
9.918569e-01
## 19   -0.99550105 -0.996157350 -0.993037910 -0.9931084 -0.994495580 -
9.926238e-01
## 20   -0.99488302 -0.997049800 -0.992880540 -0.9969250 -0.995356910 -
9.935610e-01
## 21   -0.99215543 -0.996446930 -0.993691850 -0.9944603 -0.994929660 -
9.943938e-01
## 22   -0.99113965 -0.995490790 -0.987616570 -0.9923700 -0.993631350 -
9.870134e-01
## 23   -0.99221625 -0.995303140 -0.984149320 -0.9915595 -0.993788090 -
9.827301e-01
## 24   -0.99045005 -0.997259000 -0.986217040 -0.9939786 -0.996602820 -
9.859952e-01
## 25   -0.99082380 -0.996957210 -0.989051740 -0.9930413 -0.996367300 -
9.884924e-01
## 26   -0.99032840 -0.995779680 -0.987151840 -0.9912602 -0.994290020 -
9.862068e-01
## 27   -0.98919841 -0.995890310 -0.990281320 -0.9915710 -0.996569230 -
9.904846e-01
## 28   -0.98156570 -0.981877010 -0.964890860 -0.9838531 -0.978584140 -
9.671340e-01
## 29   -0.99178965 -0.992986620 -0.987989790 -0.9946214 -0.991065960 -
9.895051e-01
## 30   -0.99017788 -0.995453500 -0.992858420 -0.9921773 -0.993750660 -
9.925432e-01
```

```
## 31   -0.90403706 -0.896477800 -0.859855430 -0.9169050 -0.887310730 -
8.527692e-01
## 32   -0.89207213 -0.861261580 -0.847145690 -0.8984801 -0.838318100 -
8.475404e-01
## 33   -0.94925418 -0.931087710 -0.939568880 -0.9597053 -0.928507680 -
9.369111e-01
## 34   -0.99519463 -0.992497810 -0.982679270 -0.9947307 -0.989558290 -
9.819047e-01
## 35   -0.99841352 -0.993921940 -0.992202460 -0.9978790 -0.992365190 -
9.926118e-01
## 36   -0.99601381 -0.997736050 -0.992492660 -0.9974402 -0.996757940 -
9.917136e-01
## 37   -0.99688883 -0.996466700 -0.991326580 -0.9949492 -0.995424060 -
9.916514e-01
## 38   -0.99663253 -0.995145440 -0.990986120 -0.9963259 -0.993341620 -
9.897944e-01
## 39   -0.98323096 -0.986642660 -0.977075650 -0.9878409 -0.983634810 -
9.750559e-01
## 40   -0.99097901 -0.991050920 -0.991552390 -0.9915812 -0.989660860 -
9.922124e-01
## 41   -0.99029847 -0.994925060 -0.992196210 -0.9906666 -0.993122120 -
9.924315e-01
## 42   -0.99096366 -0.992890970 -0.990612340 -0.9906115 -0.990078780 -
9.907740e-01
## 43   -0.99170450 -0.994781590 -0.990348310 -0.9913571 -0.992486880 -
9.930043e-01
## 44   -0.99091536 -0.995963620 -0.991054640 -0.9927003 -0.994364410 -
9.921165e-01
## 45   -0.99425932 -0.994629660 -0.992601920 -0.9955175 -0.992336170 -
9.937896e-01
## 46   -0.99681868 -0.992133660 -0.993662690 -0.9966313 -0.990263960 -
9.937144e-01
## 47   -0.99521838 -0.991997230 -0.992100240 -0.9962351 -0.992429730 -
9.922909e-01
## 48   -0.99254848 -0.992775960 -0.989681610 -0.9953936 -0.990708290 -
9.904462e-01
## 49   -0.99288764 -0.992053370 -0.993910300 -0.9924529 -0.990919060 -
9.933344e-01
## 50   -0.99450103 -0.994322720 -0.992064570 -0.9959697 -0.992899430 -
9.925966e-01
## 51   -0.99359384 -0.994401350 -0.990687370 -0.9936457 -0.991824350 -
9.915857e-01
## 52   -0.97295990 -0.950222930 -0.903675440 -0.9824606 -0.934891950 -
8.958269e-01
## 53   -0.99079124 -0.993496010 -0.989286220 -0.9909196 -0.991360160 -
9.890564e-01
## 54   -0.99217342 -0.995885630 -0.991121140 -0.9939737 -0.994316250 -
9.923872e-01
## 55   -0.99445967 -0.994442870 -0.993746140 -0.9966357 -0.993403290 -
9.938620e-01
```

```
## 56    -0.99379202  -0.994704730  -0.993253720  -0.9951122  -0.992045690  -
9.940195e-01
## 57    -0.99076600  -0.992228010  -0.993362450  -0.9909207  -0.989189260  -
9.926708e-01
## 58    -0.99007664  -0.991964160  -0.992279220  -0.9940096  -0.989357740  -
9.925559e-01
## 59    -0.99221261  -0.994626070  -0.990901310  -0.9931454  -0.992525300  -
9.912319e-01
## 60    -0.99182548  -0.994628630  -0.990111230  -0.9925917  -0.992022070  -
9.890427e-01
## 61    -0.99078170  -0.993505020  -0.986829940  -0.9932697  -0.991492900  -
9.860913e-01
## 62    -0.99038501  -0.992587430  -0.992667170  -0.9940278  -0.989849400  -
9.923356e-01
## 63    -0.99069800  -0.994212210  -0.995123570  -0.9935746  -0.992059980  -
9.940192e-01
## 64    -0.99164211  -0.992569060  -0.994712910  -0.9925966  -0.989919480  -
9.944022e-01
## 65    -0.91560292  -0.932442670  -0.887861720  -0.9420728  -0.913630780  -
8.870049e-01
## 66    -0.97633568  -0.984755820  -0.989088430  -0.9842554  -0.979830780  -
9.889149e-01
## 67    -0.81513119  -0.898509160  -0.653521900  -0.8632690  -0.863066450  -
6.691135e-01
## 68    -0.80855043  -0.891674430  -0.647795610  -0.8546971  -0.860394730  -
6.574313e-01
## 69    -0.94547883  -0.968801550  -0.923422130  -0.9638675  -0.962459030  -
9.181212e-01
## 70    -0.86899322  -0.850918300  -0.837322360  -0.8937021  -0.828216480  -
8.292993e-01
## 71    -0.57076123  -0.694472480  -0.360077310  -0.6529498  -0.580952680  -
3.171471e-01
## 72    -0.57776080  -0.722210640  -0.357610190  -0.6615262  -0.626295410  -
3.031539e-01
## 73    -0.89344593  -0.910172710  -0.903556570  -0.9298109  -0.890968240  -
9.016381e-01
## 74    -0.98784889  -0.976909110  -0.964165480  -0.9898560  -0.970753770  -
9.682807e-01
## 75    -0.99128063  -0.977484710  -0.984637280  -0.9924545  -0.971671790  -
9.834465e-01
## 76    -0.99440684  -0.993425050  -0.991936130  -0.9960515  -0.991808870  -
9.927915e-01
## 77    -0.99003854  -0.992605600  -0.993212680  -0.9936042  -0.990548890  -
9.938129e-01
## 78    -0.99029168  -0.988169940  -0.989468220  -0.9922509  -0.984782630  -
9.886295e-01
## 79    -0.53570907  -0.228253210  -0.124274450  -0.6984362  -0.011102599  -
1.407374e-01
## 80    -0.49894754  -0.114045000   0.027847600  -0.5945946   0.048560897  -
5.468683e-02
```

```
## 81   -0.52564781 -0.235894530 -0.005815575 -0.6328668 -0.073238443 -
2.856216e-02
## 82   -0.48742267 -0.132279260  0.020367181 -0.5528494  0.019740242 -
4.745190e-02
## 83   -0.42589499 -0.169227180  0.055776797 -0.5102109 -0.004277367
2.806141e-03
## 84   -0.43348651 -0.257538420 -0.052800462 -0.4954739 -0.124140810 -
1.095687e-01
## 85   -0.45649574 -0.112020620 -0.010835726 -0.5382851  0.098477157 -
5.739538e-02
## 86   -0.43539110  0.051579153  0.080495392 -0.5521501  0.183541810 -
4.127169e-02
## 87   -0.56272771 -0.349059580 -0.032820151 -0.6477726 -0.184342770 -
1.118748e-01
## 88   -0.45371719 -0.237751650  0.121427910 -0.5457356 -0.092755169
6.368853e-02
## 89   -0.47693821 -0.181243720 -0.021188340 -0.5346172 -0.033502272 -
6.557278e-02
## 90   -0.49953681 -0.101603870  0.016051207 -0.5865656  0.016344663 -
1.046851e-01
## 91   -0.45758603 -0.153019700  0.178655050 -0.5286219 -0.005614019 -
5.346495e-02
## 92   -0.39531278 -0.159714270  0.260483140 -0.4814970  0.030096844
1.260661e-01
## 93   -0.38083270 -0.114380340  0.284727320 -0.5027153  0.022081806
2.019415e-01
## 94   -0.42484368 -0.038082737  0.099341719 -0.5375414  0.174635450
7.439104e-02
## 95   -0.43801900  0.044038993  0.037952585 -0.5319877  0.196897720 -
2.217652e-02
## 96   -0.45222392 -0.021832203  0.026439916 -0.5351012  0.107400900 -
6.918495e-02
## 97   -0.47215737 -0.043677510  0.082853004 -0.5580528  0.084966694
4.511157e-02
## 98   -0.49079204 -0.193496500  0.121531530 -0.5387223 -0.093435665 -
3.670015e-02
## 99   -0.44351246 -0.129812240  0.078647374 -0.5752320  0.048451323 -
2.042659e-06
## 100 -0.43688721 -0.058146296  0.068633721 -0.6325469  0.145278790 -
8.911401e-02
## 101 -0.49159537 -0.109568030  0.028760454 -0.6414840  0.074346256 -
1.028452e-01
## 102 -0.42861504 -0.128845950  0.282028660 -0.5352807  0.090797436
1.691396e-01
## 103 -0.43954820 -0.188770400  0.234180640 -0.5393586  0.003973135
2.417001e-01
## 104 -0.48986138 -0.131764040  0.345884270 -0.4913270  0.017429690
3.361900e-01
## 105 -0.50836523 -0.191070950  0.164327770 -0.5624840 -0.021397462
9.260726e-02
```

```
## 106 -0.52522565 -0.169679170 -0.049631550 -0.6507263 -0.017991932 -
8.494375e-02
## 107 -0.46027599 -0.057271875  0.129946940 -0.5531650  0.066989506
1.048026e-01
## 108 -0.45208251 -0.127403200  0.296012230 -0.5289391  0.066139912
1.685570e-01
## 109 -0.49261846 -0.179876700  0.218629240 -0.5417653 -0.068717944
1.798986e-01
## 110 -0.47631176 -0.200194000  0.198983680 -0.5948332 -0.003063585
7.452392e-02
## 111 -0.55129678 -0.147887740  0.097215283 -0.6155934  0.003450832 -
2.579266e-02
## 112 -0.31505431 -0.144717050  0.331598560 -0.4320882  0.122293140
2.054097e-01
## 113 -0.50478754 -0.156563670  0.034091080 -0.6138633  0.057394681 -
9.642700e-02
## 114 -0.48506920 -0.137853720 -0.038428646 -0.6148440 -0.023456907 -
1.366699e-01
## 115 -0.47145320 -0.155937820  0.057895188 -0.5971239 -0.021689378 -
1.785449e-02
## 116 -0.50219765 -0.148474570  0.114005070 -0.5878104 -0.001733433
3.987396e-02
## 117 -0.52163833 -0.085198123  0.192899310 -0.5704208  0.100984410
9.467269e-02
## 118 -0.52315016 -0.082443784  0.084056091 -0.6224332  0.077741229 -
6.820188e-02
## 119 -0.55202596 -0.363732230 -0.052243004 -0.6221087 -0.231754670 -
2.088043e-01
## 120 -0.59985513 -0.215235610 -0.126422260 -0.6341724 -0.098447527 -
2.170428e-01
## 121 -0.56993912 -0.202994600 -0.105440680 -0.6414976 -0.042750399 -
1.521735e-01
## 122 -0.56495601 -0.371234730  0.017660625 -0.6002394 -0.233897920 -
2.577139e-02
## 123 -0.54763306 -0.208751610  0.040703823 -0.5939434 -0.001591609
9.168200e-03
## 124 -0.52864443 -0.187155010  0.033280687 -0.5691563 -0.013882768 -
1.853018e-02
## 125 -0.54251872 -0.255271990  0.055556567 -0.6195751 -0.102925630 -
1.926547e-02
## 126 -0.57063166 -0.255713970 -0.257451730 -0.6224344 -0.086770601 -
2.141153e-01
## 127 -0.44383374 -0.132885860 -0.195403480 -0.5202521  0.037908280 -
2.203722e-01
## 128 -0.32703112 -0.160096150 -0.098630218 -0.4747324  0.045080512 -
4.448723e-02
## 129 -0.32513413 -0.203804250  0.003829822 -0.4465910 -0.016474904 -
5.378901e-03
## 130 -0.24059704 -0.091073978 -0.067669415 -0.3583788  0.141997860 -
4.308037e-02
```

```
## 131 -0.23679741 -0.025951614  0.013120937 -0.2607809  0.283850120
5.537702e-02
## 132 -0.23216591 -0.107326170 -0.086929381 -0.2383813  0.166920310 -
6.336385e-02
## 133 -0.23553489 -0.224534720 -0.149429430 -0.3907560 -0.037539916 -
2.192046e-01
## 134 -0.20720872 -0.230464500 -0.146286040 -0.4397877 -0.008246537 -
1.547702e-01
## 135  0.09652153 -0.020968506 -0.095427491 -0.2078694  0.238410820 -
7.367502e-02
## 136 -0.09454416  0.015575024 -0.099843422 -0.2034167  0.245261770 -
6.927244e-02
## 137 -0.14360549  0.008710569  0.126852250 -0.3315523  0.246929120
1.083950e-01
## 138 -0.26428242 -0.158252050  0.064279884 -0.3689511  0.121249920
1.340389e-01
## 139 -0.26985944 -0.104249840 -0.230782960 -0.3861903  0.054991010 -
1.681974e-01
## 140 -0.34540368 -0.069646502 -0.093685026 -0.4468027  0.133330570 -
4.770945e-02
## 141 -0.16573667 -0.014807258 -0.199840550 -0.3647145  0.254613010 -
2.140854e-01
## 142 -0.15048162  0.022168874 -0.354605850 -0.2876551  0.102254040 -
3.143188e-01
## 143 -0.45851448 -0.072763028 -0.132167350 -0.5170762  0.089373754 -
1.311879e-01
## 144 -0.42513106 -0.078567739 -0.161335600 -0.5557826  0.100616090 -
2.268529e-01
## 145 -0.35673698 -0.071332774  0.054634171 -0.3751521  0.041729151
1.135259e-02
## 146 -0.33425413  0.005344239  0.106406150 -0.3805907  0.206690540
1.553667e-01
## 147 -0.46593192 -0.190221740 -0.234585350 -0.5225239 -0.014090299 -
2.418962e-01
## 148 -0.42325820 -0.130518010 -0.342448540 -0.4924067  0.017634160 -
3.179881e-01
## 149 -0.33048911 -0.149899780 -0.340476610 -0.4337175  0.010901226 -
2.863761e-01
## 150 -0.36835617 -0.178799270 -0.200120080 -0.4264787  0.047566183 -
1.807678e-01
## 151 -0.65764263 -0.460305010 -0.504399440 -0.6460393 -0.352428410 -
5.260220e-01
## 152 -0.67459405 -0.494800490 -0.491801460 -0.7140992 -0.401598960 -
5.446220e-01
## 153 -0.72323358 -0.561495080 -0.470701310 -0.7837559 -0.455779650 -
4.811704e-01
## 154 -0.67649459 -0.556199080 -0.324110520 -0.7538754 -0.449140860 -
3.948147e-01
## 155 -0.62817278 -0.420280800 -0.335075650 -0.6843939 -0.334523870 -
3.469763e-01
```

```
## 156 -0.66391868 -0.514467670 -0.422205130 -0.7305004 -0.335259830 -
4.187507e-01
## 157 -0.61788226 -0.479463860 -0.421697500 -0.7239293 -0.335764490 -
4.311525e-01
## 158 -0.61701867 -0.422935130 -0.409839130 -0.6884078 -0.322873590 -
4.039796e-01
## 159 -0.64912616 -0.319758140 -0.468090300 -0.7288388 -0.168200240 -
4.995119e-01
## 160 -0.68802267 -0.416746700 -0.484334630 -0.7066035 -0.320086670 -
4.997614e-01
## 161 -0.66448773 -0.476380950 -0.362421450 -0.7009221 -0.369539940 -
3.355927e-01
## 162 -0.67657755 -0.448807500 -0.411496090 -0.7116545 -0.291047970 -
4.326712e-01
## 163 -0.73387920 -0.511521830 -0.515243120 -0.8041556 -0.423309750 -
5.053155e-01
## 164 -0.74322025 -0.504316120 -0.420845510 -0.7883135 -0.370848050 -
4.120485e-01
## 165 -0.75472186 -0.479768940 -0.449280300 -0.7643103 -0.382402640 -
4.760620e-01
## 166 -0.74315155 -0.569790100 -0.556449410 -0.7868023 -0.527084100 -
5.760007e-01
## 167 -0.73424822 -0.608976370 -0.576578810 -0.7570314 -0.543361030 -
5.955941e-01
## 168 -0.72677542 -0.475037300 -0.417637990 -0.7283872 -0.412282250 -
4.470279e-01
## 169 -0.69734505 -0.464972120 -0.283580880 -0.7538310 -0.354330450 -
2.815113e-01
## 170 -0.69163500 -0.544407550 -0.281331420 -0.7482436 -0.403700740 -
2.372946e-01
## 171 -0.67744308 -0.572472010 -0.306004290 -0.7494155 -0.470199320 -
3.423848e-01
## 172 -0.68495313 -0.515973890 -0.318457300 -0.7664506 -0.399258710 -
3.263394e-01
## 173 -0.71530485 -0.585467020 -0.322439880 -0.7690251 -0.470491690 -
2.877417e-01
## 174 -0.68320728 -0.502875000 -0.316362840 -0.7407877 -0.376861220 -
3.114322e-01
## 175 -0.73180352 -0.480880110 -0.372460440 -0.7485330 -0.403501170 -
3.911286e-01
## 176 -0.72292721 -0.452367650 -0.365184250 -0.7808603 -0.338970110 -
3.646930e-01
## 177 -0.97711386 -0.996305540 -0.984988790 -0.9900076 -0.995452280 -
9.858627e-01
##            NA          NA           NA          NA          NA
NA
## 1   -0.99699279 -0.996736890 -0.991975160 -0.9932417 -0.9983491 -
0.99110842
## 2   -0.99164143 -0.997424530 -0.984923210 -0.9931870 -0.9979168 -
0.98251860
```

```
## 3    -0.98772322 -0.995163170 -0.985350770 -0.9939116 -0.9974823 -
0.99857122
## 4    -0.99379043 -0.993401870 -0.987874220 -0.9942012 -0.9979030 -
0.99976709
## 5    -0.99167299 -0.997009490 -0.990372810 -0.9951421 -0.9957965 -
0.99611276
## 6    -0.99181853 -0.996979940 -0.992801480 -0.9942166 -0.9960982 -
0.99906433
## 7    -0.98794084 -0.994935020 -0.991111450 -0.9891017 -0.9852681 -
0.99289350
## 8    -0.98901818 -0.996521100 -0.988152050 -0.9879935 -0.9936301 -
0.99054751
## 9    -0.99607158 -0.996760620 -0.985370030 -0.9908803 -0.9998767 -
0.98340186
## 10   -0.98866624 -0.994743950 -0.975047040 -0.9895670 -0.9945636 -
0.99243426
## 11   -0.98553480 -0.993645930 -0.979535790 -0.9892088 -0.9898213 -
0.99402341
## 12   -0.98720494 -0.998189630 -0.992456680 -0.9897963 -0.9920392 -
0.99670732
## 13   -0.99109430 -0.997997590 -0.991195480 -0.9904274 -0.9963528 -
0.98242650
## 14   -0.99099902 -0.998006140 -0.992719880 -0.9887678 -0.9958077 -
0.98069003
## 15   -0.99073089 -0.994886640 -0.991636790 -0.9904648 -0.9942187 -
0.98869813
## 16   -0.99555663 -0.996974030 -0.996835580 -0.9956344 -0.9936428 -
0.99077215
## 17   -0.99754721 -0.994126920 -0.995289260 -0.9936738 -0.9959704 -
0.99421047
## 18   -0.99490571 -0.995855030 -0.994202340 -0.9931033 -0.9989005 -
0.99855336
## 19   -0.99225295 -0.996371430 -0.993070890 -0.9939075 -0.9976269 -
0.99523059
## 20   -0.99643786 -0.998707260 -0.992040650 -0.9964272 -0.9997411 -
0.99567025
## 21   -0.99299964 -0.997747990 -0.993889120 -0.9965251 -0.9982213 -
0.99462274
## 22   -0.99151988 -0.996752800 -0.992235380 -0.9928256 -0.9983274 -
0.99046448
## 23   -0.99201084 -0.996654380 -0.989145740 -0.9913410 -0.9985619 -
0.98234836
## 24   -0.99333596 -0.998185110 -0.987089310 -0.9924523 -0.9976436 -
0.99962842
## 25   -0.99308482 -0.997342160 -0.991825980 -0.9922038 -0.9953829 -
0.98186121
## 26   -0.99145398 -0.997229030 -0.987853950 -0.9883584 -0.9979760 -
0.99533958
## 27   -0.98885299 -0.993538410 -0.993441760 -0.9953381 -0.9978861 -
0.99753978
```

```
## 28   -0.98451921 -0.986588850 -0.960617570 -0.9739986 -0.9870428 -
0.98547051
## 29   -0.99307141 -0.994054730 -0.983803850 -0.9960668 -0.9948175 -
0.99176525
## 30   -0.99237976 -0.996852120 -0.993785420 -0.9903190 -0.9963573 -
0.99205489
## 31   -0.91359367 -0.905609840 -0.908207510 -0.9329139 -0.9077074 -
0.99116451
## 32   -0.89696583 -0.899795760 -0.897216200 -0.9056415 -0.9953207 -
0.98682374
## 33   -0.95416539 -0.930556840 -0.950723250 -0.9666425 -0.8954702 -
0.98499832
## 34   -0.99458672 -0.994986220 -0.985393730 -0.9943193 -0.9756825 -
0.98888171
## 35   -0.99744122 -0.996361730 -0.992398230 -0.9981695 -0.9954600 -
0.99024846
## 36   -0.99775574 -0.997893970 -0.994664320 -0.9961689 -0.9995938 -
0.99785386
## 37   -0.99404740 -0.996846360 -0.993148570 -0.9960234 -0.9970172 -
0.99300978
## 38   -0.99571330 -0.996720540 -0.993865680 -0.9975299 -0.9999181 -
0.99857342
## 39   -0.98585202 -0.987586150 -0.984320860 -0.9888934 -0.9841399 -
0.99226540
## 40   -0.99092807 -0.993107480 -0.990429140 -0.9906293 -0.9916189 -
0.98764581
## 41   -0.98973998 -0.996394550 -0.992403590 -0.9899009 -0.9967869 -
0.99146768
## 42   -0.99009385 -0.996071950 -0.990944090 -0.9912225 -0.9985061 -
0.99623463
## 43   -0.99020951 -0.996460190 -0.989559610 -0.9898430 -0.9912049 -
0.99002713
## 44   -0.99180434 -0.997064590 -0.991520060 -0.9921899 -0.9963407 -
0.97962549
## 45   -0.99578526 -0.997182090 -0.988840840 -0.9919652 -0.9985730 -
0.99116443
## 46   -0.99727052 -0.991652990 -0.993824460 -0.9950861 -0.9979047 -
0.99302983
## 47   -0.99591272 -0.988354790 -0.992272960 -0.9940308 -0.9974774 -
0.98810833
## 48   -0.99346173 -0.994037010 -0.989096250 -0.9970338 -0.9987731 -
0.99649385
## 49   -0.99159872 -0.992183530 -0.995265350 -0.9925386 -0.9966225 -
0.98933524
## 50   -0.99664361 -0.996050080 -0.991715750 -0.9940597 -0.9948777 -
0.99296162
## 51   -0.99286290 -0.995954170 -0.991733830 -0.9905037 -0.9908074 -
0.99948975
## 52   -0.98033345 -0.965960420 -0.929696950 -0.9839762 -0.9639659 -
0.93458934
```

```
## 53   -0.98932504 -0.995163540 -0.990960360 -0.9925560 -0.9936047 -
0.99600061
## 54   -0.99376242 -0.997376830 -0.990540400 -0.9928974 -0.9941530 -
0.99444771
## 55   -0.99650833 -0.994204450 -0.992909100 -0.9970490 -0.9956591 -
0.99635177
## 56   -0.99394472 -0.996892300 -0.991758450 -0.9958875 -0.9960200 -
0.99270357
## 57   -0.98953474 -0.992680890 -0.994967670 -0.9905492 -0.9971975 -
0.99072946
## 58   -0.99299309 -0.991155160 -0.992273570 -0.9923625 -0.9941154 -
0.97896766
## 59   -0.99248116 -0.996003910 -0.990213270 -0.9929727 -0.9976874 -
0.99472833
## 60   -0.99215665 -0.997016240 -0.992000660 -0.9933681 -0.9971970 -
0.97160329
## 61   -0.99270705 -0.994206210 -0.988224130 -0.9913038 -0.9942350 -
0.99845247
## 62   -0.99273727 -0.993164540 -0.994564640 -0.9947585 -0.9952503 -
0.99823605
## 63   -0.99272405 -0.996772330 -0.996472060 -0.9932297 -0.9960430 -
0.99685270
## 64   -0.99135340 -0.994756230 -0.995729630 -0.9910149 -0.9916612 -
0.98763544
## 65   -0.93398451 -0.945283650 -0.908936520 -0.9385651 -0.9821030 -
0.94214064
## 66   -0.98188357 -0.990579860 -0.991641980 -0.9860576 -0.9897711 -
0.98320547
## 67   -0.83554942 -0.936714700 -0.754117920 -0.8979990 -0.9463677 -
0.96888759
## 68   -0.83057788 -0.930982430 -0.739898110 -0.8924443 -0.9895984 -
0.95569579
## 69   -0.95876655 -0.974274930 -0.946778750 -0.9644776 -0.9762079 -
0.94299498
## 70   -0.87880939 -0.878275890 -0.882152160 -0.9198720 -0.9002093 -
0.85617148
## 71   -0.65052183 -0.811962190 -0.506326100 -0.6740973 -0.9900073 -
0.67958524
## 72   -0.65545036 -0.831710410 -0.527333890 -0.7114778 -0.8618464 -
0.77518901
## 73   -0.91902485 -0.933112820 -0.919333680 -0.9445422 -0.9760986 -
0.96587740
## 74   -0.99010502 -0.981267950 -0.956607720 -0.9891979 -0.9833471 -
0.99094198
## 75   -0.99140613 -0.983645400 -0.988786130 -0.9940448 -0.9794774 -
0.98024603
## 76   -0.99429862 -0.994069900 -0.992215000 -0.9975719 -0.9942711 -
0.97734481
## 77   -0.99233718 -0.994630820 -0.994125670 -0.9942865 -0.9908774 -
0.98021908
```

```
## 78   -0.99071788 -0.991395830 -0.992418610 -0.9951039 -0.9987645 -
0.98966454
## 79   -0.65872725 -0.449353540 -0.209640680 -0.7148545 -0.6816034 -
0.71419680
## 80   -0.57243731 -0.256354920 -0.016366760 -0.5751678 -0.3896741 -
0.72097239
## 81   -0.58709369 -0.338415310 -0.281051190 -0.6737516 -0.8537651 -
0.99111653
## 82   -0.51111388 -0.261778700 -0.154582070 -0.6343912 -0.6998123 -
0.04233208
## 83   -0.48390706 -0.392148480 -0.038507713 -0.5257327 -0.9254360 -
0.64406337
## 84   -0.47192202 -0.424735120 -0.102898390 -0.4780874 -0.6211303 -
0.43981595
## 85   -0.50562406 -0.332877270 -0.177411930 -0.6008324 -0.8367916 -
0.38401815
## 86   -0.50559751 -0.001087157  0.064489246 -0.6151841 -0.7515427 -
0.60041257
## 87   -0.58908177 -0.419659930 -0.108025930 -0.7514551 -0.6610340 -
0.77265762
## 88   -0.48258793 -0.312367890 -0.011542029 -0.6540070 -0.7635912 -
0.83934035
## 89   -0.54050257 -0.290260560 -0.346204650 -0.5176321 -0.8255813 -
0.58599371
## 90   -0.54845099 -0.227783300  0.047673256 -0.5971763 -0.8920061 -
0.92847008
## 91   -0.48734054 -0.355560010  0.389053780 -0.5867926 -0.9398393 -
0.71447033
## 92   -0.42836623 -0.419371930  0.202962040 -0.5112588 -0.9495574 -
0.79883101
## 93   -0.45553485 -0.252447650  0.063466734 -0.5275395 -0.7376929 -
0.89340900
## 94   -0.50273517 -0.254038570 -0.170097100 -0.5383000 -0.9692375 -
0.45478936
## 95   -0.49039883 -0.140652810 -0.120112360 -0.5867614 -0.9986605 -
0.86980078
## 96   -0.49942086 -0.084988231 -0.012390568 -0.5767868 -0.6964211 -
0.47596386
## 97   -0.51374305 -0.205098590  0.031079104 -0.6116542 -0.7706019 -
0.13913717
## 98   -0.53033579 -0.258262920  0.172433380 -0.5311951 -0.7349841 -
0.46242161
## 99   -0.54401421 -0.360197570 -0.155172150 -0.5945780 -0.4505061 -
0.53350387
## 100 -0.60013631 -0.336675170  0.122767270 -0.6408970 -0.5817761 -
0.82699986
## 101 -0.57532527 -0.293535110  0.116134070 -0.7067655 -0.5321157 -
0.43873911
## 102 -0.47596074 -0.379566810  0.149083920 -0.6465342 -0.5006958 -
0.78061758
```

```
## 103 -0.49397715 -0.435641910 -0.026909812 -0.5977676 -0.8254840 -
0.46634038
## 104 -0.48752622 -0.310964030  0.229401630 -0.4853298 -0.8499853 -
0.80814802
## 105 -0.53510800 -0.429109900  0.226115210 -0.6169592 -0.8661016 -
0.85209223
## 106 -0.60893388 -0.294220460 -0.225229930 -0.6304786 -0.5361025 -
0.42935873
## 107 -0.50867092 -0.103783270  0.016787206 -0.5902511 -0.8310313 -
0.28801488
## 108 -0.48152034 -0.308970630  0.193101740 -0.5916033 -0.5873380 -
0.71768071
## 109 -0.51679631 -0.331600840 -0.087923459 -0.5742501 -0.4965213 -
0.56366369
## 110 -0.55833127 -0.259198460  0.122422920 -0.6729795 -0.5252517 -
0.59833340
## 111 -0.57092590 -0.248871600  0.084019253 -0.6534698 -0.6314475 -
0.43655205
## 112 -0.37259910 -0.483943970  0.100401170 -0.5610285 -0.9659828 -
0.19430570
## 113 -0.56992518 -0.372026930 -0.009240980 -0.6955990 -0.9160860 -
0.83632223
## 114 -0.56758978 -0.217613570 -0.060885078 -0.6575176 -0.7252622 -
0.49673705
## 115 -0.55789669 -0.263824760  0.029118442 -0.6232554 -0.9733107 -
0.99740332
## 116 -0.55919283 -0.283849420  0.060265290 -0.6144724 -0.8434376 -
0.81798426
## 117 -0.51257923 -0.364662730  0.218697220 -0.6411296 -0.7365306 -
0.88918337
## 118 -0.55298951 -0.269282950  0.212288950 -0.7233660 -0.8139118 -
0.67227812
## 119 -0.56876428 -0.446021800  0.003146135 -0.7339411 -0.5489245 -
0.56273698
## 120 -0.57865675 -0.256225790 -0.224212020 -0.6995585 -0.7195971 -
0.87099189
## 121 -0.60764872 -0.311067540 -0.224531890 -0.6849583 -0.7443036 -
0.80980891
## 122 -0.56898379 -0.490294550 -0.166192110 -0.6424741 -0.9196674 -
0.72103030
## 123 -0.55829518 -0.355310460 -0.066360567 -0.6643743 -0.6383016 -
0.81814221
## 124 -0.53840371 -0.356755650 -0.145216260 -0.6340645 -0.9941279 -
0.80688725
## 125 -0.57018908 -0.368905990 -0.212612600 -0.6473699 -0.6237035 -
0.91923282
## 126 -0.58700788 -0.454397910 -0.497014390 -0.6012342 -0.9145214 -
0.79979371
## 127 -0.47900537 -0.382572220 -0.251910050 -0.5902824 -0.8455782 -
0.73662610
```

```
## 128 -0.38681505 -0.425334760 -0.329677550 -0.5877910 -0.9688090 -
0.93989451
## 129 -0.37606422 -0.388993490 -0.278925370 -0.5142923 -0.6918293 -
0.38137024
## 130 -0.28188442 -0.381794610 -0.253619460 -0.4679534 -0.9653428 -
0.71987370
## 131 -0.19225202 -0.349914480 -0.220084290 -0.3431821 -0.7741621 -
0.90697589
## 132 -0.23948811 -0.411728840 -0.363039860 -0.2405042 -0.6955838 -
0.47684224
## 133 -0.32117010 -0.433204740 -0.156751220 -0.3110950 -0.8618946 -
0.81995309
## 134 -0.35069683 -0.441809490 -0.380535950 -0.5362146 -0.6522702 -
0.83549100
## 135 -0.08838653 -0.378936290 -0.264279270 -0.3372503 -0.3840847 -
0.09133356
## 136 -0.07396168 -0.143676640 -0.347594810 -0.3335296 -0.1747144 -
0.77643643
## 137 -0.29905203 -0.328132600 -0.245707050 -0.3359375 -0.5008319 -
0.64877993
## 138 -0.29502296 -0.495844970 -0.331475100 -0.4760332 -0.5626054 -
0.73766946
## 139 -0.33307295 -0.238271760 -0.422883980 -0.3723024 -0.4584161 -
0.90433435
## 140 -0.41385768 -0.324925170 -0.401896600 -0.4802933 -0.6028859 -
0.97096098
## 141 -0.32103262 -0.284596130 -0.443056240 -0.4577934 -0.2352844 -
0.53510263
## 142 -0.21831428  0.098300682 -0.513670380 -0.3835429 -0.5224436 -
0.90304562
## 143 -0.46487626 -0.221174690 -0.325916290 -0.5460512 -0.3238068 -
0.94176872
## 144 -0.53356693 -0.220515880 -0.177295760 -0.5261122 -0.5599902 -
0.52860660
## 145 -0.31745435 -0.151896410 -0.193308870 -0.5401871 -0.6934719 -
0.53845222
## 146 -0.35841402 -0.156308480 -0.246862210 -0.4852973 -0.9421825 -
0.91525742
## 147 -0.48283851 -0.375028930 -0.352301460 -0.6085315 -0.7616837 -
0.89544059
## 148 -0.46507724 -0.363029110 -0.536435570 -0.5150045 -0.6620115 -
0.73465640
## 149 -0.35058084 -0.185105340 -0.548146800 -0.5410085 -0.9393201 -
0.65423788
## 150 -0.37545825 -0.333575840 -0.433809330 -0.5613531 -0.8574485 -
0.47915665
## 151 -0.61909402 -0.638002470 -0.537315650 -0.6202933 -0.9854478 -
0.99164513
## 152 -0.67250425 -0.584702050 -0.552934440 -0.7831883 -0.9123307 -
0.92376615
```

```
## 153 -0.76381008 -0.611116810 -0.609519640 -0.8105907 -0.9270461 -
0.95624473
## 154 -0.72625744 -0.626388030 -0.354655920 -0.8033033 -0.8634468 -
0.51750309
## 155 -0.64062905 -0.488067590 -0.433311070 -0.7394861 -0.9616799 -
0.52367275
## 156 -0.69776410 -0.708867590 -0.563699790 -0.7603032 -0.7572621 -
0.61048481
## 157 -0.69026936 -0.618554010 -0.582018490 -0.7653279 -0.7436321 -
0.80585686
## 158 -0.64691510 -0.567831730 -0.580832730 -0.7662601 -0.9438939 -
0.98619914
## 159 -0.71045266 -0.507451320 -0.528620180 -0.7639448 -0.7935275 -
0.89900583
## 160 -0.68053400 -0.566874640 -0.519012240 -0.7759156 -0.8549856 -
0.92628201
## 161 -0.65554714 -0.625498750 -0.497396750 -0.7980213 -0.9255596 -
0.91906159
## 162 -0.67500267 -0.638316440 -0.487679620 -0.7808865 -0.8873768 -
0.64637771
## 163 -0.78384407 -0.639766390 -0.621223070 -0.8056360 -0.7542470 -
0.74370088
## 164 -0.77422572 -0.700360610 -0.551592600 -0.8188544 -0.9800682 -
0.88406901
## 165 -0.75521669 -0.592335300 -0.507302870 -0.7698044 -0.9004298 -
0.79889310
## 166 -0.76971922 -0.638996710 -0.582689600 -0.7696372 -0.9378417 -
0.84096523
## 167 -0.75469946 -0.640671390 -0.604574380 -0.7658749 -0.8330632 -
0.76862411
## 168 -0.71861748 -0.588578330 -0.471363970 -0.7620550 -0.9729719 -
0.95030920
## 169 -0.73583368 -0.596243930 -0.471371750 -0.7737382 -0.9325183 -
0.84706993
## 170 -0.71767321 -0.653231580 -0.522092510 -0.7921442 -0.8840154 -
0.89809302
## 171 -0.74195884 -0.673510700 -0.463132070 -0.7660461 -0.8813936 -
0.99689070
## 172 -0.74806691 -0.664379120 -0.484063920 -0.7920923 -0.7647629 -
0.76508001
## 173 -0.74390913 -0.688650960 -0.489467720 -0.8007178 -0.9929038 -
0.92159594
## 174 -0.73277237 -0.630047610 -0.429475210 -0.7637804 -0.9185588 -
0.42255744
## 175 -0.72493807 -0.589505290 -0.523217120 -0.7599917 -0.8928544 -
0.99525740
## 176 -0.76516655 -0.606797190 -0.519991670 -0.7622973 -0.8051903 -
0.39681398
## 177 -0.98880879 -0.995565030 -0.987674650 -0.9908441 -0.9931722 -
0.99951788
```

```
##            NA          NA         NA          NA          NA          NA
## 1  -0.9598854 -0.990514990 -0.9999347 -0.9998205 -0.9998845 -0.9930262600
## 2  -0.9868384 -0.989850940 -0.9999596 -0.9996396 -0.9998466 -0.9928433600
## 3  -0.9975540 -0.987237220 -0.9998940 -0.9996366 -0.9997951 -0.9818168800
## 4  -0.9653808 -0.992657270 -0.9999235 -0.9998031 -0.9998830 -0.9917761300
## 5  -0.9959788 -0.993258770 -0.9999691 -0.9998205 -0.9998604 -0.9961414700
## 6  -0.9848585 -0.992224900 -0.9999511 -0.9998280 -0.9998562 -0.9913534200
## 7  -0.9670654 -0.989435260 -0.9999557 -0.9997396 -0.9997628 -0.9946125000
## 8  -0.9939958 -0.990050000 -0.9999565 -0.9996461 -0.9998112 -0.9924303200
## 9  -0.9823184 -0.992784950 -0.9999697 -0.9996104 -0.9999452 -0.9958287000
## 10 -0.9926310 -0.983607590 -0.9999006 -0.9992330 -0.9997678 -0.9894379500
## 11 -0.9952234 -0.982272670 -0.9999018 -0.9993880 -0.9996678 -0.9920788200
## 12 -0.9840792 -0.993794710 -0.9999859 -0.9998498 -0.9997912 -0.9978087600
## 13 -0.9993178 -0.995882370 -0.9999941 -0.9998566 -0.9998685 -0.9982075900
## 14 -0.9919583 -0.995769940 -0.9999748 -0.9998975 -0.9998731 -0.9967156500
## 15 -0.9838855 -0.987735240 -0.9998863 -0.9997262 -0.9998281 -0.9890083100
## 16 -0.9865056 -0.995652890 -0.9999540 -0.9999433 -0.9999163 -0.9925646200
## 17 -0.9703786 -0.994936500 -0.9999511 -0.9998985 -0.9999339 -0.9939320100
## 18 -0.9846733 -0.995257010 -0.9999531 -0.9998814 -0.9999258 -0.9916490400
## 19 -0.9941550 -0.996085740 -0.9999621 -0.9998989 -0.9999164 -0.9926832300
## 20 -0.9696659 -0.996456890 -0.9999717 -0.9999041 -0.9999429 -0.9942012400
## 21 -0.9974816 -0.995356340 -0.9999659 -0.9999152 -0.9998930 -0.9948031300
## 22 -0.9970756 -0.992613130 -0.9999592 -0.9997864 -0.9998613 -0.9926472200
## 23 -0.9995958 -0.991932470 -0.9999613 -0.9996907 -0.9998657 -0.9948562700
## 24 -0.9669810 -0.992524500 -0.9999722 -0.9997658 -0.9998683 -0.9969152500
## 25 -0.9840507 -0.992637840 -0.9999733 -0.9997845 -0.9998641 -0.9963887600
## 26 -0.9843464 -0.992702380 -0.9999652 -0.9997844 -0.9998401 -0.9947890200
## 27 -0.9854502 -0.993313110 -0.9999706 -0.9998396 -0.9998291 -0.9978021400
## 28 -0.9854034 -0.976624520 -0.9996963 -0.9991055 -0.9996215 -0.9837077200
## 29 -0.9744414 -0.992049650 -0.9999198 -0.9998183 -0.9998901 -0.9916146900
## 30 -0.9907248 -0.993679030 -0.9999487 -0.9999068 -0.9998477 -0.9925873300
## 31 -0.9942501 -0.863518390 -0.9925007 -0.9881296 -0.9948177 -0.8889612600
## 32 -0.9908183 -0.846677270 -0.9890193 -0.9857841 -0.9931597 -0.8441573500
## 33 -0.9702052 -0.925247550 -0.9964783 -0.9973882 -0.9983480 -0.9327902800
## 34 -0.9905119 -0.988741900 -0.9998767 -0.9996424 -0.9999282 -0.9860871700
## 35 -0.9962467 -0.995686800 -0.9999356 -0.9998734 -0.9999832 -0.9934007700
## 36 -0.9800554 -0.996963780 -0.9999789 -0.9998931 -0.9999580 -0.9961915700
## 37 -0.9918614 -0.996781190 -0.9999696 -0.9998766 -0.9999465 -0.9949335700
## 38 -0.9900364 -0.995596520 -0.9999520 -0.9998637 -0.9999555 -0.9919856600
## 39 -0.9961689 -0.978144740 -0.9997710 -0.9993350 -0.9997015 -0.9825780700
## 40 -0.9930022 -0.991429490 -0.9998903 -0.9998686 -0.9998514 -0.9918076300
## 41 -0.9929789 -0.993604020 -0.9999470 -0.9998959 -0.9998333 -0.9936036400
## 42 -0.9955877 -0.992616900 -0.9999227 -0.9998663 -0.9998409 -0.9890817500
## 43 -0.9991010 -0.993045950 -0.9999395 -0.9998587 -0.9998577 -0.9917348200
## 44 -0.9756476 -0.993393580 -0.9999558 -0.9998654 -0.9998619 -0.9934209800
## 45 -0.9919599 -0.993586530 -0.9999356 -0.9998678 -0.9999252 -0.9898986800
## 46 -0.9975669 -0.995677650 -0.9999189 -0.9999128 -0.9999596 -0.9904946900
## 47 -0.9937552 -0.994267920 -0.9999246 -0.9998623 -0.9999410 -0.9912856400
## 48 -0.9883201 -0.992917810 -0.9999244 -0.9998425 -0.9999055 -0.9893589700
## 49 -0.9914424 -0.994579880 -0.9999229 -0.9999188 -0.9998824 -0.9905636900
```

```
## 50   -0.9886138 -0.994895190 -0.9999406 -0.9998904 -0.9999315 -0.9931665400
## 51   -0.9809575 -0.993514320 -0.9999290 -0.9998690 -0.9999016 -0.9898791900
## 52   -0.9760770 -0.934359940 -0.9982688 -0.9937777 -0.9994423 -0.9388399700
## 53   -0.9951081 -0.992171380 -0.9999261 -0.9998427 -0.9998421 -0.9923113700
## 54   -0.9971706 -0.994099210 -0.9999520 -0.9998804 -0.9998888 -0.9923923300
## 55   -0.9766586 -0.995443580 -0.9999459 -0.9999111 -0.9999363 -0.9937138500
## 56   -0.9768757 -0.995764620 -0.9999514 -0.9999166 -0.9999168 -0.9886302600
## 57   -0.9859455 -0.993061900 -0.9999188 -0.9999034 -0.9998418 -0.9865372500
## 58   -0.9832814 -0.991625490 -0.9999125 -0.9998648 -0.9998640 -0.9879870000
## 59   -0.9962562 -0.994546840 -0.9999497 -0.9998828 -0.9998815 -0.9914492300
## 60   -0.9973426 -0.992251740 -0.9999456 -0.9998089 -0.9998716 -0.9898917900
## 61   -0.9932207 -0.990463950 -0.9999165 -0.9997740 -0.9998658 -0.9909180100
## 62   -0.9743636 -0.992987200 -0.9999210 -0.9999010 -0.9998680 -0.9871548100
## 63   -0.9768430 -0.993603820 -0.9999320 -0.9999314 -0.9998676 -0.9890503200
## 64   -0.9933942 -0.992762900 -0.9999029 -0.9999231 -0.9998695 -0.9892912100
## 65   -0.9391592 -0.883971140 -0.9962670 -0.9900108 -0.9964693 -0.9089126800
## 66   -0.9845877 -0.979002960 -0.9997301 -0.9997336 -0.9995350 -0.9787379400
## 67   -0.9025208 -0.760765770 -0.9917258 -0.9362015 -0.9849206 -0.8565042400
## 68   -0.9778170 -0.753442350 -0.9910641 -0.9332932 -0.9836118 -0.8770715900
## 69   -0.9117831 -0.935384250 -0.9991176 -0.9956082 -0.9983338 -0.9660924500
## 70   -0.9408187 -0.803978940 -0.9860127 -0.9773813 -0.9914090 -0.8546021900
## 71   -0.9041386 -0.405783600 -0.9361502 -0.7144891 -0.9203370 -0.5411902300
## 72   -0.8701278 -0.429928860 -0.9448944 -0.7289875 -0.9233611 -0.6088883500
## 73   -0.9944306 -0.878422320 -0.9948780 -0.9924636 -0.9948287 -0.9070590800
## 74   -0.9648095 -0.975288080 -0.9995068 -0.9990698 -0.9997927 -0.9742060100
## 75   -0.9889573 -0.980429700 -0.9995394 -0.9996107 -0.9998639 -0.9734219600
## 76   -0.9824089 -0.993116500 -0.9999238 -0.9998529 -0.9999311 -0.9914599000
## 77   -0.9863549 -0.991841170 -0.9999068 -0.9998979 -0.9998598 -0.9907443300
## 78   -0.9942482 -0.989910760 -0.9998455 -0.9998408 -0.9998498 -0.9831287800
## 79   -0.8320226 -0.210636860 -0.6635667 -0.6512689 -0.9207418 -0.0205884880
## 80   -0.5503050 -0.134179020 -0.5990871 -0.5136816 -0.8924490 -0.3371379000
## 81   -0.3403547 -0.147428910 -0.6585820 -0.5243769 -0.9066479 -0.1156636200
## 82   -0.8073169 -0.100669430 -0.6098553 -0.4660962 -0.8801175 -0.0699445780
## 83   -0.7342112 -0.119589880 -0.6706294 -0.4397723 -0.8534242 -0.2940763000
## 84   -0.5628580 -0.141959910 -0.7123361 -0.5154325 -0.8515898 -0.2480116300
## 85   -0.5752374 -0.122502560 -0.5931756 -0.5472495 -0.8687448  0.0255610680
## 86   -0.6264955 -0.108705060 -0.5116688 -0.4900476 -0.8665121 -0.0416653450
## 87   -0.8832874 -0.239575880 -0.7564218 -0.5617992 -0.9176811 -0.1466556000
## 88   -0.7987305 -0.117481750 -0.6793004 -0.4214170 -0.8698423 -0.2213996400
## 89   -0.8812370 -0.167132250 -0.6540478 -0.5611978 -0.8730659 -0.2325818400
## 90   -0.8569739 -0.139125270 -0.5921377 -0.5284699 -0.8908294 -0.1259894000
## 91   -0.8106672 -0.143813370 -0.6404289 -0.4349191 -0.8666209 -0.1813691100
## 92   -0.6395434 -0.080622059 -0.6493380 -0.3107983 -0.8370862 -0.0365900620
## 93   -0.6063109 -0.025138091 -0.6065742 -0.2467437 -0.8385969 -0.0279245470
## 94   -0.4892791 -0.032250024 -0.5394324 -0.3906220 -0.8600813  0.0091706999
## 95   -0.7429530 -0.072081013 -0.4895754 -0.4924408 -0.8622878 -0.0086168015
## 96   -0.6889507 -0.105202090 -0.5478664 -0.5066250 -0.8668396 -0.0211303660
## 97   -0.8950592 -0.087640600 -0.5734125 -0.4110370 -0.8775423 -0.1588695300
## 98   -0.5836291 -0.117790970 -0.6482740 -0.4205746 -0.8775152 -0.2231350800
## 99   -0.6827606 -0.033515482 -0.5618784 -0.4267517 -0.8740799 -0.1181769000
```

```
## 100 -0.6462473 -0.015286733 -0.4804624 -0.4740460 -0.8844801  0.0601101490
## 101 -0.3976271 -0.059540696 -0.5246880 -0.5052139 -0.9002819 -0.0103928300
## 102 -0.6991998  0.058659542 -0.5254789 -0.2064673 -0.8605564 -0.0956734550
## 103 -0.8798070  0.017695396 -0.6259651 -0.1713648 -0.8645268 -0.0568092170
## 104 -0.9752095 -0.047989248 -0.6200926 -0.1585301 -0.8650229 -0.0428902590
## 105 -0.8821205 -0.073049752 -0.6390499 -0.3190773 -0.8874501 -0.1435244300
## 106 -0.4585993 -0.162280970 -0.6389260 -0.5553477 -0.9099928 -0.1497550600
## 107 -0.9389279 -0.052503929 -0.5441828 -0.3940891 -0.8733389 -0.0340917540
## 108 -0.5113387 -0.006931843 -0.5745100 -0.2230203 -0.8652625  0.0522748880
## 109 -0.9026547 -0.045801351 -0.6345769 -0.2452621 -0.8787086 -0.1809994200
## 110 -0.8793395 -0.059212829 -0.6216839 -0.3356907 -0.8869307  0.0146673750
## 111 -0.9746150 -0.127150680 -0.6202131 -0.4241564 -0.9088666 -0.2432098500
## 112 -0.9932514  0.045091522 -0.5911603 -0.1855266 -0.7981090  0.0397188530
## 113 -0.6521165 -0.084012317 -0.5710744 -0.4986488 -0.8979377 -0.0452752010
## 114 -0.5557529 -0.122461440 -0.5985179 -0.5533034 -0.8933554 -0.1814633200
## 115 -0.9776842 -0.163538680 -0.6449688 -0.5168252 -0.8862002 -0.1124007700
## 116 -0.6772974 -0.133335040 -0.6236075 -0.4516170 -0.8917431 -0.1476025100
## 117 -0.9935405 -0.103704100 -0.5461698 -0.4222630 -0.8923885 -0.0568665190
## 118 -0.9806196 -0.118660030 -0.5695277 -0.4683599 -0.9039885 -0.1386462000
## 119 -0.9983059 -0.186018620 -0.7370445 -0.5383892 -0.9103577 -0.3287683500
## 120 -0.9502439 -0.238433260 -0.6817427 -0.6219166 -0.9225741 -0.2817076500
## 121 -0.8701763 -0.218940490 -0.6726455 -0.6078933 -0.9179919 -0.1302049500
## 122 -0.9861001 -0.183743140 -0.7508493 -0.4719360 -0.9085504 -0.3049344900
## 123 -0.8486968 -0.120711680 -0.6482255 -0.4416518 -0.9034807  0.0588802610
## 124 -0.7691229 -0.175882220 -0.6564025 -0.5182280 -0.8936992  0.0120148690
## 125 -0.9349008 -0.221179560 -0.6959615 -0.5465247 -0.9077659 -0.2002108700
## 126 -0.7486926 -0.215787370 -0.6767256 -0.6895169 -0.9143647 -0.1119613200
## 127 -0.8589651 -0.131034920 -0.5937334 -0.6596423 -0.8608759 -0.1041690200
## 128 -0.4540653 -0.049181497 -0.5988296 -0.5757203 -0.8143884  0.0584994460
## 129 -0.5324006 -0.030922734 -0.6326924 -0.4762728 -0.8056996  0.0307540680
## 130 -0.3360893  0.058454260 -0.5166284 -0.5153037 -0.7488478  0.1919520600
## 131 -0.8581786  0.125790620 -0.4173963 -0.4569286 -0.7117665  0.4236722100
## 132 -0.7955005  0.063538635 -0.5150942 -0.5339619 -0.7011863  0.3556550300
## 133 -0.3777908 -0.063662014 -0.6423643 -0.6466977 -0.7577633  0.0123595470
## 134 -0.2527500 -0.050451344 -0.6361978 -0.6535870 -0.7625237  0.0679326460
## 135  0.6298199  0.306176430 -0.3432983 -0.5074556 -0.5436124  0.0773918120
## 136 -0.9568051  0.174609680 -0.3917408 -0.5248815 -0.6321640  0.2171923700
## 137 -0.4265824  0.218975320 -0.3711966 -0.3310628 -0.7023339  0.1211290500
## 138 -0.4704251  0.151191920 -0.4674622 -0.3836553 -0.7608360  0.3296667500
## 139 -0.6764158  0.012720888 -0.4897265 -0.6773825 -0.7684764 -0.0390303750
## 140 -0.7323099 -0.051151762 -0.5286589 -0.6043861 -0.8121856  0.2024564200
## 141 -0.1391938  0.116818430 -0.4029182 -0.6210861 -0.7226720  0.2535477700
## 142 -0.7987920  0.060360247 -0.4272524 -0.7163520 -0.6890555 -0.0441310720
## 143 -0.7191898 -0.084923568 -0.5342306 -0.6012582 -0.8639216  0.0422453330
## 144 -0.8486941 -0.066102226 -0.5207099 -0.6259466 -0.8645799 -0.0006015968
## 145 -0.9930671  0.012636709 -0.5166863 -0.4440831 -0.7932673 -0.0988134060
## 146 -0.9995579  0.058663249 -0.4618900 -0.3744000 -0.7880452  0.1379107400
## 147 -0.8722938 -0.072723495 -0.5606873 -0.6548638 -0.8672306 -0.0708570720
## 148 -0.8867965 -0.146998450 -0.5721219 -0.7667646 -0.8479636 -0.1778919100
## 149 -0.9684832 -0.073251646 -0.5590161 -0.7441385 -0.8035816 -0.0287046620
```

```
## 150 -0.7267429 -0.088308347 -0.6068644 -0.6521122 -0.8131394  0.1254618200
## 151 -0.7527907 -0.457473970 -0.8434078 -0.8609423 -0.9353000 -0.5153695300
## 152 -0.9721884 -0.495364540 -0.8606359 -0.8740838 -0.9498217 -0.4552719600
## 153 -0.7055599 -0.497470530 -0.8909451 -0.8318934 -0.9665456 -0.4321814800
## 154 -0.8166060 -0.455304080 -0.8905703 -0.7608806 -0.9558766 -0.4292932100
## 155 -0.6841965 -0.410670800 -0.8411118 -0.7601735 -0.9370981 -0.3842912800
## 156 -0.8613715 -0.438479780 -0.8540466 -0.8250503 -0.9505683 -0.2571691700
## 157 -0.9342430 -0.425193620 -0.8415068 -0.8338933 -0.9415467 -0.3115787300
## 158 -0.9902288 -0.405105130 -0.8228337 -0.8145245 -0.9357334 -0.3304523700
## 159 -0.7580574 -0.404745170 -0.7612969 -0.8544055 -0.9478457 -0.3137592200
## 160 -0.9947193 -0.494423520 -0.8374760 -0.8682041 -0.9507404 -0.3982253700
## 161 -0.8921381 -0.445509180 -0.8534327 -0.7990725 -0.9461017 -0.4214672900
## 162 -0.9856185 -0.437772080 -0.8333894 -0.8205058 -0.9497559 -0.2433695800
## 163 -0.7895479 -0.516721210 -0.8693054 -0.8726003 -0.9702858 -0.5330107600
## 164 -0.8412632 -0.461546060 -0.8554445 -0.8106505 -0.9697173 -0.3618333400
## 165 -0.9524257 -0.502804960 -0.8589488 -0.8390377 -0.9682078 -0.5377417600
## 166 -0.8360259 -0.600790900 -0.9103221 -0.9044125 -0.9695322 -0.6725477700
## 167 -0.8895512 -0.597453760 -0.9248995 -0.8985573 -0.9646630 -0.7178112900
## 168 -0.9932202 -0.526083330 -0.8724758 -0.8374017 -0.9596551 -0.5593047600
## 169 -0.6796216 -0.416893250 -0.8450331 -0.7363500 -0.9590696 -0.4187606000
## 170 -0.9310077 -0.401551400 -0.8695778 -0.7116361 -0.9574551 -0.3508173700
## 171 -0.8806856 -0.484725050 -0.8945078 -0.7858020 -0.9554224 -0.5396139200
## 172 -0.8619090 -0.471011830 -0.8820960 -0.7701296 -0.9588460 -0.5215131400
## 173 -0.9783645 -0.466925810 -0.8926215 -0.7660393 -0.9636433 -0.5109049200
## 174 -0.7793772 -0.430855010 -0.8579702 -0.7652641 -0.9551265 -0.3931366600
## 175 -0.8662321 -0.503554670 -0.8598726 -0.8248935 -0.9631944 -0.4550838000
## 176 -0.9941423 -0.395380940 -0.8053983 -0.7860474 -0.9661579 -0.4445259600
## 177 -0.9605528 -0.984622590 -0.9999529 -0.9996727 -0.9996225 -0.9958850800
##              NA           NA          NA           NA          NA    NA
NA
## 1    -0.991373390 -0.99623962 -1.0000000 -1.00000000 -1.000000000  1.00 -
0.24
## 2    -0.985220650 -0.99104933 -1.0000000 -1.00000000 -1.000000000 -0.32 -
0.12
## 3    -0.984764830 -0.98236421 -1.0000000 -1.00000000 -1.000000000 -0.16 -
0.48
## 4    -0.990684890 -0.99328839 -1.0000000 -1.00000000 -1.000000000 -0.12 -
0.56
## 5    -0.992407660 -0.98617880 -1.0000000 -1.00000000 -1.000000000 -0.32 -
0.08
## 6    -0.991057240 -0.98775269 -1.0000000 -1.00000000 -1.000000000 -0.32 -
0.36
## 7    -0.989908780 -0.98656320 -1.0000000 -1.00000000 -1.000000000 -0.12 -
0.60
## 8    -0.983651970 -0.99036817 -1.0000000 -1.00000000 -1.000000000 -0.20 -
0.48
## 9    -0.984127420 -0.99349981 -1.0000000 -1.00000000 -1.000000000 -0.20
0.20
## 10   -0.972204260 -0.98799489 -1.0000000 -0.93912029 -1.000000000  0.12 -
0.56
```

```
## 11   -0.977580720 -0.98265458 -1.0000000 -1.00000000 -1.000000000  0.12 -
0.56
## 12   -0.990120610 -0.98348150 -1.0000000 -1.00000000 -1.000000000 -0.36
0.48
## 13   -0.992198030 -0.98950263 -1.0000000 -1.00000000 -1.000000000 -0.44
0.04
## 14   -0.996211880 -0.99013218 -1.0000000 -1.00000000 -1.000000000 -0.12 -
0.24
## 15   -0.982943630 -0.99167477 -1.0000000 -1.00000000 -1.000000000 -0.08 -
0.40
## 16   -0.994810660 -0.99462271 -1.0000000 -1.00000000 -1.000000000 -0.20
0.08
## 17   -0.990738070 -0.99533063 -1.0000000 -1.00000000 -1.000000000 -0.04 -
0.40
## 18   -0.992628700 -0.99204420 -1.0000000 -1.00000000 -1.000000000 -0.04 -
0.60
## 19   -0.991640360 -0.99146016 -1.0000000 -1.00000000 -1.000000000 -0.08 -
0.32
## 20   -0.995025940 -0.99160301 -1.0000000 -1.00000000 -1.000000000  0.04 -
0.32
## 21   -0.996809920 -0.98848481 -1.0000000 -1.00000000 -1.000000000 -0.56 -
0.44
## 22   -0.986790840 -0.99022119 -1.0000000 -1.00000000 -1.000000000 -0.04 -
0.48
## 23   -0.986128460 -0.99096737 -1.0000000 -1.00000000 -1.000000000 -0.28 -
0.12
## 24   -0.988143490 -0.98991198 -1.0000000 -1.00000000 -1.000000000 -0.32 -
0.36
## 25   -0.987932520 -0.99090247 -1.0000000 -1.00000000 -1.000000000 -0.48
0.40
## 26   -0.986799440 -0.99012084 -1.0000000 -1.00000000 -1.000000000 -0.16 -
0.32
## 27   -0.993364640 -0.98330063 -1.0000000 -1.00000000 -1.000000000 -0.20 -
0.12
## 28   -0.972005010 -0.98727659 -1.0000000 -0.93912029 -0.942216280 -0.32 -
1.00
## 29   -0.991433370 -0.98799361 -1.0000000 -1.00000000 -1.000000000  0.04 -
1.00
## 30   -0.993879120 -0.99088198 -1.0000000 -1.00000000 -1.000000000  0.04
0.04
## 31   -0.876603020 -0.92149938 -0.3847176 -0.36190925 -0.454913410 -0.36 -
0.40
## 32   -0.875105220 -0.91030572 -0.2745262 -0.30937406 -0.427157710 -0.40 -
0.40
## 33   -0.945493260 -0.95552124 -0.4851257 -0.61823559 -0.653535630 -0.24 -
0.28
## 34   -0.982701140 -0.99366976 -1.0000000 -1.00000000 -1.000000000 -1.00 -
0.40
## 35   -0.994710490 -0.99606405 -1.0000000 -1.00000000 -1.000000000  0.04 -
0.16
```

```
## 36   -0.991707040 -0.99582785 -1.0000000 -1.00000000 -1.000000000 -0.08
0.08
## 37   -0.991978230 -0.99183057 -1.0000000 -1.00000000 -1.000000000 -0.12
0.08
## 38   -0.988670500 -0.99327009 -1.0000000 -1.00000000 -1.000000000 -0.20 -
0.24
## 39   -0.976123290 -0.97651866 -1.0000000 -1.00000000 -1.000000000 -0.28 -
0.72
## 40   -0.993484250 -0.99019384 -1.0000000 -1.00000000 -1.000000000 -0.08
0.12
## 41   -0.994053410 -0.98467552 -1.0000000 -1.00000000 -1.000000000 -0.20
0.28
## 42   -0.992702430 -0.99009595 -1.0000000 -1.00000000 -1.000000000 -0.48 -
0.28
## 43   -0.996099230 -0.98692944 -1.0000000 -1.00000000 -1.000000000 -0.48 -
0.12
## 44   -0.995938480 -0.98954152 -1.0000000 -1.00000000 -1.000000000  0.08 -
0.36
## 45   -0.995002400 -0.99409035 -1.0000000 -1.00000000 -1.000000000  0.12 -
0.32
## 46   -0.994267940 -0.99752586 -1.0000000 -1.00000000 -1.000000000  0.16 -
0.32
## 47   -0.992367750 -0.99339156 -1.0000000 -1.00000000 -1.000000000  0.12 -
0.08
## 48   -0.994159420 -0.98796741 -1.0000000 -1.00000000 -1.000000000 -0.04 -
0.20
## 49   -0.992344050 -0.98775348 -1.0000000 -1.00000000 -1.000000000 -0.08 -
0.20
## 50   -0.994598000 -0.99671180 -1.0000000 -1.00000000 -1.000000000 -0.08
0.00
## 51   -0.994736880 -0.99168903 -1.0000000 -1.00000000 -1.000000000 -0.04 -
0.32
## 52   -0.896151460 -0.97624998 -0.6469475 -0.52130996 -0.942216280 -0.52 -
0.44
## 53   -0.990267950 -0.98570662 -1.0000000 -1.00000000 -1.000000000  0.04 -
0.28
## 54   -0.994140820 -0.99208665 -1.0000000 -1.00000000 -1.000000000 -0.52 -
0.28
## 55   -0.994109250 -0.99374776 -1.0000000 -1.00000000 -1.000000000 -0.64
0.28
## 56   -0.995653090 -0.98931135 -1.0000000 -1.00000000 -1.000000000 -0.60
0.24
## 57   -0.991539990 -0.98626879 -1.0000000 -1.00000000 -1.000000000 -0.64
0.24
## 58   -0.993998580 -0.98701509 -1.0000000 -1.00000000 -1.000000000 -0.64 -
0.40
## 59   -0.991468390 -0.99012756 -1.0000000 -1.00000000 -1.000000000 -0.08 -
0.04
## 60   -0.988431650 -0.98992988 -1.0000000 -1.00000000 -1.000000000 -0.12 -
0.40
```

```
## 61   -0.987784360 -0.99072692 -1.0000000 -1.00000000 -1.000000000  0.04 -
0.40
## 62   -0.991590380 -0.98977229 -1.0000000 -1.00000000 -1.000000000 -0.64 -
0.16
## 63   -0.993632990 -0.98664140 -1.0000000 -1.00000000 -1.000000000 -0.36
0.16
## 64   -0.994446330 -0.99035285 -1.0000000 -1.00000000 -1.000000000 -0.32 -
0.52
## 65   -0.901066860 -0.92425287 -0.4685732 -0.35957646 -0.472575720 -0.04
0.04
## 66   -0.992299050 -0.97902502 -1.0000000 -1.00000000 -0.942216280  0.04
0.08
## 67   -0.770053400 -0.80314930 -0.3613149  0.04456702 -0.272704960 -0.68 -
0.72
## 68   -0.752040850 -0.82067619 -0.3017259  0.10615776 -0.188980990 -0.32 -
0.68
## 69   -0.928772960 -0.95219289 -0.7585198 -0.57464283 -0.637649920 -0.20 -
0.88
## 70   -0.832848280 -0.85500443 -0.2397250 -0.28363441 -0.320929940  0.08 -
0.12
## 71   -0.414781160 -0.73119938  0.1647686  0.54028383  0.218721740 -0.32 -
0.76
## 72   -0.349559030 -0.71014508  0.1381383  0.53742870  0.142599440 -0.24 -
0.76
## 73   -0.925220130 -0.90816170 -0.4358503 -0.45740273 -0.503761290 -0.20 -
1.00
## 74   -0.975051590 -0.99115560 -0.9436990 -0.93912029 -1.000000000 -0.16 -
1.00
## 75   -0.982118910 -0.98637663 -0.9027237 -1.00000000 -1.000000000 -0.12 -
0.12
## 76   -0.993360690 -0.98992082 -1.0000000 -1.00000000 -1.000000000 -0.28
0.08
## 77   -0.996258190 -0.98699438 -1.0000000 -1.00000000 -1.000000000  0.00
0.08
## 78   -0.989686840 -0.98779196 -1.0000000 -1.00000000 -1.000000000  0.12 -
0.32
## 79   -0.410271440 -0.64509966  0.6651367  0.56372869  0.131521590 -0.32 -
0.40
## 80   -0.378681610 -0.60303213  0.5227795  0.54213217  0.294396450 -0.48 -
0.40
## 81   -0.365481620 -0.60107598  0.6676022  0.63526221  0.196490490 -0.48 -
0.40
## 82   -0.403021890 -0.52336070  0.6780974  0.50468259  0.363306910 -0.48 -
0.56
## 83   -0.147259460 -0.50541838  0.5544265  0.70569082  0.401853650 -0.48 -
0.56
## 84   -0.352237820 -0.55430835  0.4366041  0.52779536  0.405999070 -0.48 -
0.56
## 85   -0.406380510 -0.49431541  0.6613912  0.58928407  0.378260770 -0.32 -
0.40
```

```
## 86   -0.241968450 -0.57691109  0.6265589  0.61046747  0.386674480 -0.32 -
0.40
## 87   -0.358827340 -0.52591886  0.5718566  0.59295317  0.272055580 -0.52 -
0.60
## 88   -0.171463950 -0.44502105  0.6006399  0.70382000  0.317505540 -0.48 -
0.40
## 89   -0.375480430 -0.56248189  0.6212255  0.55997351  0.342296880 -0.48 -
0.28
## 90   -0.426925540 -0.54726090  0.6209165  0.62567680  0.355409780 -0.48 -
0.56
## 91   -0.479070420 -0.44898927  0.6212335  0.62500366  0.385656870 -0.48 -
0.56
## 92   -0.294790200 -0.39896185  0.6529742  0.60133058  0.377442790 -0.76 -
0.56
## 93   -0.139482610 -0.46224364  0.6475721  0.75100913  0.432906820 -0.48 -
0.48
## 94   -0.179262540 -0.52305250  0.6860613  0.77060412  0.278027080 -0.48 -
0.40
## 95   -0.354471140 -0.48763629  0.6947629  0.61169706  0.414692350 -0.28 -
0.56
## 96   -0.393815540 -0.51682172  0.6989230  0.49416333  0.380937480 -0.32 -
0.40
## 97   -0.182724420 -0.47026445  0.5922884  0.62888453  0.379416390 -0.32 -
0.60
## 98   -0.351646970 -0.56147305  0.5223909  0.65432361  0.295982720 -0.36 -
0.44
## 99   -0.243786780 -0.53280118  0.6522099  0.71693794  0.345664000 -0.48 -
0.56
## 100  -0.416460290 -0.61459183  0.6064322  0.64248707  0.322071130 -0.28 -
0.56
## 101  -0.362691230 -0.57139442  0.6909927  0.63679274  0.244506370 -0.48 -
0.56
## 102  -0.086763417 -0.44402497  0.7274024  0.80146455  0.384548440 -0.44 -
0.36
## 103  -0.046196676 -0.52446659  0.7303913  0.76013009  0.409051570 -0.48 -
0.56
## 104   0.137106050 -0.60855995  0.6402343  0.77738233  0.301516490 -0.12 -
0.40
## 105  -0.194220850 -0.58414333  0.6713589  0.75924946  0.332368810 -0.32 -
0.40
## 106  -0.358012210 -0.58854377  0.6329118  0.61797631  0.268342850 -0.48 -
0.40
## 107  -0.127814560 -0.49161961  0.6824699  0.72852330  0.354321450 -0.48 -
0.40
## 108  -0.334823240 -0.49628259  0.6970289  0.77478810  0.382969670 -0.48 -
0.56
## 109  -0.186900750 -0.53829635  0.4965102  0.69178642  0.318473710 -0.48 -
0.28
## 110  -0.280032750 -0.58517287  0.5624886  0.74185111  0.365758310 -0.32 -
0.40
```

```
## 111 -0.282474460 -0.54700510  0.6480964  0.69963776  0.287102120 -0.32 -
0.40
## 112 -0.194556810 -0.44406576  0.6711090  0.76336303  0.513814930 -0.48 -
0.36
## 113 -0.438867210 -0.50376303  0.7228208  0.62997951  0.320127100 -0.48 -
0.56
## 114 -0.419488240 -0.57469006  0.6089982  0.62736966  0.342616590 -0.48 -
0.56
## 115 -0.368451360 -0.54576714  0.6118003  0.63517897  0.286377800 -0.48 -
0.56
## 116 -0.233865270 -0.64044184  0.6108804  0.64006976  0.330416720 -0.48 -
0.40
## 117 -0.196422780 -0.49166748  0.5771489  0.63105672  0.342814760 -0.32 -
0.40
## 118 -0.342621210 -0.54600356  0.6796418  0.64268211  0.302614480 -0.32 -
0.40
## 119 -0.501899730 -0.58509941  0.4696923  0.57527935  0.260213040 -0.32 -
0.40
## 120 -0.385455530 -0.53209698  0.5925323  0.55037590  0.259457720 -0.32 -
0.40
## 121 -0.313907270 -0.58492665  0.5826150  0.57768413  0.262519860 -0.32 -
0.60
## 122 -0.200159660 -0.61953030  0.5680120  0.70190482  0.260167260 -0.16 -
0.44
## 123 -0.273431360 -0.60112923  0.6374513  0.72204450  0.303246360 -0.52 -
0.44
## 124 -0.342689480 -0.59430079  0.5911586  0.65745287  0.301841860 -0.32 -
0.40
## 125 -0.396165360 -0.52478486  0.4636550  0.51067904  0.306082210 -0.32 -
0.40
## 126 -0.276250000 -0.60137760  0.6069145  0.55193171  0.243626680 -0.28
0.00
## 127 -0.386903530 -0.45867670  0.7237731  0.56855977  0.369859210 -0.88 -
0.36
## 128 -0.211368390 -0.30061546  0.6985848  0.66835129  0.515998650 -0.88 -
0.56
## 129 -0.218844240 -0.33501122  0.6417031  0.70279026  0.491069800 -0.28 -
0.52
## 130 -0.217645710 -0.31973143  0.7368227  0.73298835  0.551493040 -0.88 -
0.64
## 131 -0.063852109 -0.31720036  0.8005562  0.70961525  0.576976210 -0.88 -
0.40
## 132 -0.287540940 -0.26578850  0.8019676  0.65104274  0.580090520 -0.88 -
0.28
## 133 -0.422823390 -0.22344436  0.6805171  0.55061280  0.509889220 -0.88 -
0.28
## 134 -0.385632660 -0.26238919  0.7159055  0.56480667  0.497789730 -0.68 -
0.32
## 135 -0.188802160  0.09644528  0.7722124  0.52865054  0.619468920 -0.88 -
0.40
```

```
## 136 -0.214096970 -0.02888595  0.6499321  0.71581067  0.697539970 -0.20 -
0.36
## 137 -0.314238100 -0.30685888  0.7810311  0.66263852  0.545186690 -0.84 -
0.60
## 138  0.009318812 -0.31597133  0.7994826  0.67106552  0.576546390 -0.20 -
0.32
## 139 -0.178870400 -0.37210175  0.7047531  0.57600555  0.448010630 -0.68 -
0.68
## 140 -0.290674610 -0.50613059  0.7011604  0.54998382  0.474603920 -0.32 -
0.60
## 141 -0.396601340 -0.28701251  0.7261867  0.54588867  0.509823590 -0.84 -
0.64
## 142 -0.425308800 -0.22506951  0.7503325  0.51892557  0.614532470 -0.84 -
0.28
## 143 -0.250975770 -0.48129225  0.5416599  0.63320242  0.310317800 -0.84 -
0.36
## 144 -0.404790700 -0.59788353  0.7112076  0.59027850  0.338545240 -0.84 -
0.36
## 145 -0.270562170 -0.46764617  0.6935587  0.72256186  0.468608390 -0.24 -
0.48
## 146  0.010013189 -0.48457774  0.7144301  0.77771055  0.522585030 -0.24 -
0.24
## 147 -0.436836330 -0.50920855  0.7272914  0.60060823  0.400129030 -0.68 -
0.52
## 148 -0.506291320 -0.50036486  0.6542015  0.39121391  0.398510370 -0.88 -
0.64
## 149 -0.340862680 -0.23975113  0.7233024  0.51029949  0.506357270 -0.24 -
0.12
## 150 -0.291015200 -0.41281554  0.6828770  0.61311098  0.450937640 -0.24 -
0.40
## 151 -0.604004150 -0.64895315  0.4186011  0.26842784  0.132161410 -0.72 -
0.88
## 152 -0.653586820 -0.71500045  0.3387240  0.20972026  0.090247872 -0.72 -
0.88
## 153 -0.680074210 -0.78723207  0.2615774  0.33377566 -0.023108747 -0.88 -
0.88
## 154 -0.514770080 -0.71769208  0.3455691  0.42532153  0.081859556 -0.88 -
0.44
## 155 -0.461015080 -0.58908771  0.4047198  0.49958018  0.172803060 -0.32 -
0.48
## 156 -0.545209640 -0.69703097  0.4340955  0.38459932  0.133053940 -0.28 -
0.44
## 157 -0.626526400 -0.64583762  0.4577116  0.33560234  0.141511620 -0.88 -
0.40
## 158 -0.499586370 -0.64970340  0.4270923  0.41894963  0.169511970 -0.88 -
0.72
## 159 -0.611832250 -0.72783463  0.5058570  0.28486459  0.113616450 -0.88 -
0.88
## 160 -0.621057170 -0.71064541  0.4012443  0.28338038  0.012289068 -0.88 -
0.88
```

```
## 161 -0.450371170 -0.65140250  0.4237100  0.36582629  0.104094100 -0.88 -
0.88
## 162 -0.546686220 -0.68371657  0.4179177  0.33887923  0.107884130 -0.72 -
0.88
## 163 -0.586903810 -0.76360790  0.3982216  0.31566544 -0.064575600 -0.36 -
0.88
## 164 -0.496397130 -0.80375698  0.4216279  0.38991030 -0.058183882 -0.32 -
0.88
## 165 -0.654329280 -0.78898389  0.3771208  0.34942531 -0.040443826 -0.72 -
0.88
## 166 -0.678637420 -0.74760224  0.1979828  0.18214324 -0.022251440 -0.88 -
0.88
## 167 -0.645317440 -0.79961611  0.1356273  0.20635136  0.007925612 -0.88 -
0.88
## 168 -0.578912540 -0.78434433  0.3004982  0.36181892  0.048318977 -0.88 -
0.88
## 169 -0.426438530 -0.75025336  0.4133454  0.54421694  0.022314449 -0.88 -
0.88
## 170 -0.381112330 -0.70103782  0.4189300  0.55733313  0.068372659 -0.88 -
0.88
## 171 -0.584993550 -0.74913653  0.3600102  0.34198529  0.034288472 -0.88 -
0.88
## 172 -0.531622760 -0.71459318  0.3238679  0.47281490  0.052543230 -0.16 -
0.48
## 173 -0.333047740 -0.75328579  0.3413291  0.45532843  0.031723749 -0.24 -
0.44
## 174 -0.518407310 -0.75286547  0.4465942  0.46158159  0.061729402 -0.24 -
0.48
## 175 -0.632914630 -0.71730209  0.3575005  0.33470299  0.027462688 -0.88 -
0.48
## 176 -0.476674630 -0.74776054  0.5103603  0.38541743 -0.029682998 -0.32 -
0.40
## 177 -0.988590810 -0.98456765 -1.0000000 -1.00000000 -1.000000000 -0.16 -
0.76
##          NA           NA           NA           NA           NA           NA
## 1    -1.00  0.870384510  0.210697000  0.26370789 -0.703685770 -0.90374251
## 2    -0.32  0.608513520 -0.053675613  0.06314827 -0.630304950 -0.91039449
## 3    -0.28  0.115434000 -0.193436340  0.03825433 -0.594758830 -0.92354104
## 4    -0.28  0.035798053 -0.093035847  0.16809523 -0.263851400 -0.75722852
## 5     0.04  0.273350200  0.079135382  0.29238418 -0.522157110 -0.81298725
## 6     0.52  0.328835890  0.054771404  0.32094497 -0.594628710 -0.90533841
## 7     0.00  0.356404110  0.050785859  0.20893077 -0.298142240 -0.65219086
## 8    -0.04  0.294943480  0.022930174  0.02694164 -0.606378320 -0.87103902
## 9    -0.04  0.286449480  0.152200080  0.25011504 -0.477107310 -0.79942107
## 10   -0.08  0.211778580 -0.041894735  0.02995693 -0.488761080 -0.86825037
## 11   -0.68  0.298147060 -0.116641590  0.07587141 -0.427557230 -0.79356544
## 12    0.04  0.362423010  0.085267402  0.23596642 -0.474231640 -0.84250823
## 13   -0.28  0.272144630  0.197263570  0.14741231 -0.374494320 -0.74681725
## 14   -0.16  0.270963850  0.170853970 -0.02255032 -0.401720880 -0.83619668
## 15   -0.48  0.431678730 -0.311964500 -0.06730017 -0.536218580 -0.89823199
```

```
## 16    0.04   0.293521350 -0.038750943   0.31368835 -0.627149320 -0.90234856
## 17   -0.52   0.298100650  0.042417242   0.21892784 -0.246761530 -0.62983069
## 18   -0.24   0.239296220 -0.067847456   0.13728835 -0.510274530 -0.82855905
## 19   -0.44   0.328290760 -0.052247515   0.06668089 -0.575663850 -0.85813461
## 20    0.00   0.153222510 -0.008567331   0.23363094 -0.769501100 -0.94713002
## 21   -0.28   0.302778950  0.145946530   0.08777639 -0.617007450 -0.90432600
## 22    0.04   0.321051150  0.308977270   0.40567757 -0.550060990 -0.86323966
## 23   -0.04   0.315472120  0.151835270   0.27388505 -0.438127310 -0.84857989
## 24   -0.40   0.307074080  0.087754562   0.19355673 -0.594439550 -0.87283076
## 25    0.28   0.478843330  0.169540350   0.32078760 -0.296682110 -0.73768773
## 26    0.32   0.223872220  0.236000150   0.29543031 -0.497287250 -0.87555034
## 27    0.00   0.467846190  0.201639270   0.29315673  0.184093630 -0.20675026
## 28   -1.00   0.259880550 -0.598503440  -0.27117090 -0.276026620 -0.77156238
## 29    0.04   0.187730560 -0.198845260   0.22072527 -0.424358980 -0.79994498
## 30    0.04   0.460114210  0.031410500   0.16349957 -0.662650550 -0.91872901
## 31   -0.96  -0.006406553 -0.604098500  -1.00000000  0.071059033 -0.42897192
## 32   -0.92  -0.245814910 -0.601925070  -0.94151016 -0.242352300 -0.71242425
## 33   -0.88   0.263047660 -0.549491890  -0.58818391  0.250695100 -0.23621787
## 34   -0.48   0.240032130 -0.226336210  -0.12355492 -0.625218520 -0.92750631
## 35   -0.44   0.410774550  0.209076250  -0.08994818 -0.532493190 -0.88636602
## 36   -0.32   0.234097900  0.303833850   0.24861129 -0.596795520 -0.87159158
## 37   -0.28   0.249081440  0.230650290   0.13494586 -0.466915860 -0.81330780
## 38    0.32   0.157007750  0.055799457   0.08142481 -0.563828650 -0.86793341
## 39   -0.12   0.273963040 -0.297175150   0.11202399 -0.368269730 -0.74708896
## 40   -0.40   0.378709750  0.161354560   0.08031657 -0.232272470 -0.74198267
## 41   -0.40   0.014616459  0.109348470   0.08422511 -0.506320380 -0.84918184
## 42   -0.36   0.031498302  0.224320890   0.08030522 -0.619408140 -0.91815573
## 43   -0.16   0.283633610  0.029142162   0.11532156 -0.616825980 -0.91265509
## 44   -0.28   0.326857550  0.149419060   0.31863939 -0.607611960 -0.87976862
## 45   -0.24   0.256640230  0.291651150   0.09012413 -0.725764840 -0.94173030
## 46   -0.20   0.215328580  0.015661251  -0.01866270 -0.259207410 -0.64492619
## 47   -0.20   0.227294420  0.126603340   0.11905236  0.308725330  0.07941842
## 48   -0.20   0.280923370 -0.048640788   0.13977148 -0.426814450 -0.80550025
## 49   -0.40   0.245466650  0.006360147  -0.01846428 -0.166662380 -0.61766035
## 50   -0.40   0.300477840  0.104530590   0.24729601 -0.432656810 -0.82977503
## 51    0.04   0.392535400  0.154774560   0.43060319 -0.614694190 -0.88959988
## 52   -0.44  -0.054980692 -0.166353430  -0.12840717 -0.408992360 -0.84805415
## 53    0.16   0.152576040  0.087052284   0.16369105 -0.476008670 -0.84927081
## 54   -0.56   0.249632450  0.102151850   0.25505110 -0.629488670 -0.90305949
## 55   -0.24   0.254816150  0.178791820   0.43735373 -0.323029790 -0.72167728
## 56   -0.20   0.168071250  0.303643110   0.33697381 -0.597141330 -0.92467389
## 57   -0.24   0.187720100  0.275884060   0.18979962 -0.474653950 -0.79309229
## 58    0.08   0.149532160  0.142851660   0.44449049 -0.315409480 -0.64125802
## 59    0.12   0.126268740  0.047782148   0.18853112 -0.528144240 -0.86048152
## 60    0.04   0.160048740  0.276633320   0.10515966 -0.627250610 -0.92584221
## 61    0.20   0.180982510  0.174287760   0.43300776 -0.514409430 -0.82476222
## 62   -0.16   0.265143770  0.182162160   0.31662248 -0.412157360 -0.75637146
## 63    0.16   0.239106500  0.062977287   0.26689833 -0.678267880 -0.93035126
## 64    0.16   0.262981730  0.151033540   0.28121312 -0.589475370 -0.88473559
## 65   -0.04   0.015272279  0.391993640  -0.02135718 -0.556616170 -0.82629940
```

```
## 66   -0.16   0.084542057 -0.003190855   0.11757263 -0.533933910 -0.90130044
## 67   -0.72  -0.346337740 -0.868525060  -0.55169544 -0.657140560 -0.92745709
## 68   -0.72  -0.402187610 -0.879951110  -0.58193048 -0.635300470 -0.90537285
## 69   -0.88   0.018574341 -0.477699620  -0.18934396 -0.309238520 -0.77131015
## 70   -0.36   0.128185320 -0.192542110  -0.41708085 -0.148498050 -0.65376594
## 71   -0.72  -0.089937610 -0.245490300  -0.29874883 -0.669772080 -0.92913410
## 72   -0.68  -0.068720793 -0.243446760  -0.26722372 -0.611178450 -0.92357875
## 73   -0.52  -0.283167860 -0.353021180   0.07558809 -0.320341990 -0.78821669
## 74   -0.08   0.255911290 -0.553216760   0.14471338 -0.389663860 -0.80537578
## 75   -0.48   0.279288250  0.001172976  -0.02100248 -0.391210900 -0.81890697
## 76   -0.04   0.230982370  0.238524670   0.08736471 -0.432352860 -0.78374833
## 77    0.04   0.140042410  0.111757250   0.31428141 -0.462318710 -0.84219929
## 78   -0.20   0.211051620  0.089327877   0.24773636 -0.486300810 -0.85162061
## 79   -0.32  -0.352554420 -0.520371050   0.05423699 -0.412856340 -0.83456258
## 80   -0.20  -0.289005870 -0.316830680  -0.18418296 -0.136743590 -0.66765604
## 81   -0.20  -0.134446240 -0.481985960  -0.04421427 -0.253163650 -0.68797046
## 82   -0.48  -0.276362490 -0.465123230  -0.32863964 -0.150466350 -0.63777661
## 83   -0.48  -0.381210790 -0.375564710  -0.30822461 -0.200684800 -0.73430695
## 84   -0.48  -0.180471020 -0.138494410  -0.13384882 -0.130031500 -0.65639438
## 85   -0.48  -0.330580840 -0.492023070  -0.27933850 -0.281336570 -0.76379392
## 86   -0.12  -0.345606670 -0.489902390  -0.14728448  0.129271210 -0.37300511
## 87   -0.44  -0.332986790 -0.401323810  -0.41857923 -0.238513220 -0.66540428
## 88   -0.32  -0.219178720 -0.452316640  -0.33949949 -0.139920190 -0.58528405
## 89   -0.20  -0.229217400 -0.449689060  -0.06787222 -0.148322440 -0.63225960
## 90   -0.20  -0.318310920 -0.485382180  -0.08352900 -0.061615380 -0.55097008
## 91   -0.08  -0.392358750 -0.274769840  -0.32646668 -0.178386850 -0.68603624
## 92   -0.08  -0.359667860 -0.228486780  -0.13327222 -0.267095110 -0.75398183
## 93   -0.28  -0.216483070 -0.470084840  -0.06296673 -0.065043215 -0.57453733
## 94   -0.20  -0.243286370 -0.412748970   0.06757033 -0.231066840 -0.73860316
## 95   -0.48  -0.331318360 -0.559033940  -0.22841367 -0.071518710 -0.59887154
## 96   -0.48  -0.331815000 -0.344648510  -0.23217950  0.071211582 -0.42246746
## 97   -0.52  -0.342772250 -0.378649940  -0.30493266  0.023584523 -0.52328736
## 98    0.08  -0.192872100 -0.178049850  -0.10522578 -0.017478730 -0.51535055
## 99   -0.20  -0.184624350 -0.446856090  -0.18124728 -0.293908550 -0.78265801
## 100  -0.28  -0.073983134 -0.413338350  -0.05150952 -0.299782800 -0.77890238
## 101  -0.36  -0.114936540 -0.225185610   0.05918218 -0.287959770 -0.74474152
## 102  -0.16  -0.057830859 -0.184909370  -0.22832287 -0.381869010 -0.82706498
## 103  -0.08  -0.086241252 -0.178531760  -0.35050674 -0.351408430 -0.79943647
## 104  -0.12  -0.271681540 -0.466369570  -0.43938567 -0.110851440 -0.61508879
## 105  -0.24  -0.317790520 -0.410972970  -0.36270218 -0.303001540 -0.76300981
## 106  -0.48  -0.250847750 -0.474016200  -0.04400893 -0.115944610 -0.60991680
## 107  -0.48  -0.191355590 -0.540937190  -0.23146966 -0.007055681 -0.46200334
## 108  -0.48  -0.059079043 -0.398276270  -0.23338101 -0.248395160 -0.70034811
## 109  -0.20  -0.007655887 -0.303390660  -0.28942290 -0.098444902 -0.61154656
## 110  -0.20  -0.047169782 -0.311082020  -0.21587245 -0.209274700 -0.62060736
## 111  -0.24  -0.162028130 -0.374847260  -0.23736969 -0.111090810 -0.59456608
## 112   0.00  -0.243111420 -0.167227100  -0.13925351 -0.501337740 -0.89102364
## 113  -0.28  -0.127713070 -0.426190910   0.04309276 -0.454197340 -0.83255296
## 114  -0.08  -0.169694180 -0.381895910  -0.03749856 -0.063198476 -0.54878282
## 115  -0.48  -0.356282200 -0.550763990  -0.14688551 -0.084351938 -0.57450921
```

```
## 116 -0.12 -0.271107810 -0.664585780 -0.20774195 -0.140305300 -0.63730333
## 117 -0.12 -0.166036400 -0.620376600 -0.43162317 -0.229969450 -0.74483471
## 118 -0.48 -0.267513700 -0.334539560 -0.40371659 -0.122370690 -0.63647215
## 119 -0.20  0.004542003 -0.291633140 -0.35860352 -0.211904560 -0.69488062
## 120 -0.52 -0.323090100 -0.287335260 -0.60851107 -0.027279444 -0.48536793
## 121 -0.16 -0.255003670 -0.446516840 -0.48668632 -0.161372530 -0.63879098
## 122 -0.16 -0.193775610 -0.175663880 -0.36469334 -0.341535370 -0.72830596
## 123 -0.52 -0.295475280 -0.274065560 -0.39676247 -0.295949780 -0.72368706
## 124 -0.48 -0.410939620 -0.610553410 -0.48784869 -0.267682130 -0.72840083
## 125 -0.52 -0.132528450 -0.523385060 -0.40734420 -0.184558150 -0.67196123
## 126 -0.28 -0.195135810 -0.226247450 -0.14740992 -0.405838600 -0.79644307
## 127 -0.28 -0.140235580 -0.196698350  0.13527624 -0.237476810 -0.74210969
## 128  0.00 -0.238883040 -0.483521490  0.13610791 -0.428696940 -0.84658223
## 129  0.08 -0.280084540 -0.452922460  0.08742917 -0.270275820 -0.72315273
## 130  0.08 -0.353904410 -0.413993560  0.05014936 -0.461598910 -0.84048604
## 131 -0.36 -0.262410120 -0.487292880 -0.18398575 -0.551370470 -0.88601091
## 132 -0.08 -0.176864760 -0.334501460 -0.05817107 -0.529797820 -0.87616910
## 133 -0.20 -0.191936170 -0.222003300  0.12116946 -0.386195180 -0.80801453
## 134 -0.20 -0.310422160 -0.466825300  0.39894588 -0.444469460 -0.83152254
## 135 -0.44 -0.016140638 -0.222306700  0.20508578 -0.507269210 -0.87911649
## 136 -0.20 -0.200069380 -0.340319770 -0.17508936 -0.245297420 -0.69691762
## 137 -0.32 -0.230615760 -0.420187980  0.20105257 -0.399272160 -0.84590395
## 138 -0.04 -0.232437090 -0.576305810 -0.05654591 -0.689052100 -0.93760179
## 139 -0.04 -0.115551780 -0.528505170  0.04177160 -0.236540390 -0.69008490
## 140 -0.12 -0.513217120 -0.540051040 -0.20146557 -0.288666710 -0.76017201
## 141 -0.12 -0.224003870 -0.087172286  0.06015677 -0.403637350 -0.83634216
## 142 -0.16 -0.150818590 -0.127035790 -0.05694928  0.181797050 -0.17122527
## 143 -0.24 -0.321803170 -0.356993080 -0.14241632 -0.175366100 -0.65839999
## 144 -0.08 -0.294788860 -0.210691030 -0.11374115 -0.187532710 -0.65433439
## 145 -0.12 -0.273274210 -0.450206000 -0.44636541 -0.058279609 -0.53188376
## 146 -0.16 -0.222751040 -0.392696930 -0.36882117 -0.178323470 -0.64726629
## 147 -0.12 -0.312756650 -0.325615880 -0.31797483 -0.400601550 -0.77253719
## 148 -0.16 -0.112981510 -0.390527900 -0.13860559 -0.244872320 -0.73922437
## 149 -0.04 -0.191088430 -0.311940820 -0.04712262 -0.192994380 -0.53873500
## 150 -0.24 -0.320970710 -0.219089050 -0.01054931 -0.351225580 -0.74189165
## 151 -0.20 -0.271729760 -0.481095770 -0.75439631 -0.308111550 -0.78575353
## 152 -0.64 -0.369058930 -0.254321840 -0.78493488 -0.210714320 -0.66783664
## 153 -0.96 -0.536079010 -0.590728850 -0.60613227 -0.233768960 -0.66315420
## 154 -0.88 -0.554327130 -0.386788430 -0.50516342 -0.254728980 -0.68480104
## 155 -0.96 -0.448798420 -0.502353970 -0.53430909  0.019406691 -0.47783610
## 156 -0.96 -0.429619600 -0.680114990 -0.44432121 -0.542252710 -0.90964031
## 157 -0.96 -0.294879190 -0.708329660 -0.46002336 -0.416242990 -0.81523527
## 158 -0.96 -0.221701650 -0.474956780 -0.44670790 -0.222034000 -0.69977552
## 159 -0.96 -0.357681110 -0.561097950 -0.36474898 -0.244695280 -0.75502377
## 160 -0.96 -0.523293430 -0.522396980 -0.76434704 -0.148415490 -0.68725968
## 161 -0.04 -0.488243600 -0.543183950 -0.61933715 -0.257491070 -0.73204928
## 162 -0.88 -0.429211060 -0.446701240 -0.58342019 -0.384793210 -0.82749845
## 163 -0.96 -0.353320500 -0.583237930 -0.47621482 -0.227803600 -0.71992834
## 164 -0.96 -0.346888700 -0.449218030 -0.64292802 -0.496691380 -0.88539830
## 165 -0.96 -0.235986950 -0.319506030 -0.72967527 -0.194548780 -0.69432433
```

```
## 166 -0.96 -0.450780470 -0.582321720 -0.43787111  0.029892182 -0.50287756
## 167 -0.96 -0.519384720 -0.469470070 -0.54594667 -0.009211363 -0.52610467
## 168 -0.96 -0.424085370 -0.480054770 -0.70853669 -0.062629718 -0.61341799
## 169 -0.96 -0.344234460 -0.486037460 -0.40647624 -0.242425070 -0.70974697
## 170 -0.88 -0.324508060 -0.560952410 -0.48576606 -0.462088560 -0.83551725
## 171 -0.88 -0.471925630 -0.784185700 -0.44975370 -0.320549850 -0.76389699
## 172 -0.48 -0.362143090 -0.640596220 -0.40637380 -0.247977850 -0.76882175
## 173 -0.88 -0.462080400 -0.573269790 -0.63740271 -0.474202710 -0.84486746
## 174 -0.88 -0.567500510 -0.619785930 -0.49726850 -0.387402590 -0.79628582
## 175 -0.96 -0.318140220 -0.638267670 -0.45830215 -0.139219360 -0.66248620
## 176 -0.96 -0.249508630 -0.368882220 -0.52716644 -0.421078880 -0.83042856
## 177 -0.56  0.489125010  0.035155548  0.27919699 -0.466932880 -0.75514981
##                 NA          NA          NA          NA          NA          NA
## 1   -0.582573620 -0.93631005 -0.50734474 -0.8055359 -0.9999865 -0.9999796
## 2   -0.414423540 -0.85058640 -0.65553468 -0.9159869 -0.9999963 -0.9999797
## 3   -0.528934210 -0.91298509 -0.80340654 -0.9801332 -0.9999936 -0.9999443
## 4   -0.396039260 -0.82963474 -0.57703837 -0.8933748 -0.9999978 -0.9999651
## 5   -0.496559960 -0.90390837 -0.76436937 -0.9662039 -0.9999953 -0.9999829
## 6   -0.664972250 -0.95645992 -0.72259902 -0.9432911 -0.9999878 -0.9999855
## 7   -0.643008520 -0.94989992 -0.42013736 -0.8325819 -0.9999879 -0.9999797
## 8   -0.635874720 -0.95316199 -0.38012059 -0.7717600 -0.9999924 -0.9999718
## 9   -0.490461150 -0.91272572 -0.27934516 -0.6318599 -0.9999966 -0.9999795
## 10  -0.449148030 -0.87360518 -0.57461666 -0.8565246 -0.9999799 -0.9999387
## 11  -0.490969590 -0.87628926 -0.70412647 -0.9151155 -0.9999760 -0.9999436
## 12  -0.620583670 -0.93297361 -0.50988745 -0.8681000 -0.9999978 -0.9999827
## 13  -0.500929850 -0.87757848 -0.46694007 -0.8220289 -0.9999987 -0.9999874
## 14  -0.443383650 -0.84957493 -0.42595412 -0.7613189 -0.9999973 -0.9999824
## 15  -0.724212230 -0.98881084 -0.54599422 -0.8719334 -0.9999925 -0.9999489
## 16  -0.726632320 -0.97283829 -0.55794170 -0.8965090 -0.9999895 -0.9999749
## 17  -0.642590880 -0.96469286 -0.62482303 -0.8056657 -0.9999848 -0.9999825
## 18  -0.652622020 -0.95254813 -0.45411374 -0.8257815 -0.9999937 -0.9999819
## 19  -0.576404530 -0.90636310 -0.53642637 -0.8935255 -0.9999836 -0.9999834
## 20  -0.374994920 -0.79789946 -0.62805379 -0.9290909 -0.9999922 -0.9999672
## 21  -0.477982790 -0.86700641 -0.81807946 -0.9730895 -0.9999973 -0.9999654
## 22  -0.604320490 -0.95027667 -0.57593016 -0.9119584 -0.9999962 -0.9999837
## 23  -0.570532010 -0.94711670 -0.47651286 -0.8240605 -0.9999909 -0.9999841
## 24  -0.532634090 -0.87916417 -0.62329939 -0.8899067 -0.9999915 -0.9999867
## 25  -0.644418280 -0.95055734 -0.56248361 -0.8334021 -0.9999978 -0.9999756
## 26  -0.527150250 -0.89147165 -0.42819343 -0.7699307 -0.9999969 -0.9999787
## 27  -0.606522500 -0.94488394 -0.76557603 -0.9854489 -0.9999960 -0.9999991
## 28  -0.144367050 -0.56594391 -0.03264695 -0.2930160 -0.9999694 -0.9999574
## 29  -0.197726040 -0.57349656 -0.73217495 -0.9694135 -0.9999769 -0.9999689
## 30  -0.542161720 -0.92151213 -0.53053645 -0.8156604 -0.9999946 -0.9999792
## 31  -0.544480110 -0.93796314 -0.46751086 -0.8456485 -0.9965997 -0.9946565
## 32  -0.467138450 -0.88436374 -0.30870775 -0.7149273 -0.9950080 -0.9940763
## 33  -0.504714970 -0.89615422 -0.53958467 -0.8778192 -0.9988856 -0.9996025
## 34  -0.526276040 -0.89511420 -0.56528260 -0.8852258 -0.9999389 -0.9999322
## 35  -0.513405100 -0.88214453 -0.72271594 -0.9437076 -0.9999948 -0.9999919
## 36  -0.648194600 -0.95974488 -0.62070121 -0.8900834 -0.9999915 -0.9999869
## 37  -0.502987440 -0.90527840 -0.57254548 -0.9223785 -0.9999910 -0.9999933
```

```
## 38    -0.679948620 -0.98042196 -0.63726803 -0.9219292 -0.9999894 -0.9999826
## 39    -0.754410400 -0.96809423 -0.64257604 -0.9026279 -0.9999560 -0.9999361
## 40    -0.403010030 -0.82190541 -0.56465244 -0.8688646 -0.9999894 -0.9999526
## 41    -0.442449490 -0.88120972 -0.57125157 -0.8659839 -0.9999794 -0.9999575
## 42    -0.439844480 -0.86754679 -0.52833093 -0.8606803 -0.9999827 -0.9999426
## 43    -0.243003850 -0.72911083 -0.57583602 -0.8528235 -0.9999725 -0.9999681
## 44    -0.362719050 -0.84390963 -0.56608255 -0.8766445 -0.9999779 -0.9999877
## 45    -0.246431940 -0.67039582 -0.50472307 -0.7704737 -0.9999879 -0.9999653
## 46    -0.526459220 -0.91418336 -0.53003662 -0.8158500 -0.9999914 -0.9999648
## 47    -0.514712980 -0.89257552 -0.59001714 -0.8398502 -0.9999893 -0.9999659
## 48    -0.420206310 -0.82671719 -0.80478653 -0.9867385 -0.9999897 -0.9999704
## 49    -0.587478240 -0.95209849 -0.54739554 -0.8683123 -0.9999916 -0.9999682
## 50    -0.443232220 -0.86060118 -0.40619041 -0.8083157 -0.9999911 -0.9999773
## 51    -0.409157970 -0.84698752 -0.47945604 -0.7836249 -0.9999906 -0.9999614
## 52    -0.538937980 -0.93381380 -0.70516400 -0.9231404 -0.9997660 -0.9979645
## 53    -0.487328630 -0.88589751 -0.63591922 -0.9217835 -0.9999780 -0.9999390
## 54    -0.406005380 -0.82325562 -0.64212387 -0.8846184 -0.9999907 -0.9999520
## 55    -0.595289020 -0.89910221 -0.68460719 -0.9386473 -0.9999958 -0.9999391
## 56    -0.391188720 -0.80723466 -0.64121310 -0.9394417 -0.9999914 -0.9999557
## 57    -0.670539580 -0.96334594 -0.55800806 -0.8968347 -0.9999929 -0.9999264
## 58    -0.501052440 -0.88948972 -0.63883393 -0.8878616 -0.9999911 -0.9999177
## 59    -0.415815370 -0.83267618 -0.60809664 -0.8965705 -0.9999968 -0.9999445
## 60    -0.622651090 -0.95584841 -0.60521252 -0.8783701 -0.9999958 -0.9999410
## 61    -0.559186790 -0.90784473 -0.45973266 -0.8106777 -0.9999794 -0.9999313
## 62    -0.564537440 -0.93831463 -0.70498936 -0.9460993 -0.9999907 -0.9999250
## 63    -0.697570480 -0.98204202 -0.67494187 -0.9152739 -0.9999977 -0.9999358
## 64    -0.570082220 -0.94399886 -0.55071242 -0.8507134 -0.9999912 -0.9999380
## 65    -0.437048140 -0.86326250 -0.57736104 -0.8192970 -0.9977517 -0.9986566
## 66    -0.676546230 -0.95235169 -0.66823973 -0.9138662 -0.9999467 -0.9997829
## 67    -0.369720510 -0.84997282 -0.73264609 -0.9561950 -0.9932951 -0.9937294
## 68    -0.384601640 -0.84390728 -0.67760246 -0.9370398 -0.9918875 -0.9941158
## 69    -0.520410570 -0.93740534 -0.51689763 -0.8686356 -0.9994971 -0.9997007
## 70    -0.651696400 -0.94523733 -0.57951994 -0.9076291 -0.9956191 -0.9983298
## 71    -0.637576740 -0.93156171 -0.38864907 -0.7626876 -0.9801020 -0.9660877
## 72    -0.628350870 -0.93794062 -0.43098500 -0.8029336 -0.9866067 -0.9634052
## 73    -0.463163940 -0.88656996 -0.84374544 -0.9525562 -0.9977723 -0.9972067
## 74    -0.020890211 -0.39246349 -0.36140416 -0.7573047 -0.9999372 -0.9998721
## 75    -0.713880290 -0.96519615 -0.64604273 -0.9278048 -0.9999589 -0.9998872
## 76    -0.451197780 -0.85551590 -0.75796217 -0.9811188 -0.9999792 -0.9999640
## 77    -0.497460500 -0.90621673 -0.73681395 -0.9399274 -0.9999669 -0.9999472
## 78    -0.537498040 -0.93254149 -0.73661650 -0.9629829 -0.9999741 -0.9999193
## 79    -0.220164070 -0.72149239 -0.46517941 -0.8422007 -0.8510157 -0.6917314
## 80    -0.016548002 -0.53411100 -0.26703592 -0.6765774 -0.8036466 -0.6265507
## 81    -0.307514040 -0.81628191 -0.44366884 -0.8490434 -0.8148828 -0.7629799
## 82    -0.213108940 -0.74967550 -0.42610215 -0.8335913 -0.7768754 -0.7336914
## 83    -0.212308520 -0.70493029 -0.28299356 -0.6912771 -0.7665435 -0.7854631
## 84    -0.162331440 -0.66566429 -0.19078477 -0.6062173 -0.6836006 -0.8434512
## 85    -0.191997670 -0.73127305 -0.34808672 -0.7638978 -0.7162931 -0.7774702
## 86     0.054612688 -0.45142198 -0.49920070 -0.8681587 -0.8249323 -0.7093602
## 87    -0.089528226 -0.59627009 -0.63250551 -0.9459419 -0.8646644 -0.7441914
```

```
## 88   -0.180157910 -0.68643350 -0.57032531 -0.9006721 -0.7882059 -0.7539344
## 89   -0.284966660 -0.82141818 -0.20202429 -0.6120843 -0.7944064 -0.7283842
## 90    0.024486371 -0.45222264 -0.42100090 -0.7700433 -0.7819576 -0.6914047
## 91    0.402806920  0.04309494 -0.43904037 -0.8240622 -0.7498467 -0.7295781
## 92   -0.004220009 -0.54918388 -0.32667008 -0.7411881 -0.6255493 -0.7534678
## 93   -0.189087420 -0.71152228 -0.38595522 -0.7510011 -0.7109975 -0.7300584
## 94   -0.300213990 -0.80820890 -0.29789383 -0.7151923 -0.7681956 -0.7021175
## 95   -0.219387390 -0.74142536 -0.44542706 -0.8274270 -0.7875375 -0.7164062
## 96    0.021967599 -0.51935447 -0.36018113 -0.7450900 -0.8199053 -0.6581903
## 97   -0.191874040 -0.67216371 -0.46494005 -0.8018253 -0.8704674 -0.7242956
## 98    0.076338631 -0.41557238 -0.12035292 -0.5777179 -0.8431671 -0.8311888
## 99   -0.251082560 -0.76924394 -0.44823371 -0.7909279 -0.7526308 -0.6470674
## 100   0.057949125 -0.41546430 -0.58840826 -0.8315354 -0.6240090 -0.6240272
## 101   0.128364530 -0.32617050 -0.55861477 -0.8925898 -0.6884599 -0.5990217
## 102  -0.123600460 -0.62884697 -0.55598385 -0.9124708 -0.7204328 -0.7166961
## 103  -0.330590150 -0.82076143 -0.47801080 -0.8382098 -0.7659757 -0.8132924
## 104  -0.223449980 -0.69837186 -0.16508976 -0.6211137 -0.7743866 -0.7485067
## 105  -0.067666778 -0.49471290 -0.35809794 -0.7731975 -0.7518291 -0.7740174
## 106  -0.215626350 -0.72990251 -0.41635582 -0.7357148 -0.7518124 -0.7258042
## 107  -0.223306760 -0.72366095 -0.50797154 -0.8423648 -0.7457698 -0.5990719
## 108  -0.106173810 -0.62586183 -0.39115459 -0.8231823 -0.7822219 -0.7205833
## 109  -0.274277950 -0.79180872 -0.29792077 -0.7083344 -0.8015993 -0.7870505
## 110  -0.050532866 -0.57008324 -0.52500313 -0.8624305 -0.8423628 -0.7740514
## 111  -0.049883569 -0.54064609 -0.48017451 -0.8326251 -0.8367421 -0.7575123
## 112  -0.089315803 -0.64990934 -0.51971375 -0.8779908 -0.7242574 -0.6878011
## 113  -0.060800706 -0.58149958 -0.52825473 -0.8765802 -0.7829752 -0.6674896
## 114  -0.072324590 -0.57850794 -0.47952514 -0.8266298 -0.7945199 -0.6818765
## 115  -0.089918434 -0.57608605 -0.48658215 -0.7765228 -0.7768867 -0.7200577
## 116  -0.054085557 -0.56341865 -0.38014442 -0.7700510 -0.7480993 -0.7522693
## 117   0.008341515 -0.46242586 -0.48333452 -0.8489982 -0.7467982 -0.7086782
## 118   0.172499350 -0.24502132 -0.65194731 -0.9401494 -0.8331691 -0.7018358
## 119   0.107588850 -0.35960200 -0.57111622 -0.9109536 -0.8673057 -0.8474466
## 120  -0.105159930 -0.60586476 -0.52908285 -0.8842955 -0.8820035 -0.7719718
## 121  -0.237936350 -0.73595556 -0.42596318 -0.8156343 -0.8803700 -0.7751905
## 122  -0.259348840 -0.74509567 -0.34102986 -0.7409980 -0.8762061 -0.8314397
## 123  -0.300915360 -0.74976679 -0.42346936 -0.8219944 -0.8913892 -0.6826037
## 124  -0.225193080 -0.74853722 -0.34172641 -0.7698926 -0.8690282 -0.7126521
## 125  -0.164201170 -0.74067484 -0.51127487 -0.8322684 -0.8908548 -0.8440819
## 126  -0.491181070 -0.91719754 -0.27190710 -0.6511396 -0.7300596 -0.8873446
## 127  -0.266444260 -0.72230634 -0.45730023 -0.8149007 -0.6157540 -0.8646641
## 128  -0.470601530 -0.89430607 -0.58802587 -0.9148830 -0.6547252 -0.8792203
## 129  -0.352806850 -0.84431701 -0.47397861 -0.8420296 -0.7130795 -0.8396053
## 130  -0.447064370 -0.86170713 -0.40757425 -0.8260080 -0.5232378 -0.7293709
## 131  -0.464507160 -0.87838908 -0.37342488 -0.8030187 -0.4553530 -0.6786599
## 132  -0.425980220 -0.89640722 -0.05588135 -0.4906443 -0.6116217 -0.7918952
## 133  -0.076429116 -0.57078337 -0.31049131 -0.5828826 -0.6107070 -0.8697968
## 134  -0.325642700 -0.83085586 -0.60332565 -0.9228620 -0.6974791 -0.8024239
## 135  -0.386340520 -0.82684913 -0.53994280 -0.8799088 -0.5777406 -0.6428724
## 136  -0.498899080 -0.90308070 -0.52435353 -0.8672851 -0.6464435 -0.6688831
## 137  -0.369939740 -0.87650445 -0.23445049 -0.6914399 -0.6185207 -0.5969764
```

```
## 138  -0.499417640 -0.93558044 -0.46020588 -0.8601936 -0.4951330 -0.7361171
## 139  -0.524203830 -0.91421739 -0.29043135 -0.7052268 -0.6090266 -0.6243972
## 140  -0.446988890 -0.90952726 -0.35114247 -0.7444412 -0.4311471 -0.8586833
## 141  -0.395181360 -0.86896554 -0.44662188 -0.8266327 -0.5687824 -0.5589131
## 142  -0.653960030 -0.93538806 -0.47510134 -0.8392372 -0.2991103 -0.7788867
## 143  -0.374477110 -0.83726919 -0.33474315 -0.7520777 -0.5109942 -0.7358392
## 144  -0.146481370 -0.61796795 -0.33140304 -0.6645412 -0.5742914 -0.7163724
## 145  -0.301506500 -0.80629451 -0.42987547 -0.8639471 -0.6918394 -0.8724398
## 146  -0.449487400 -0.90266418 -0.32427641 -0.7608702 -0.6095622 -0.7124498
## 147  -0.394828010 -0.82366730 -0.44319270 -0.8329188 -0.5878331 -0.6035127
## 148  -0.436343370 -0.90381871 -0.31487054 -0.6915436 -0.6589275 -0.8064129
## 149  -0.527166110 -0.91975307 -0.55975948 -0.8820107 -0.6585425 -0.8725734
## 150  -0.424463570 -0.87253458 -0.38697127 -0.8360118 -0.6286908 -0.8233210
## 151  -0.262670230 -0.68487668 -0.15721414 -0.5756066 -0.8541273 -0.9012383
## 152  -0.126308070 -0.62162816 -0.54468983 -0.9121842 -0.8211068 -0.9087812
## 153  -0.443808830 -0.87696484 -0.42496056 -0.8381028 -0.8339273 -0.9366925
## 154  -0.123693210 -0.62101363 -0.57482495 -0.8899642 -0.8809642 -0.9297627
## 155  -0.298484360 -0.78117521 -0.46278465 -0.8474449 -0.8439482 -0.9196528
## 156  -0.345701780 -0.84364251 -0.44433106 -0.8333146 -0.8987696 -0.8941615
## 157  -0.349514220 -0.84757744 -0.62669522 -0.8850520 -0.8717872 -0.9109959
## 158  -0.428556220 -0.87630640 -0.60576150 -0.9129404 -0.8552571 -0.9342634
## 159  -0.183516310 -0.66916404 -0.43203829 -0.8088950 -0.7482849 -0.9085041
## 160  -0.236374400 -0.69767857 -0.44856043 -0.8698694 -0.8207203 -0.9227419
## 161  -0.381453630 -0.84065892 -0.52225406 -0.9216677 -0.8400973 -0.8768994
## 162  -0.266911550 -0.75586916 -0.49218299 -0.8759848 -0.8493472 -0.8656695
## 163  -0.415255140 -0.86614241 -0.47264675 -0.7866551 -0.8672746 -0.9556400
## 164  -0.447403500 -0.87083355 -0.40923466 -0.8208611 -0.8774443 -0.9339857
## 165  -0.247178430 -0.73074342 -0.24728510 -0.6840439 -0.8353985 -0.9376680
## 166  -0.176016620 -0.65932080 -0.26377212 -0.6275232 -0.8537002 -0.9582880
## 167  -0.236646670 -0.70708138 -0.19903783 -0.6275194 -0.8733349 -0.9616046
## 168  -0.241217220 -0.71736202 -0.29488639 -0.7472468 -0.8368564 -0.9334895
## 169  -0.403266240 -0.86495568 -0.35158266 -0.7702225 -0.8345572 -0.9372345
## 170  -0.514134350 -0.92627957 -0.52357357 -0.8582907 -0.8567943 -0.9468422
## 171  -0.234776840 -0.77396884 -0.41127011 -0.7714321 -0.9014466 -0.9128833
## 172  -0.359218910 -0.84802015 -0.48651273 -0.8235545 -0.9039302 -0.9287288
## 173  -0.433705600 -0.88706831 -0.53607901 -0.8546323 -0.9229491 -0.9338445
## 174  -0.319357730 -0.81727820 -0.32800527 -0.7543916 -0.8783778 -0.8982356
## 175  -0.279844480 -0.81577839 -0.32788824 -0.7420045 -0.8405279 -0.9153584
## 176  -0.300259680 -0.81141043 -0.42527705 -0.6852835 -0.8913310 -0.8505695
## 177  -0.558695970 -0.91404660 -0.72028060 -0.9374390 -0.9999778 -0.9999882
##               NA          NA          NA          NA         NA         NA
## 1     -0.99997478 -0.99995513 -0.9999186 -0.99964011 -0.9994833 -0.9999609
## 2     -0.99994892 -0.99996834 -0.9999101 -0.99981369 -0.9999203 -0.9999607
## 3     -0.99982744 -0.99984140 -0.9999222 -0.99990585 -0.9998736 -0.9999965
## 4     -0.99984325 -0.99986543 -0.9999959 -0.99993038 -0.9999417 -0.9999992
## 5     -0.99994662 -0.99993883 -0.9999616 -0.99992890 -0.9999581 -0.9999949
## 6     -0.99993089 -0.99991554 -0.9999256 -0.99985903 -0.9999402 -0.9999969
## 7     -0.99993068 -0.99994837 -0.9999251 -0.99990731 -0.9999128 -0.9999673
## 8     -0.99993406 -0.99996758 -0.9999351 -0.99984103 -0.9999471 -0.9999941
## 9     -0.99995756 -0.99994221 -0.9999544 -0.99991709 -0.9999393 -1.0000000
```

```
## 10     -0.99991797 -0.99977498 -0.9998864 -0.99990932 -0.9998747 -0.9999947
## 11     -0.99993213 -0.99978278 -0.9998868 -0.99988618 -0.9997855 -0.9999863
## 12     -0.99997742 -0.99996540 -0.9999896 -0.99995789 -0.9999171 -0.9999903
## 13     -0.99998793 -0.99997460 -0.9999633 -0.99998108 -0.9999837 -0.9999981
## 14     -0.99995806 -0.99995575 -0.9999359 -0.99995185 -0.9999696 -0.9999931
## 15     -0.99985341 -0.99982161 -0.9998333 -0.99986845 -0.9998360 -0.9998727
## 16     -0.99994087 -0.99992573 -0.9999158 -0.99992286 -0.9999174 -0.9999938
## 17     -0.99995068 -0.99984385 -0.9999585 -0.99992698 -0.9999531 -0.9999826
## 18     -0.99993210 -0.99989297 -0.9999501 -0.99990527 -0.9999352 -0.9999998
## 19     -0.99996042 -0.99992714 -0.9999050 -0.99991693 -0.9999620 -0.9999969
## 20     -0.99998870 -0.99994985 -0.9998978 -0.99995936 -0.9999563 -1.0000000
## 21     -0.99998147 -0.99991625 -0.9999582 -0.99988523 -0.9999460 -0.9999993
## 22     -0.99994633 -0.99990573 -0.9999602 -0.99987732 -0.9999150 -0.9999992
## 23     -0.99993855 -0.99992867 -0.9999289 -0.99995675 -0.9999202 -0.9999974
## 24     -0.99996980 -0.99991643 -0.9999399 -0.99995095 -0.9999634 -0.9999989
## 25     -0.99996556 -0.99994285 -0.9999480 -0.99995104 -0.9999706 -0.9999539
## 26     -0.99992876 -0.99996118 -0.9999584 -0.99991968 -0.9999527 -0.9999990
## 27     -0.99993598 -0.99993648 -0.9999507 -0.99992941 -0.9999474 -0.9999914
## 28     -0.99951817 -0.99939548 -0.9997878 -0.99961827 -0.9998216 -0.9999710
## 29     -0.99993131 -0.99979552 -0.9998886 -0.99989135 -0.9999191 -0.9999946
## 30     -0.99996899 -0.99986155 -0.9998897 -0.99986602 -0.9999134 -0.9999981
## 31     -0.99121569 -0.99622189 -0.9928284 -0.99240466 -0.9975217 -0.9950132
## 32     -0.98303949 -0.99451943 -0.9912833 -0.99252038 -0.9964610 -0.9999887
## 33     -0.99293027 -0.99751098 -0.9971842 -0.99848646 -0.9954245 -0.9949287
## 34     -0.99992319 -0.99977656 -0.9998362 -0.99979027 -0.9998969 -0.9999149
## 35     -0.99992829 -0.99984655 -0.9998157 -0.99990708 -0.9999401 -0.9999966
## 36     -0.99997230 -0.99998345 -0.9998949 -0.99994343 -0.9999631 -0.9999987
## 37     -0.99994615 -0.99993606 -0.9999424 -0.99996369 -0.9999087 -0.9999983
## 38     -0.99991672 -0.99991029 -0.9999454 -0.99995732 -0.9999048 -0.9999998
## 39     -0.99968296 -0.99965783 -0.9996652 -0.99978360 -0.9997756 -0.9999387
## 40     -0.99986253 -0.99977279 -0.9998699 -0.99991350 -0.9998881 -0.9998865
## 41     -0.99993765 -0.99993387 -0.9999102 -0.99993629 -0.9999615 -0.9999976
## 42     -0.99995230 -0.99984300 -0.9998766 -0.99983007 -0.9999836 -0.9999995
## 43     -0.99997625 -0.99985274 -0.9998896 -0.99982952 -0.9999795 -0.9999881
## 44     -0.99997443 -0.99991457 -0.9998341 -0.99989162 -0.9999629 -0.9999972
## 45     -0.99996699 -0.99984152 -0.9998513 -0.99986292 -0.9999613 -0.9999986
## 46     -0.99993679 -0.99973980 -0.9999286 -0.99988459 -0.9999345 -0.9999992
## 47     -0.99996517 -0.99971031 -0.9999671 -0.99983477 -0.9999712 -0.9999991
## 48     -0.99994379 -0.99977132 -0.9998750 -0.99988734 -0.9999793 -0.9999986
## 49     -0.99987609 -0.99986677 -0.9999290 -0.99988992 -0.9999200 -0.9999958
## 50     -0.99991381 -0.99989625 -0.9999205 -0.99986757 -0.9999375 -0.9999935
## 51     -0.99996106 -0.99983588 -0.9998558 -0.99988282 -0.9998499 -0.9999697
## 52     -0.99925100 -0.99693055 -0.9990951 -0.99976005 -0.9985132 -0.9996305
## 53     -0.99995659 -0.99981814 -0.9999469 -0.99990367 -0.9999234 -0.9999764
## 54     -0.99997884 -0.99993192 -0.9998559 -0.99988423 -0.9999850 -0.9999935
## 55     -0.99997014 -0.99990380 -0.9998902 -0.99991966 -0.9999644 -0.9999922
## 56     -0.99997187 -0.99988538 -0.9999192 -0.99995579 -0.9999054 -0.9999940
## 57     -0.99994016 -0.99985056 -0.9998942 -0.99989573 -0.9998917 -0.9999986
## 58     -0.99992827 -0.99986801 -0.9998476 -0.99993625 -0.9999031 -0.9999946
## 59     -0.99995700 -0.99992460 -0.9999112 -0.99990584 -0.9999788 -0.9999991
```

```
## 60   -0.99996545 -0.99990735 -0.9998956 -0.99988743 -0.9999900 -0.9999967
## 61   -0.99994379 -0.99986845 -0.9998776 -0.99978934 -0.9999845 -0.9999744
## 62   -0.99993781 -0.99992423 -0.9998151 -0.99983982 -0.9999746 -0.9999906
## 63   -0.99992656 -0.99991789 -0.9999491 -0.99977961 -0.9999649 -0.9999875
## 64   -0.99990363 -0.99984042 -0.9998738 -0.99977586 -0.9999359 -0.9999865
## 65   -0.99857736 -0.99077072 -0.9993813 -0.99202477 -0.9964076 -0.9999125
## 66   -0.99975780 -0.99965373 -0.9996134 -0.99980291 -0.9998746 -0.9999379
## 67   -0.99337318 -0.99385740 -0.9929815 -0.99607357 -0.9965683 -0.9995773
## 68   -0.99259981 -0.99319386 -0.9926324 -0.99516400 -0.9963572 -0.9999798
## 69   -0.99869706 -0.99915358 -0.9993821 -0.99929827 -0.9996895 -0.9993270
## 70   -0.98793725 -0.95789897 -0.9895112 -0.99121747 -0.9955438 -0.9968691
## 71   -0.93301155 -0.88860957 -0.9608550 -0.96647970 -0.9614874 -0.9999790
## 72   -0.93272000 -0.93394077 -0.9633093 -0.97284872 -0.9647651 -0.9973619
## 73   -0.99058719 -0.99824287 -0.9976258 -0.99851421 -0.9983199 -0.9998947
## 74   -0.99917262 -0.99932683 -0.9995539 -0.99961687 -0.9995362 -0.9999598
## 75   -0.99915069 -0.99944063 -0.9995471 -0.99966019 -0.9997067 -0.9999305
## 76   -0.99992615 -0.99987691 -0.9998322 -0.99987013 -0.9999311 -0.9999951
## 77   -0.99990577 -0.99984173 -0.9998792 -0.99987785 -0.9999194 -0.9999854
## 78   -0.99989111 -0.99966554 -0.9997346 -0.99978613 -0.9999307 -0.9999997
## 79   -0.61502969 -0.77833500 -0.8153980 -0.90451904 -0.9363922 -0.9771978
## 80   -0.57060659 -0.66421903 -0.9075072 -0.86888258 -0.9026950 -0.9478925
## 81   -0.68226991 -0.55556361 -0.8390429 -0.83772257 -0.8241314 -0.9585321
## 82   -0.58120438 -0.51739857 -0.8665061 -0.87538819 -0.9141262 -0.9751472
## 83   -0.64051066 -0.62673174 -0.9315871 -0.86948121 -0.9630355 -0.9933004
## 84   -0.80563060 -0.62415838 -0.8779956 -0.92717176 -0.8636200 -0.9365016
## 85   -0.51617396 -0.48371548 -0.9384282 -0.91743613 -0.8527412 -0.9822943
## 86   -0.25512837 -0.43243508 -0.9445440 -0.85486539 -0.9386180 -0.9886779
## 87   -0.80085618 -0.81639774 -0.9533270 -0.82029093 -0.9267915 -0.9606993
## 88   -0.67527427 -0.74064235 -0.8541819 -0.82731031 -0.8836568 -0.9798198
## 89   -0.70720212 -0.61256979 -0.7805564 -0.85003370 -0.8935969 -0.9788404
## 90   -0.57300328 -0.57311082 -0.7879140 -0.82304418 -0.9518725 -0.9983081
## 91   -0.64345217 -0.65098033 -0.8567935 -0.84687684 -0.9649410 -0.9994839
## 92   -0.72378734 -0.72055802 -0.8879877 -0.79238045 -0.9341682 -0.9995444
## 93   -0.63489097 -0.57619658 -0.9150337 -0.80033797 -0.6790953 -0.9909808
## 94   -0.30460247 -0.72021651 -0.9003654 -0.79742187 -0.7572640 -0.9974734
## 95   -0.09209173 -0.72202943 -0.8531564 -0.85693943 -0.8147090 -0.9999260
## 96   -0.33354579 -0.68416919 -0.8733440 -0.93851024 -0.8354383 -0.9698038
## 97   -0.21980260 -0.79208618 -0.9590647 -0.79026775 -0.8882958 -0.9925955
## 98   -0.38434907 -0.80122000 -0.8972047 -0.81902087 -0.7902460 -0.9060949
## 99   -0.53230161 -0.64127094 -0.8973007 -0.76385163 -0.6827345 -0.9511817
## 100  -0.53562418 -0.51446552 -0.8721055 -0.63545355 -0.5109413 -0.8885964
## 101  -0.56738837 -0.64341052 -0.8089860 -0.78173572 -0.5925454 -0.9170811
## 102  -0.38970311 -0.73045680 -0.6719825 -0.73019443 -0.6117906 -0.9314143
## 103  -0.51615484 -0.65922773 -0.8026719 -0.83240630 -0.7406589 -0.9907155
## 104  -0.54275696 -0.61061710 -0.8953210 -0.83197564 -0.9354467 -0.9962900
## 105  -0.58031015 -0.70002775 -0.7874977 -0.86153430 -0.8991022 -0.9973165
## 106  -0.65563733 -0.68696600 -0.7880817 -0.85240267 -0.8869974 -0.9621204
## 107  -0.63186467 -0.51020233 -0.7914369 -0.75409084 -0.8229345 -0.9951051
## 108  -0.51732206 -0.61932099 -0.7724186 -0.65653726 -0.7465904 -0.9760329
## 109  -0.52789349 -0.72984535 -0.8446330 -0.70887052 -0.6905794 -0.9479082
```

```
## 110 -0.51676724 -0.62825859 -0.9059240 -0.57100746 -0.7749456 -0.9116780
## 111 -0.53815412 -0.57259103 -0.9269221 -0.70646929 -0.7367561 -0.9755232
## 112 -0.69867113 -0.51172161 -0.7990343 -0.67926529 -0.8757742 -0.9994388
## 113 -0.63038874 -0.50521585 -0.7757239 -0.67683555 -0.7641258 -0.9976849
## 114 -0.60524952 -0.59000040 -0.8230937 -0.69874401 -0.9194362 -0.9842878
## 115 -0.63279105 -0.66210527 -0.8952312 -0.81072647 -0.9796660 -0.9996755
## 116 -0.56434695 -0.64032271 -0.9056363 -0.79245562 -0.9216496 -0.9942391
## 117 -0.41949668 -0.56786115 -0.8839564 -0.79091800 -0.8577036 -0.8706036
## 118 -0.45113838 -0.49600699 -0.8846124 -0.82160165 -0.9097727 -0.9808817
## 119 -0.63810096 -0.80628848 -0.9007071 -0.79306542 -0.8595316 -0.7906836
## 120 -0.47847195 -0.87616793 -0.8467940 -0.90187560 -0.9260569 -0.9858199
## 121 -0.48941648 -0.84547282 -0.8297883 -0.83528005 -0.8667651 -0.9909182
## 122 -0.70344277 -0.79406815 -0.8703660 -0.83224260 -0.8454014 -0.9977478
## 123 -0.55566493 -0.73906033 -0.8669578 -0.87096288 -0.8859092 -0.9792497
## 124 -0.54486157 -0.75446994 -0.8991283 -0.84452838 -0.9216706 -0.9977523
## 125 -0.52517156 -0.68001298 -0.9203398 -0.83736846 -0.9067588 -0.8973402
## 126 -0.58163325 -0.72345653 -0.8049225 -0.80030241 -0.8306211 -0.9990285
## 127 -0.49246743 -0.59690318 -0.8339658 -0.84671753 -0.7847346 -0.9707261
## 128 -0.50911244 -0.48020004 -0.8229427 -0.82647367 -0.9069395 -0.9991972
## 129 -0.52004621 -0.60413794 -0.9121025 -0.83760480 -0.9309206 -0.9497079
## 130 -0.55662172 -0.55872867 -0.7647012 -0.73769235 -0.8203802 -0.9997893
## 131 -0.54034290 -0.24644625 -0.7155826 -0.70864535 -0.8501738 -0.9883710
## 132 -0.53879168 -0.38462681 -0.4910132 -0.82724619 -0.9531006 -0.9838115
## 133 -0.68344657 -0.69548577 -0.5272504 -0.86746338 -0.9121274 -0.9696116
## 134 -0.62250705 -0.59602422 -0.8279702 -0.88466063 -0.9005783 -0.9823881
## 135 -0.49303677 -0.09061318 -0.6473273  0.01557063 -0.7758379 -0.9482435
## 136 -0.21543439 -0.36420850 -0.7647560 -0.65991061 -0.8869211 -0.8530567
## 137 -0.14366841 -0.68261115 -0.7426337 -0.56279409 -0.6955843 -0.8951421
## 138 -0.58722787 -0.49563632 -0.6358010 -0.27379957 -0.7811236 -0.9699158
## 139 -0.67476368 -0.44475428 -0.6035062 -0.55525242 -0.8902097 -0.8575491
## 140 -0.32902854 -0.76689017 -0.8136802 -0.89624266 -0.9510503 -0.9577141
## 141 -0.43144779 -0.49033534 -0.7314032 -0.64881445 -0.7606608 -0.9172146
## 142 -0.44684470 -0.56483950 -0.7726798 -0.46914612 -0.8017712 -0.9642156
## 143 -0.47589874 -0.76919917 -0.8195261 -0.80724801 -0.7915933 -0.9228523
## 144 -0.50377169 -0.58469374 -0.8020122 -0.75473402 -0.8742881 -0.9499416
## 145 -0.12769045 -0.66044881 -0.8089796 -0.75452616 -0.8843085 -0.9521673
## 146 -0.34197246 -0.61102975 -0.6180304 -0.62066525 -0.9343360 -0.9797077
## 147 -0.75049545 -0.74395031 -0.6922156 -0.69466101 -0.7854205 -0.9896360
## 148 -0.35781987 -0.85955178 -0.8483855 -0.63538180 -0.7273996 -0.9642265
## 149 -0.34974831 -0.67314516 -0.8287891 -0.48513446 -0.8411465 -0.9986782
## 150 -0.61082147 -0.59592959 -0.8189346 -0.64478235 -0.9018924 -0.9938402
## 151 -0.81272942 -0.97658260 -0.9137578 -0.87580852 -0.9109940 -0.9999048
## 152 -0.88126006 -0.95299517 -0.9475265 -0.90704705 -0.9539571 -0.9986800
## 153 -0.91163652 -0.96365745 -0.9663665 -0.95116643 -0.9725211 -0.9976242
## 154 -0.88779817 -0.93903722 -0.9647924 -0.97163404 -0.9590194 -0.9971674
## 155 -0.77923544 -0.92413486 -0.9616062 -0.95197300 -0.9657923 -0.9991891
## 156 -0.83151685 -0.89305800 -0.9335431 -0.95949898 -0.9707948 -0.9776459
## 157 -0.79263249 -0.92338389 -0.9163489 -0.93144849 -0.9232645 -0.9852158
## 158 -0.73571284 -0.90815800 -0.9203093 -0.90840385 -0.8450848 -0.9994743
## 159 -0.68708199 -0.83734449 -0.9321373 -0.91887932 -0.8834680 -0.9925677
```

```
## 160 -0.79951469 -0.89791545 -0.9766566 -0.92190438 -0.9692540 -0.9967050
## 161 -0.88549973 -0.93030142 -0.9715014 -0.89109772 -0.9808539 -0.9984984
## 162 -0.83645026 -0.91963270 -0.9486147 -0.90037442 -0.9728771 -0.9942812
## 163 -0.80036826 -0.94604801 -0.9494855 -0.94792268 -0.9557002 -0.9910688
## 164 -0.78301912 -0.95891485 -0.9195026 -0.90278577 -0.9670980 -0.9998774
## 165 -0.83646301 -0.92938326 -0.9330586 -0.93132729 -0.9569487 -0.9947822
## 166 -0.93784934 -0.93389304 -0.9827396 -0.97085759 -0.9702919 -0.9980578
## 167 -0.93876143 -0.97144536 -0.9898950 -0.97839534 -0.9835730 -0.9817344
## 168 -0.86046668 -0.94083958 -0.9787326 -0.94297067 -0.9711900 -0.9992223
## 169 -0.82368095 -0.86713036 -0.9103803 -0.97014196 -0.9616809 -0.9993296
## 170 -0.86911424 -0.89881888 -0.8730963 -0.96347228 -0.9738404 -0.9873340
## 171 -0.89813855 -0.95730971 -0.9596631 -0.95619160 -0.9687389 -0.9978260
## 172 -0.84354382 -0.93778734 -0.9590760 -0.95442747 -0.9725308 -0.9876566
## 173 -0.87204454 -0.89928717 -0.9652576 -0.95642430 -0.9830718 -0.9996157
## 174 -0.84387555 -0.90554887 -0.9502801 -0.95711271 -0.9838813 -0.9989337
## 175 -0.87970144 -0.88879762 -0.9703809 -0.90088022 -0.9637246 -0.9968832
## 176 -0.75380800 -0.93345523 -0.9455812 -0.77570945 -0.8841773 -0.9926986
## 177 -0.99994829 -0.99993419 -0.9999172 -0.99989861 -0.9997877 -0.9999894
##             NA          NA         NA          NA         NA          NA
## 1   -0.9999823 -0.99997072 -0.9998110 -0.9994847 -0.9999808 -0.9998519
## 2   -0.9999867 -0.99995600 -0.9998767 -0.9999141 -0.9999744 -0.9999058
## 3   -0.9999628 -0.99980377 -0.9999227 -0.9998752 -0.9999085 -0.9998430
## 4   -0.9999781 -0.99982688 -0.9999824 -0.9999426 -0.9999268 -0.9999009
## 5   -0.9999883 -0.99994120 -0.9999587 -0.9999579 -0.9999748 -0.9999391
## 6   -0.9999866 -0.99991847 -0.9999058 -0.9999407 -0.9999674 -0.9998864
## 7   -0.9999830 -0.99993274 -0.9999253 -0.9999080 -0.9999644 -0.9999237
## 8   -0.9999799 -0.99994388 -0.9999047 -0.9999469 -0.9999632 -0.9999241
## 9   -0.9999867 -0.99995137 -0.9999490 -0.9999404 -0.9999778 -0.9999351
## 10  -0.9999531 -0.99984640 -0.9999002 -0.9998759 -0.9999356 -0.9997788
## 11  -0.9999545 -0.99986107 -0.9998909 -0.9997866 -0.9999423 -0.9997784
## 12  -0.9999893 -0.99997732 -0.9999895 -0.9999167 -0.9999875 -0.9999794
## 13  -0.9999928 -0.99998971 -0.9999813 -0.9999837 -0.9999943 -0.9999807
## 14  -0.9999889 -0.99995771 -0.9999509 -0.9999688 -0.9999797 -0.9999464
## 15  -0.9999653 -0.99981568 -0.9998476 -0.9998142 -0.9999205 -0.9997780
## 16  -0.9999806 -0.99993087 -0.9999254 -0.9999176 -0.9999664 -0.9999071
## 17  -0.9999834 -0.99990264 -0.9999558 -0.9999506 -0.9999724 -0.9998671
## 18  -0.9999870 -0.99990951 -0.9999413 -0.9999364 -0.9999681 -0.9998936
## 19  -0.9999835 -0.99994701 -0.9999158 -0.9999621 -0.9999763 -0.9999017
## 20  -0.9999768 -0.99997943 -0.9999284 -0.9999571 -0.9999818 -0.9999269
## 21  -0.9999780 -0.99995892 -0.9999385 -0.9999468 -0.9999800 -0.9999089
## 22  -0.9999892 -0.99992641 -0.9999366 -0.9999164 -0.9999754 -0.9998998
## 23  -0.9999871 -0.99993032 -0.9999482 -0.9999212 -0.9999708 -0.9999246
## 24  -0.9999891 -0.99994975 -0.9999532 -0.9999639 -0.9999843 -0.9999189
## 25  -0.9999848 -0.99995799 -0.9999587 -0.9999623 -0.9999793 -0.9999421
## 26  -0.9999864 -0.99993685 -0.9999528 -0.9999533 -0.9999664 -0.9999517
## 27  -0.9999990 -0.99993172 -0.9999516 -0.9999467 -0.9999793 -0.9999326
## 28  -0.9999604 -0.99936222 -0.9997141 -0.9998191 -0.9997876 -0.9993736
## 29  -0.9999712 -0.99986602 -0.9998943 -0.9999195 -0.9999552 -0.9997900
## 30  -0.9999856 -0.99992496 -0.9998845 -0.9999146 -0.9999813 -0.9998322
## 31  -0.9950566 -0.99137785 -0.9920709 -0.9966005 -0.9926739 -0.9918943
```

```
## 32    -0.9939735 -0.98414070 -0.9910807 -0.9965201 -0.9886611 -0.9899720
## 33    -0.9992487 -0.99330544 -0.9974996 -0.9945233 -0.9966828 -0.9964942
## 34    -0.9999306 -0.99985124 -0.9998174 -0.9998822 -0.9999197 -0.9997244
## 35    -0.9999938 -0.99988606 -0.9998517 -0.9999405 -0.9999722 -0.9997991
## 36    -0.9999892 -0.99998120 -0.9999199 -0.9999635 -0.9999854 -0.9999460
## 37    -0.9999931 -0.99993961 -0.9999601 -0.9999100 -0.9999784 -0.9999381
## 38    -0.9999855 -0.99990492 -0.9999595 -0.9999064 -0.9999611 -0.9999186
## 39    -0.9999408 -0.99960837 -0.9996998 -0.9997677 -0.9998353 -0.9995577
## 40    -0.9999663 -0.99980144 -0.9998908 -0.9998682 -0.9999248 -0.9997709
## 41    -0.9999650 -0.99993189 -0.9999272 -0.9999617 -0.9999527 -0.9999143
## 42    -0.9999569 -0.99990356 -0.9998609 -0.9999838 -0.9999519 -0.9998027
## 43    -0.9999687 -0.99992685 -0.9998695 -0.9999776 -0.9999705 -0.9998156
## 44    -0.9999836 -0.99995260 -0.9998577 -0.9999630 -0.9999818 -0.9998534
## 45    -0.9999737 -0.99991456 -0.9998575 -0.9999617 -0.9999710 -0.9997993
## 46    -0.9999750 -0.99984586 -0.9999183 -0.9999356 -0.9999604 -0.9997651
## 47    -0.9999748 -0.99985541 -0.9999237 -0.9999716 -0.9999712 -0.9997469
## 48    -0.9999778 -0.99986528 -0.9998834 -0.9999794 -0.9999653 -0.9997649
## 49    -0.9999773 -0.99985353 -0.9999208 -0.9999207 -0.9999388 -0.9998605
## 50    -0.9999829 -0.99989643 -0.9999059 -0.9999373 -0.9999579 -0.9998722
## 51    -0.9999724 -0.99990738 -0.9998687 -0.9998467 -0.9999677 -0.9998026
## 52    -0.9985920 -0.99806610 -0.9993072 -0.9984675 -0.9985915 -0.9972804
## 53    -0.9999525 -0.99989602 -0.9999385 -0.9999202 -0.9999500 -0.9998364
## 54    -0.9999665 -0.99996372 -0.9998693 -0.9999840 -0.9999698 -0.9998740
## 55    -0.9999605 -0.99994445 -0.9999069 -0.9999636 -0.9999616 -0.9998785
## 56    -0.9999692 -0.99993773 -0.9999413 -0.9999060 -0.9999692 -0.9998880
## 57    -0.9999510 -0.99989725 -0.9998998 -0.9998933 -0.9999425 -0.9998344
## 58    -0.9999447 -0.99989549 -0.9998852 -0.9999037 -0.9999329 -0.9998375
## 59    -0.9999643 -0.99994317 -0.9999154 -0.9999790 -0.9999597 -0.9998995
## 60    -0.9999617 -0.99994230 -0.9998973 -0.9999896 -0.9999608 -0.9998746
## 61    -0.9999481 -0.99990800 -0.9998449 -0.9999799 -0.9999416 -0.9998107
## 62    -0.9999491 -0.99992778 -0.9998237 -0.9999733 -0.9999401 -0.9998376
## 63    -0.9999592 -0.99991607 -0.9998889 -0.9999631 -0.9999438 -0.9998767
## 64    -0.9999577 -0.99986380 -0.9998368 -0.9999344 -0.9999338 -0.9997845
## 65    -0.9981357 -0.99482234 -0.9963158 -0.9964529 -0.9979677 -0.9907225
## 66    -0.9998384 -0.99966597 -0.9996730 -0.9998649 -0.9997823 -0.9995367
## 67    -0.9929858 -0.99205003 -0.9936838 -0.9965461 -0.9918503 -0.9912326
## 68    -0.9926046 -0.99114447 -0.9930749 -0.9964164 -0.9912481 -0.9903335
## 69    -0.9995848 -0.99860422 -0.9993100 -0.9995648 -0.9991714 -0.9989235
## 70    -0.9969734 -0.97192129 -0.9893543 -0.9950157 -0.9929430 -0.9617762
## 71    -0.9693708 -0.89785961 -0.9599258 -0.9621504 -0.9497478 -0.8908459
## 72    -0.9705573 -0.91756546 -0.9641955 -0.9648653 -0.9505834 -0.9271816
## 73    -0.9972154 -0.99176793 -0.9978076 -0.9983286 -0.9941565 -0.9972415
## 74    -0.9998914 -0.99905781 -0.9995564 -0.9995365 -0.9995994 -0.9992170
## 75    -0.9999107 -0.99909046 -0.9995697 -0.9996984 -0.9996064 -0.9993099
## 76    -0.9999691 -0.99989772 -0.9998476 -0.9999314 -0.9999516 -0.9998188
## 77    -0.9999527 -0.99986607 -0.9998824 -0.9999180 -0.9999307 -0.9998162
## 78    -0.9999380 -0.99977695 -0.9997475 -0.9999319 -0.9999133 -0.9995955
## 79    -0.7358133 -0.59701887 -0.8367280 -0.9330855 -0.6407566 -0.7266430
## 80    -0.6728637 -0.51157646 -0.8839256 -0.8943062 -0.5733679 -0.6741129
## 81    -0.7653461 -0.55240106 -0.8251168 -0.8191602 -0.6902346 -0.5543759
```

```
## 82   -0.7295890 -0.45541310 -0.8590648 -0.9108086 -0.6227624 -0.5490138
## 83   -0.7581629 -0.55056282 -0.9003452 -0.9623805 -0.6684200 -0.6574716
## 84   -0.7582811 -0.68046513 -0.8880950 -0.8537057 -0.7320817 -0.6473395
## 85   -0.7305881 -0.38899273 -0.9246773 -0.8518686 -0.5985253 -0.5682395
## 86   -0.7354614 -0.15928122 -0.9030320 -0.9374922 -0.5019219 -0.5158350
## 87   -0.7755424 -0.76122553 -0.8947009 -0.9204613 -0.7440327 -0.7937022
## 88   -0.7476286 -0.62824943 -0.8309994 -0.8817703 -0.6733879 -0.6949661
## 89   -0.7340191 -0.59725851 -0.7909015 -0.8913489 -0.6748075 -0.5734683
## 90   -0.7047503 -0.47340790 -0.7847348 -0.9523790 -0.5997630 -0.5401930
## 91   -0.7148762 -0.56356194 -0.8408066 -0.9654485 -0.6349731 -0.6353626
## 92   -0.6746584 -0.65791458 -0.8393284 -0.9352203 -0.6337726 -0.6857359
## 93   -0.6978273 -0.52387722 -0.8607690 -0.6829095 -0.6180579 -0.5935674
## 94   -0.7054696 -0.32511214 -0.8497168 -0.7609796 -0.4970095 -0.6924649
## 95   -0.7232713 -0.15726749 -0.8425054 -0.8179039 -0.4294187 -0.6889571
## 96   -0.7004113 -0.33222662 -0.8896374 -0.8324505 -0.5041113 -0.6926798
## 97   -0.7653802 -0.28942673 -0.8861976 -0.8887989 -0.5122227 -0.7700395
## 98   -0.8217104 -0.42402293 -0.8564838 -0.7757238 -0.6205682 -0.7568144
## 99   -0.6632240 -0.47108596 -0.8338416 -0.6787912 -0.5509208 -0.6235138
## 100  -0.5909882 -0.41795207 -0.7640728 -0.4978735 -0.4944948 -0.4830121
## 101  -0.6037527 -0.49987074 -0.7818859 -0.5835713 -0.5169202 -0.5901782
## 102  -0.6934764 -0.39714921 -0.6686543 -0.6052544 -0.5201906 -0.5783477
## 103  -0.7757500 -0.46616999 -0.7985002 -0.7433556 -0.6345953 -0.6130206
## 104  -0.7379749 -0.46590107 -0.8605505 -0.9358475 -0.6146601 -0.6188320
## 105  -0.7442512 -0.53502602 -0.8002970 -0.9003309 -0.6341309 -0.6443493
## 106  -0.7133351 -0.58905864 -0.7969308 -0.8816312 -0.6384330 -0.6324442
## 107  -0.6293896 -0.49245056 -0.7587209 -0.8250549 -0.5622219 -0.4762682
## 108  -0.7235744 -0.44954479 -0.7057960 -0.7463457 -0.5933645 -0.5212600
## 109  -0.7748426 -0.50654391 -0.7758382 -0.6858673 -0.6383895 -0.6499258
## 110  -0.7847213 -0.45303537 -0.7602621 -0.7617679 -0.6419976 -0.5644605
## 111  -0.7716071 -0.44552406 -0.8301191 -0.7365832 -0.6397549 -0.5703083
## 112  -0.6766611 -0.54613431 -0.7330269 -0.8778173 -0.6257033 -0.4601229
## 113  -0.6898734 -0.48908620 -0.7163704 -0.7677634 -0.6099708 -0.4441265
## 114  -0.7042545 -0.50642577 -0.7572034 -0.9177939 -0.6117810 -0.5341604
## 115  -0.7208537 -0.55999448 -0.8517444 -0.9799555 -0.6356440 -0.6509261
## 116  -0.7286425 -0.49609911 -0.8512130 -0.9218929 -0.6155166 -0.6344877
## 117  -0.7001157 -0.34928090 -0.8360189 -0.8351515 -0.5369642 -0.5707812
## 118  -0.7343176 -0.34278845 -0.8490884 -0.9076392 -0.5764674 -0.5265167
## 119  -0.8429175 -0.62762180 -0.8481533 -0.8214966 -0.7351979 -0.7549581
## 120  -0.8010986 -0.53167897 -0.8567270 -0.9245961 -0.6403378 -0.8123093
## 121  -0.8024322 -0.52686412 -0.8178956 -0.8673168 -0.6456165 -0.7635528
## 122  -0.8366322 -0.67410040 -0.8438994 -0.8476436 -0.7553320 -0.7430775
## 123  -0.7479996 -0.53263534 -0.8575468 -0.8838735 -0.6276375 -0.7116386
## 124  -0.7572727 -0.53083947 -0.8682741 -0.9225927 -0.6308862 -0.7302239
## 125  -0.8512816 -0.48246699 -0.8795739 -0.8885261 -0.6984044 -0.6828486
## 126  -0.8071771 -0.54638026 -0.7867984 -0.8333668 -0.6849082 -0.6525746
## 127  -0.7415680 -0.41996129 -0.8254089 -0.7828032 -0.5981701 -0.5850918
## 128  -0.7683112 -0.38184279 -0.8096733 -0.9083961 -0.6259417 -0.4883594
## 129  -0.7689860 -0.44502890 -0.8741386 -0.9223939 -0.6306900 -0.6231802
## 130  -0.6135000 -0.45408255 -0.7340147 -0.8234504 -0.5205618 -0.4954904
## 131  -0.5506608 -0.30381854 -0.6890690 -0.8505205 -0.4640962 -0.2347391
```

```
## 132  -0.6930710 -0.36336104 -0.5870515 -0.9507831 -0.5772624 -0.2681953
## 133  -0.7426037 -0.61487429 -0.6279428 -0.9077742 -0.6725199 -0.5251710
## 134  -0.7381798 -0.52277016 -0.8369987 -0.8988953 -0.6455256 -0.5922314
## 135  -0.5823979 -0.19774055 -0.3451511 -0.7697140 -0.4712374  0.1114258
## 136  -0.6297677 -0.09777441 -0.7020379 -0.8604705 -0.4022081 -0.3303941
## 137  -0.5711943 -0.18086053 -0.6472080 -0.6805840 -0.3277890 -0.5286127
## 138  -0.6052683 -0.45062186 -0.4565091 -0.7790982 -0.5257686 -0.2624228
## 139  -0.5845316 -0.49770904 -0.5506593 -0.8645706 -0.5429025 -0.2881291
## 140  -0.6552559 -0.36502357 -0.8321678 -0.9437228 -0.4663002 -0.7151292
## 141  -0.5245708 -0.32466814 -0.6750696 -0.7488008 -0.4013324 -0.4053858
## 142  -0.5451089 -0.36965449 -0.6288446 -0.7982862 -0.4236665 -0.4293256
## 143  -0.6121765 -0.48259078 -0.7994656 -0.7802876 -0.4884281 -0.6948573
## 144  -0.6279764 -0.42356215 -0.7660886 -0.8667875 -0.5117802 -0.5362137
## 145  -0.7805461 -0.15843363 -0.7706826 -0.8770646 -0.4888769 -0.5952282
## 146  -0.6412199 -0.30674614 -0.5873373 -0.9315501 -0.4600707 -0.4355325
## 147  -0.5616742 -0.68939752 -0.6676189 -0.7871332 -0.5537980 -0.5876137
## 148  -0.7235132 -0.42862519 -0.7481118 -0.7252047 -0.5319110 -0.7270508
## 149  -0.7657555 -0.34023594 -0.6731109 -0.8436422 -0.5625486 -0.5390315
## 150  -0.7208436 -0.51345522 -0.7322003 -0.9024007 -0.6271781 -0.5217352
## 151  -0.8715146 -0.84109903 -0.8909744 -0.9125172 -0.8252703 -0.9094567
## 152  -0.8615974 -0.88510879 -0.9265122 -0.9544994 -0.8437308 -0.9159250
## 153  -0.8852188 -0.91390402 -0.9573249 -0.9725378 -0.8742947 -0.9445032
## 154  -0.9017912 -0.88415836 -0.9646917 -0.9591816 -0.8783563 -0.9312776
## 155  -0.8787720 -0.79145207 -0.9544596 -0.9662280 -0.8181735 -0.9133995
## 156  -0.8869229 -0.81927301 -0.9387086 -0.9669789 -0.8448119 -0.8798717
## 157  -0.8856601 -0.80175328 -0.9156151 -0.9217353 -0.8288335 -0.8867410
## 158  -0.8931912 -0.74988705 -0.9087903 -0.8476662 -0.8129369 -0.8709138
## 159  -0.8288847 -0.68015046 -0.9210461 -0.8840495 -0.7428444 -0.8268709
## 160  -0.8703747 -0.79601345 -0.9521924 -0.9691495 -0.8192724 -0.8925191
## 161  -0.8496431 -0.87849228 -0.9360505 -0.9808952 -0.8358133 -0.9055809
## 162  -0.8465764 -0.83487589 -0.9244968 -0.9722412 -0.8144806 -0.8899403
## 163  -0.9122644 -0.81786010 -0.9446517 -0.9547408 -0.8530643 -0.9229862
## 164  -0.9029259 -0.80975135 -0.9059362 -0.9676442 -0.8389252 -0.9064678
## 165  -0.8865015 -0.83917442 -0.9267882 -0.9566855 -0.8463793 -0.8986786
## 166  -0.9078973 -0.92161496 -0.9764263 -0.9704310 -0.9025026 -0.9353657
## 167  -0.9187959 -0.93885473 -0.9843347 -0.9803262 -0.9115600 -0.9684038
## 168  -0.8844740 -0.86326163 -0.9622573 -0.9715387 -0.8540006 -0.9309722
## 169  -0.8858477 -0.80165139 -0.9275318 -0.9622150 -0.8409363 -0.8532192
## 170  -0.9019420 -0.85164285 -0.8997450 -0.9718448 -0.8712838 -0.8579405
## 171  -0.9001211 -0.90040063 -0.9548908 -0.9688601 -0.8810029 -0.9381811
## 172  -0.9113890 -0.84848975 -0.9537704 -0.9706202 -0.8689865 -0.9230155
## 173  -0.9231658 -0.85417421 -0.9587441 -0.9832907 -0.8893664 -0.8979347
## 174  -0.8804242 -0.83457413 -0.9489679 -0.9839544 -0.8443782 -0.8959877
## 175  -0.8744909 -0.85563706 -0.9393242 -0.9637503 -0.8534305 -0.8771401
## 176  -0.8556535 -0.77537285 -0.8711495 -0.8847717 -0.7899164 -0.8642946
## 177  -0.9999839 -0.99994048 -0.9999164 -0.9997894 -0.9999720 -0.9999073
##             NA          NA         NA         NA         NA         NA
## 1    -0.9999326 -0.9998999 -0.99982444 -0.9998598 -0.9997275 -0.9997288
## 2    -0.9998610 -0.9998272 -0.99945649 -0.9998303 -0.9996093 -0.9996855
## 3    -0.9998203 -0.9997439 -0.99955907 -0.9998386 -0.9996673 -0.9996275
```

```
## 4    -0.9998950 -0.9997965 -0.99988815 -0.9999061 -0.9996812 -0.9998463
## 5    -0.9999254 -0.9998775 -0.99981036 -0.9999321 -0.9997284 -0.9997694
## 6    -0.9999001 -0.9999422 -0.99978381 -0.9998103 -0.9998735 -0.9996886
## 7    -0.9998286 -0.9998400 -0.99983699 -0.9996681 -0.9997485 -0.9995457
## 8    -0.9997883 -0.9998156 -0.99977210 -0.9995652 -0.9994789 -0.9993055
## 9    -0.9998970 -0.9997676 -0.99974782 -0.9994849 -0.9996420 -0.9990158
## 10   -0.9996861 -0.9995318 -0.99926475 -0.9992874 -0.9993564 -0.9988162
## 11   -0.9996810 -0.9996827 -0.99942783 -0.9993665 -0.9990824 -0.9996192
## 12   -0.9998962 -0.9999405 -0.99990473 -0.9997974 -0.9996253 -0.9997731
## 13   -0.9999151 -0.9999739 -0.99985840 -0.9998089 -0.9996723 -0.9997769
## 14   -0.9999073 -0.9999711 -0.99986257 -0.9999252 -0.9998438 -0.9997408
## 15   -0.9996509 -0.9998265 -0.99982432 -0.9997082 -0.9996046 -0.9999014
## 16   -0.9998556 -0.9999808 -0.99996534 -0.9999126 -0.9999065 -0.9998310
## 17   -0.9998789 -0.9999362 -0.99994243 -0.9999024 -0.9998769 -0.9996700
## 18   -0.9999320 -0.9999220 -0.99986771 -0.9999371 -0.9998135 -0.9997728
## 19   -0.9999130 -0.9999496 -0.99985833 -0.9999221 -0.9998748 -0.9999081
## 20   -0.9999354 -0.9999292 -0.99988872 -0.9999252 -0.9998998 -0.9998971
## 21   -0.9999802 -0.9999203 -0.99993564 -0.9999390 -0.9998585 -0.9997666
## 22   -0.9999721 -0.9998994 -0.99983242 -0.9998757 -0.9993275 -0.9994604
## 23   -0.9999152 -0.9998927 -0.99963947 -0.9998123 -0.9992565 -0.9994408
## 24   -0.9998856 -0.9999321 -0.99970358 -0.9997508 -0.9996390 -0.9996934
## 25   -0.9999465 -0.9998925 -0.99980685 -0.9997527 -0.9995304 -0.9998566
## 26   -0.9999417 -0.9999443 -0.99971553 -0.9998052 -0.9996321 -0.9994700
## 27   -0.9999497 -0.9999561 -0.99978095 -0.9998484 -0.9998091 -0.9995300
## 28   -0.9969558 -0.9994196 -0.99965310 -0.9997580 -0.9997660 -0.9992205
## 29   -0.9993902 -0.9999336 -0.99992478 -0.9998510 -0.9998915 -0.9996674
## 30   -0.9999249 -0.9999451 -0.99992351 -0.9998626 -0.9999164 -0.9997595
## 31   -0.9865558 -0.9895636 -0.98870861 -0.9983343 -0.9929979 -0.9907350
## 32   -0.9838811 -0.9876233 -0.98655350 -0.9971809 -0.9923449 -0.9893631
## 33   -0.9959275 -0.9988945 -0.99669455 -0.9986706 -0.9985886 -0.9981304
## 34   -0.9995113 -0.9997703 -0.99972280 -0.9997485 -0.9997820 -0.9993198
## 35   -0.9999577 -0.9999659 -0.99988233 -0.9998276 -0.9996184 -0.9998755
## 36   -0.9999481 -0.9999740 -0.99991477 -0.9998340 -0.9997048 -0.9998325
## 37   -0.9999514 -0.9999646 -0.99985666 -0.9998508 -0.9998007 -0.9996226
## 38   -0.9999671 -0.9999116 -0.99987826 -0.9998456 -0.9997900 -0.9997710
## 39   -0.9986473 -0.9996768 -0.99961245 -0.9995440 -0.9992395 -0.9993137
## 40   -0.9998444 -0.9999648 -0.99996210 -0.9997345 -0.9997341 -0.9996805
## 41   -0.9999270 -0.9999746 -0.99990399 -0.9998333 -0.9996978 -0.9999389
## 42   -0.9999768 -0.9999580 -0.99978940 -0.9998831 -0.9997198 -0.9999184
## 43   -0.9999398 -0.9999529 -0.99978909 -0.9998508 -0.9998073 -0.9997874
## 44   -0.9999543 -0.9999507 -0.99980034 -0.9998834 -0.9998190 -0.9996945
## 45   -0.9999172 -0.9999503 -0.99986557 -0.9998292 -0.9998395 -0.9996915
## 46   -0.9999173 -0.9999727 -0.99991261 -0.9998698 -0.9998128 -0.9998764
## 47   -0.9999517 -0.9999554 -0.99980616 -0.9998016 -0.9998742 -0.9998208
## 48   -0.9999125 -0.9999442 -0.99977578 -0.9997968 -0.9999331 -0.9996847
## 49   -0.9999358 -0.9999686 -0.99990599 -0.9998563 -0.9999041 -0.9998510
## 50   -0.9999544 -0.9999617 -0.99991506 -0.9997435 -0.9998523 -0.9998516
## 51   -0.9999770 -0.9999569 -0.99982670 -0.9998290 -0.9998159 -0.9997930
## 52   -0.9971908 -0.9954806 -0.99613879 -0.9910902 -0.9966000 -0.9964627
## 53   -0.9999163 -0.9999121 -0.99982425 -0.9998844 -0.9997647 -0.9997270
```

```
## 54   -0.9999675 -0.9999414 -0.99985079 -0.9998946 -0.9997713 -0.9998033
## 55   -0.9999493 -0.9999765 -0.99993690 -0.9998685 -0.9997045 -0.9998783
## 56   -0.9999655 -0.9999828 -0.99994193 -0.9998341 -0.9997803 -0.9998062
## 57   -0.9999935 -0.9999733 -0.99986816 -0.9998611 -0.9998442 -0.9997834
## 58   -0.9999452 -0.9999100 -0.99986680 -0.9998638 -0.9998694 -0.9997660
## 59   -0.9999556 -0.9999228 -0.99993039 -0.9998134 -0.9998610 -0.9997777
## 60   -0.9999800 -0.9998901 -0.99988881 -0.9997459 -0.9996021 -0.9995783
## 61   -0.9999725 -0.9998838 -0.99981935 -0.9997557 -0.9995099 -0.9996102
## 62   -0.9999756 -0.9999545 -0.99988584 -0.9998795 -0.9997887 -0.9998435
## 63   -0.9999508 -0.9999561 -0.99992593 -0.9999405 -0.9998532 -0.9998242
## 64   -0.9999640 -0.9999513 -0.99990629 -0.9999490 -0.9998355 -0.9998833
## 65   -0.9965116 -0.9961328 -0.99485045 -0.9815698 -0.9917992 -0.9906583
## 66   -0.9996386 -0.9999086 -0.99982262 -0.9996138 -0.9997014 -0.9997230
## 67   -0.7865623 -0.9528335 -0.97766591 -0.9870074 -0.9738846 -0.9635143
## 68   -0.7864389 -0.9488550 -0.97626048 -0.9849981 -0.9731179 -0.9627612
## 69   -0.9911163 -0.9978408 -0.99577962 -0.9969192 -0.9990166 -0.9978430
## 70   -0.9740758 -0.9898546 -0.97737749 -0.9795224 -0.9871997 -0.9752447
## 71   -0.2833900 -0.8706240 -0.94836671 -0.8292916 -0.5165625 -0.7503263
## 72   -0.2920621 -0.8798006 -0.96459255 -0.8289273 -0.5386968 -0.7918468
## 73   -0.9793020 -0.9953613 -0.99701016 -0.9981443 -0.9945550 -0.9872580
## 74   -0.9964508 -0.9997226 -0.99948565 -0.9994949 -0.9994314 -0.9993667
## 75   -0.9995115 -0.9998717 -0.99970319 -0.9995435 -0.9994645 -0.9996274
## 76   -0.9998618 -0.9999724 -0.99989292 -0.9997204 -0.9998022 -0.9997540
## 77   -0.9999036 -0.9999481 -0.99989638 -0.9998938 -0.9998615 -0.9997748
## 78   -0.9998908 -0.9999297 -0.99981498 -0.9998479 -0.9998534 -0.9996236
## 79   -0.8495971 -0.6258181 -0.65045026 -0.9029509 -0.8905495 -0.8924096
## 80   -0.8248145 -0.4219907 -0.72192646 -0.6788534 -0.8541034 -0.7828069
## 81   -0.7632301 -0.5497918 -0.59487472 -0.6798289 -0.8260636 -0.7387300
## 82   -0.6819695 -0.4110942 -0.55142153 -0.8636242 -0.8159763 -0.7055306
## 83   -0.5602028 -0.4411507 -0.58188213 -0.7654145 -0.7022628 -0.6233875
## 84   -0.6932954 -0.6427735 -0.49330273 -0.7532120 -0.7320256 -0.5614444
## 85   -0.7484983 -0.4141413 -0.69533829 -0.9131659 -0.8878673 -0.8305798
## 86   -0.7884210 -0.3431011 -0.67357900 -0.8843882 -0.8221046 -0.6216382
## 87   -0.8141733 -0.4810732 -0.75543911 -0.7324934 -0.8025089 -0.8468163
## 88   -0.7276135 -0.3520880 -0.63803565 -0.6494708 -0.7418523 -0.7752417
## 89   -0.6554879 -0.5501585 -0.66539564 -0.8188876 -0.7925432 -0.7753751
## 90   -0.7329925 -0.5197920 -0.57214593 -0.8656360 -0.7485334 -0.7450205
## 91   -0.6632343 -0.3972369 -0.57013426 -0.7883005 -0.7024903 -0.6942732
## 92   -0.7151610 -0.4104602 -0.24909495 -0.6724997 -0.6519703 -0.6608783
## 93   -0.6483084 -0.2676659 -0.31446575 -0.6207432 -0.7168972 -0.6681115
## 94   -0.7004885 -0.3239907 -0.52871168 -0.7804070 -0.8268976 -0.5896938
## 95   -0.6901963 -0.4114938 -0.60837743 -0.8929964 -0.8356473 -0.7185526
## 96   -0.7141543 -0.3420558 -0.78416017 -0.9085949 -0.7338024 -0.6878722
## 97   -0.7698582 -0.3192689 -0.59779708 -0.7088721 -0.7965949 -0.7176945
## 98   -0.7421343 -0.4290602 -0.52876666 -0.6882719 -0.7789484 -0.6007427
## 99   -0.5326363 -0.4479565 -0.49006994 -0.8342433 -0.7539522 -0.5873654
## 100  -0.6321265 -0.5363850 -0.47026910 -0.7695007 -0.8309175 -0.6116395
## 101  -0.7383864 -0.6061532 -0.46735651 -0.7878719 -0.6209367 -0.7710176
## 102  -0.5649249 -0.5054911  0.07202794 -0.7250309 -0.4237265 -0.4771627
## 103  -0.7149845 -0.3200821 -0.09913592 -0.5491809 -0.5238738 -0.6300725
```

```
## 104 -0.5621287 -0.1058860 -0.38100682 -0.5103500 -0.6186748 -0.8135402
## 105 -0.7303628 -0.2161931 -0.51607005 -0.6772934 -0.7398990 -0.7683954
## 106 -0.6914480 -0.5176874 -0.70095812 -0.7768784 -0.8135457 -0.8118000
## 107 -0.7297853 -0.2765294 -0.54507811 -0.7873635 -0.7458412 -0.8450947
## 108 -0.6131382 -0.3076811 -0.09635146 -0.7661322 -0.7518970 -0.6098442
## 109 -0.6100171 -0.3481916 -0.21610403 -0.6891801 -0.5922891 -0.6088397
## 110 -0.7180075 -0.2539798 -0.56377925 -0.7127296 -0.5506933 -0.6394960
## 111 -0.7374328 -0.3818578 -0.54866781 -0.7950385 -0.6194499 -0.7155332
## 112 -0.6056565 -0.4976056  0.10551202 -0.5397056 -0.7847879 -0.3231207
## 113 -0.7214219 -0.5160434 -0.53266369 -0.7924285 -0.8270816 -0.7158933
## 114 -0.7325604 -0.5627343 -0.62236146 -0.8264424 -0.6844215 -0.7895948
## 115 -0.5644257 -0.4746451 -0.64398397 -0.8578863 -0.7688766 -0.8642159
## 116 -0.6699640 -0.3268966 -0.61246764 -0.8031941 -0.9207765 -0.8308855
## 117 -0.6965491 -0.3035036 -0.56068874 -0.7916763 -0.8773339 -0.8287184
## 118 -0.7435598 -0.3507517 -0.68083052 -0.8160947 -0.7502525 -0.6536051
## 119 -0.7141220 -0.4518033 -0.75263730 -0.8882758 -0.7312908 -0.5526635
## 120 -0.7995567 -0.5419593 -0.78638167 -0.9086161 -0.7824260 -0.6917747
## 121 -0.8167019 -0.5622118 -0.71263030 -0.8355932 -0.8445725 -0.7494833
## 122 -0.8219621 -0.4348436 -0.64570519 -0.8357172 -0.7716646 -0.1370129
## 123 -0.7977345 -0.3663661 -0.61742704 -0.8986903 -0.7303071 -0.2566084
## 124 -0.7111120 -0.4079907 -0.68685088 -0.8505266 -0.8340705 -0.8094872
## 125 -0.7478494 -0.4621572 -0.65765856 -0.8683457 -0.8340633 -0.8525887
## 126 -0.7957492 -0.7977508 -0.74585931 -0.6688114 -0.7827890 -0.7558536
## 127 -0.7886771 -0.7845804 -0.69467501 -0.6628873 -0.7439377 -0.7890136
## 128 -0.6873684 -0.6309310 -0.63853910 -0.7244873 -0.8155961 -0.8253440
## 129 -0.5045224 -0.5537657 -0.56017016 -0.7084843 -0.7207854 -0.7149053
## 130 -0.6867534 -0.5702787 -0.56599413 -0.8049109 -0.5724021 -0.7444525
## 131 -0.6670168 -0.4956417 -0.51298534 -0.7691000 -0.6289513 -0.6906753
## 132 -0.7557517 -0.6585408 -0.43104558 -0.7812940 -0.7905680 -0.7334148
## 133 -0.8337788 -0.7552432 -0.50147744 -0.8771499 -0.8974981 -0.7908670
## 134 -0.8448188 -0.7245212 -0.58535815 -0.8241273 -0.9153519 -0.7575217
## 135 -0.6814985 -0.5400016 -0.72547174 -0.7027307 -0.5212777 -0.4995547
## 136 -0.7339115 -0.6888748 -0.50905506 -0.6089950 -0.7312262 -0.5810933
## 137 -0.5550509 -0.3579670 -0.42230326 -0.6820950 -0.8249648 -0.5131047
## 138 -0.4310227 -0.4559744 -0.39464021 -0.7322869 -0.8531840 -0.7535032
## 139 -0.6332144 -0.7710289 -0.78404419 -0.6595038 -0.8111550 -0.8748394
## 140 -0.6124664 -0.7262000 -0.66255814 -0.5886683 -0.8607988 -0.9155357
## 141 -0.8070565 -0.7698510 -0.64416882 -0.5891522 -0.8135596 -0.7008258
## 142 -0.7483246 -0.8878059 -0.74272360 -0.6777019 -0.7400477 -0.6900927
## 143 -0.7077163 -0.7201472 -0.53384447 -0.8176048 -0.7927875 -0.7101797
## 144 -0.7589046 -0.7842233 -0.49869833 -0.8509670 -0.7521612 -0.6737721
## 145 -0.6189192 -0.5270976 -0.41369955 -0.7945967 -0.7775890 -0.5265896
## 146 -0.5863958 -0.5194236 -0.31855738 -0.6550167 -0.7246188 -0.5877779
## 147 -0.6358255 -0.7089019 -0.78971611 -0.7603042 -0.7949801 -0.7415252
## 148 -0.7701599 -0.7827367 -0.82303714 -0.8850156 -0.8942584 -0.9201570
## 149 -0.7702200 -0.8479682 -0.71271081 -0.8683057 -0.8413977 -0.7068011
## 150 -0.8533977 -0.8087213 -0.49362337 -0.8424425 -0.7957617 -0.6696755
## 151 -0.5760399 -0.9253804 -0.93457066 -0.9483786 -0.9194689 -0.8313102
## 152 -0.5632845 -0.9523725 -0.93877627 -0.9694439 -0.8941761 -0.8205034
## 153 -0.5826731 -0.8818995 -0.90784044 -0.9464927 -0.8860571 -0.8937657
```

```
## 154 -0.5088128 -0.8044613 -0.88845349 -0.9069836 -0.8790581 -0.7441479
## 155 -0.5514069 -0.7918569 -0.85190137 -0.9071576 -0.9195072 -0.8755775
## 156 -0.6003498 -0.8618071 -0.89366546 -0.9255585 -0.9625083 -0.9141843
## 157 -0.7152564 -0.8311022 -0.91789323 -0.9291642 -0.9534083 -0.9428118
## 158 -0.6401666 -0.8788550 -0.85876902 -0.8946795 -0.9264334 -0.8784670
## 159 -0.6334842 -0.8982679 -0.92671486 -0.9145264 -0.9665465 -0.9150538
## 160 -0.6669559 -0.9180922 -0.92862923 -0.9089095 -0.9773272 -0.8994476
## 161 -0.5290442 -0.8766423 -0.86885119 -0.8722575 -0.9592291 -0.9245119
## 162 -0.5564269 -0.8709169 -0.92056504 -0.8993026 -0.9496859 -0.8975146
## 163 -0.7268136 -0.9311034 -0.88746471 -0.9317491 -0.9514465 -0.9203333
## 164 -0.6542437 -0.8880529 -0.82101332 -0.9298300 -0.8993033 -0.8525324
## 165 -0.6486623 -0.9417043 -0.82209882 -0.9308657 -0.9250660 -0.8675818
## 166 -0.7555971 -0.9442417 -0.93261988 -0.9455860 -0.9830884 -0.9506235
## 167 -0.7671241 -0.9352682 -0.92588421 -0.9576765 -0.9781940 -0.9032552
## 168 -0.5586439 -0.9186045 -0.89725965 -0.9211586 -0.8732339 -0.9080320
## 169 -0.4518180 -0.8462208 -0.82116278 -0.7892820 -0.8862269 -0.8452649
## 170 -0.4671802 -0.7894470 -0.81268598 -0.8104298 -0.9023877 -0.8094371
## 171 -0.4753556 -0.8321953 -0.87162271 -0.9301988 -0.9561670 -0.8839292
## 172 -0.6974508 -0.7787002 -0.83594833 -0.9059235 -0.9317692 -0.9032085
## 173 -0.6581307 -0.8104064 -0.78857317 -0.9096904 -0.9197323 -0.9486255
## 174 -0.6196727 -0.7892717 -0.81953001 -0.9248663 -0.9352735 -0.9490728
## 175 -0.7035658 -0.8170788 -0.90245800 -0.9558520 -0.9524436 -0.9112223
## 176 -0.7966520 -0.8281567 -0.78235906 -0.8999503 -0.9438076 -0.8698356
## 177 -0.9995074 -0.9998910 -0.99975310 -0.9996674 -0.9998161 -0.9994336
##              NA         NA          NA         NA         NA         NA
## 1   -0.9995671 -0.9997652 -0.99990021 -0.99981490 -0.9997098 -0.9995961
## 2   -0.9995761 -0.9999370 -0.99981738 -0.99953247 -0.9995952 -0.9996257
## 3   -0.9997037 -0.9999934 -0.99973230 -0.99961124 -0.9996175 -0.9997442
## 4   -0.9996932 -0.9999999 -0.99979758 -0.99988320 -0.9997223 -0.9997359
## 5   -0.9995027 -0.9999921 -0.99987817 -0.99983869 -0.9997279 -0.9995684
## 6   -0.9995826 -0.9999992 -0.99993086 -0.99976189 -0.9998114 -0.9996392
## 7   -0.9996756 -0.9998647 -0.99982134 -0.99973365 -0.9996487 -0.9997035
## 8   -0.9998410 -0.9999794 -0.99978973 -0.99963780 -0.9993268 -0.9998624
## 9   -0.9997556 -0.9999343 -0.99977181 -0.99958223 -0.9993357 -0.9997822
## 10  -0.9996685 -0.9999522 -0.99950835 -0.99913658 -0.9990182 -0.9997083
## 11  -0.9996556 -0.9999852 -0.99964396 -0.99929291 -0.9991381 -0.9997012
## 12  -0.9998282 -0.9999956 -0.99992845 -0.99984405 -0.9996455 -0.9998534
## 13  -0.9997127 -0.9999366 -0.99996315 -0.99981568 -0.9996855 -0.9997449
## 14  -0.9997762 -0.9999242 -0.99995879 -0.99987357 -0.9998095 -0.9997989
## 15  -0.9998537 -0.9999704 -0.99976732 -0.99974331 -0.9996835 -0.9998725
## 16  -0.9999478 -0.9999810 -0.99995545 -0.99994262 -0.9998991 -0.9999560
## 17  -0.9997941 -0.9999911 -0.99992045 -0.99992106 -0.9998062 -0.9998230
## 18  -0.9998141 -0.9999995 -0.99992006 -0.99988289 -0.9997986 -0.9998415
## 19  -0.9997889 -0.9999900 -0.99994061 -0.99986901 -0.9999062 -0.9998183
## 20  -0.9997847 -0.9999944 -0.99992740 -0.99989263 -0.9999219 -0.9998151
## 21  -0.9998840 -0.9999928 -0.99992988 -0.99993336 -0.9998325 -0.9999017
## 22  -0.9998775 -0.9999784 -0.99990908 -0.99982822 -0.9992697 -0.9998942
## 23  -0.9998144 -0.9999379 -0.99988954 -0.99965753 -0.9992037 -0.9998340
## 24  -0.9997746 -0.9999999 -0.99991831 -0.99967529 -0.9996227 -0.9998070
## 25  -0.9997590 -0.9999029 -0.99989675 -0.99975157 -0.9996040 -0.9997812
```

```
## 26    -0.9998850 -0.9999694 -0.99994259 -0.99970968 -0.9995217 -0.9998997
## 27    -0.9997959 -0.9999885 -0.99995517 -0.99977779 -0.9996913 -0.9998242
## 28    -0.9990752 -0.9999261 -0.99876362 -0.99964188 -0.9995240 -0.9991866
## 29    -0.9996946 -0.9999851 -0.99980302 -0.99988396 -0.9998170 -0.9997353
## 30    -0.9999035 -0.9999856 -0.99993939 -0.99988847 -0.9998766 -0.9999179
## 31    -0.9986766 -0.9999345 -0.98737646 -0.99098430 -0.9903941 -0.9988393
## 32    -0.9982141 -0.9999380 -0.98498706 -0.98886788 -0.9892770 -0.9984356
## 33    -0.9994584 -0.9999274 -0.99804526 -0.99697032 -0.9981006 -0.9995216
## 34    -0.9997878 -0.9999744 -0.99968342 -0.99968824 -0.9995795 -0.9998154
## 35    -0.9998300 -0.9999715 -0.99996591 -0.99984196 -0.9996837 -0.9998519
## 36    -0.9997861 -0.9999974 -0.99997103 -0.99986863 -0.9997357 -0.9998167
## 37    -0.9999130 -0.9999895 -0.99996324 -0.99983414 -0.9997240 -0.9999266
## 38    -0.9998432 -0.9999953 -0.99991895 -0.99984746 -0.9997787 -0.9998664
## 39    -0.9991456 -0.9999792 -0.99939524 -0.99951129 -0.9991355 -0.9992547
## 40    -0.9998956 -0.9999537 -0.99993826 -0.99985629 -0.9996945 -0.9999069
## 41    -0.9999031 -0.9999439 -0.99996665 -0.99986045 -0.9997754 -0.9999123
## 42    -0.9998253 -0.9999393 -0.99996324 -0.99980031 -0.9997845 -0.9998436
## 43    -0.9999567 -0.9999177 -0.99994996 -0.99978483 -0.9997997 -0.9999558
## 44    -0.9999403 -0.9999221 -0.99995134 -0.99980843 -0.9997696 -0.9999420
## 45    -0.9998392 -0.9996991 -0.99994223 -0.99983045 -0.9997850 -0.9998255
## 46    -0.9999071 -0.9999696 -0.99996265 -0.99988395 -0.9998423 -0.9999190
## 47    -0.9998654 -0.9999118 -0.99995500 -0.99977409 -0.9998685 -0.9998753
## 48    -0.9999237 -0.9999939 -0.99993568 -0.99974969 -0.9998582 -0.9999365
## 49    -0.9999844 -0.9999649 -0.99996324 -0.99987275 -0.9999056 -0.9999860
## 50    -0.9999322 -0.9999793 -0.99996139 -0.99982618 -0.9998638 -0.9999422
## 51    -0.9997968 -0.9999961 -0.99996232 -0.99980199 -0.9998092 -0.9998259
## 52    -0.9967375 -0.9991341 -0.99524677 -0.99299080 -0.9957707 -0.9970439
## 53    -0.9998256 -0.9999919 -0.99990738 -0.99982634 -0.9997394 -0.9998506
## 54    -0.9998806 -0.9999942 -0.99994608 -0.99985051 -0.9997773 -0.9998990
## 55    -0.9997863 -0.9999970 -0.99997360 -0.99990106 -0.9997549 -0.9998169
## 56    -0.9998501 -0.9999894 -0.99998313 -0.99988850 -0.9997858 -0.9998717
## 57    -0.9998696 -0.9999655 -0.99998105 -0.99984740 -0.9998281 -0.9998857
## 58    -0.9997570 -0.9998922 -0.99991227 -0.99984769 -0.9998412 -0.9997781
## 59    -0.9997666 -0.9999908 -0.99992637 -0.99987035 -0.9998393 -0.9997989
## 60    -0.9998958 -0.9998394 -0.99990247 -0.99980817 -0.9995435 -0.9998927
## 61    -0.9997844 -0.9999994 -0.99989503 -0.99976210 -0.9994821 -0.9998155
## 62    -0.9999186 -0.9999933 -0.99995987 -0.99986898 -0.9998086 -0.9999320
## 63    -0.9999714 -0.9999748 -0.99995544 -0.99992701 -0.9998529 -0.9999758
## 64    -0.9998424 -0.9999353 -0.99995417 -0.99991667 -0.9998636 -0.9998582
## 65    -0.9749197 -0.9823248 -0.99567830 -0.98756211 -0.9893862 -0.9758578
## 66    -0.9995671 -0.9997473 -0.99983888 -0.99969756 -0.9996861 -0.9995938
## 67    -0.9937845 -0.9997231 -0.90697245 -0.97758597 -0.9632197 -0.9945376
## 68    -0.9936725 -0.9996255 -0.90333538 -0.97561311 -0.9622743 -0.9944275
## 69    -0.9984631 -0.9959723 -0.99595676 -0.99547692 -0.9983262 -0.9981528
## 70    -0.9885873 -0.9883853 -0.98470165 -0.97384654 -0.9790617 -0.9885658
## 71    -0.4234391 -0.9818058 -0.71393170 -0.88184748 -0.5001256 -0.4938818
## 72    -0.4034185 -0.9906631 -0.72429585 -0.89351590 -0.5358646 -0.4775042
## 73    -0.9963698 -0.9896560 -0.99092614 -0.99695248 -0.9901759 -0.9955268
## 74    -0.9995621 -0.9999814 -0.99891952 -0.99939563 -0.9993143 -0.9996190
## 75    -0.9993457 -0.9998004 -0.99977543 -0.99957730 -0.9994526 -0.9994071
```

```
## 76   -0.9996803 -0.9998725 -0.99994928 -0.99979914 -0.9997814 -0.9997086
## 77   -0.9998946 -0.9999248 -0.99993705 -0.99988339 -0.9998384 -0.9999024
## 78   -0.9998236 -0.9999649 -0.99991735 -0.99980236 -0.9997673 -0.9998454
## 79   -0.9423085 -0.9781566 -0.62525415 -0.69918239 -0.8650571 -0.9468348
## 80   -0.8493388 -0.8335236 -0.43457264 -0.64568384 -0.7885994 -0.8473474
## 81   -0.9113908 -0.9997218 -0.53597022 -0.55343251 -0.7469643 -0.9225379
## 82   -0.8474436 -0.8172561 -0.39105379 -0.60837846 -0.7245795 -0.8436391
## 83   -0.8685363 -0.9162229 -0.38963752 -0.58430282 -0.5969888 -0.8745558
## 84   -0.7336535 -0.5394825 -0.60382466 -0.51391220 -0.5947484 -0.7091616
## 85   -0.8621991 -0.9205703 -0.40948334 -0.73675379 -0.8364697 -0.8695666
## 86   -0.9492150 -0.9162316 -0.35445979 -0.70730790 -0.6937377 -0.9450579
## 87   -0.8636599 -0.9903763 -0.48564719 -0.69542815 -0.7739614 -0.8796493
## 88   -0.7725103 -0.9848053 -0.34829079 -0.57061458 -0.6940480 -0.7992956
## 89   -0.9247146 -0.9621401 -0.51093162 -0.67045474 -0.7353439 -0.9294398
## 90   -0.8749539 -0.9982343 -0.50164386 -0.62444981 -0.6865769 -0.8905099
## 91   -0.8163725 -0.9695616 -0.37407510 -0.58652035 -0.6274467 -0.8357015
## 92   -0.7600833 -0.6594035 -0.39829474 -0.29765717 -0.5720850 -0.7473857
## 93   -0.5702069 -0.9971939 -0.25305587 -0.32095733 -0.6279946 -0.6240760
## 94   -0.6469975 -0.8556722 -0.31642269 -0.55257222 -0.6839947 -0.6733258
## 95   -0.7683406 -0.9742893 -0.39335340 -0.66378804 -0.7461440 -0.7943253
## 96   -0.7253856 -0.6964765 -0.33602352 -0.79941316 -0.6501867 -0.7217421
## 97   -0.7481642 -0.7657058 -0.32847583 -0.56925802 -0.7140068 -0.7503806
## 98   -0.5814740 -0.8594066 -0.42151429 -0.50917327 -0.6497048 -0.6165393
## 99   -0.8294317 -0.9559037 -0.38931815 -0.54975716 -0.6236564 -0.8453902
## 100  -0.9149218 -0.9927998 -0.49293963 -0.50478394 -0.6966372 -0.9247502
## 101  -0.7674110 -0.9209997 -0.58123267 -0.51132006 -0.5938746 -0.7867903
## 102  -0.5425699 -0.9549155 -0.44909811 -0.08809676 -0.3079415 -0.5945918
## 103  -0.5297593 -0.6202921 -0.31629165 -0.13008884 -0.4547175 -0.5411834
## 104  -0.6835052 -0.9911454 -0.08604835 -0.31746595 -0.6101943 -0.7223185
## 105  -0.6643140 -0.9389847 -0.22569871 -0.49473231 -0.6895351 -0.6989680
## 106  -0.8815264 -0.9252645 -0.48995228 -0.67659897 -0.7679861 -0.8870479
## 107  -0.9533681 -0.9001965 -0.28028011 -0.56779481 -0.7271249 -0.9466642
## 108  -0.5942663 -0.9809712 -0.28106274 -0.23034340 -0.6315844 -0.6430536
## 109  -0.5368243 -0.8379690 -0.31706566 -0.28144763 -0.5013082 -0.5748178
## 110  -0.7904096 -0.9075576 -0.25705704 -0.54625349 -0.4805606 -0.8051918
## 111  -0.8288520 -0.9401939 -0.37760050 -0.57403281 -0.5689695 -0.8429018
## 112  -0.4876423 -0.8734501 -0.45153849  0.02371262 -0.5358930 -0.5363162
## 113  -0.7190986 -0.9547146 -0.49551972 -0.56112386 -0.7380396 -0.7488258
## 114  -0.8993295 -0.9505790 -0.54048536 -0.64261401 -0.6534555 -0.9057986
## 115  -0.9047693 -0.9990055 -0.42100710 -0.67321716 -0.7540310 -0.9166613
## 116  -0.9019729 -0.9932641 -0.31187008 -0.62443347 -0.8633732 -0.9134934
## 117  -0.9641146 -0.9948533 -0.29691584 -0.58121945 -0.8271055 -0.9679963
## 118  -0.8790490 -0.9235501 -0.35083402 -0.68040098 -0.6489352 -0.8846667
## 119  -0.7218025 -0.9492060 -0.43554306 -0.76683065 -0.5904005 -0.7504937
## 120  -0.7834454 -0.9244997 -0.53742135 -0.80104418 -0.6914105 -0.8012435
## 121  -0.8720792 -0.9866314 -0.55982513 -0.71279866 -0.7666143 -0.8865341
## 122  -0.4717926 -0.9445794 -0.44555690 -0.66402104 -0.4457366 -0.5314393
## 123  -0.4445663 -0.9935084 -0.37775136 -0.67307616 -0.4631657 -0.5138201
## 124  -0.8811540 -0.9811935 -0.39510170 -0.70102777 -0.7836960 -0.8937781
## 125  -0.9197668 -0.9452964 -0.45287485 -0.68812698 -0.8020973 -0.9229913
```

```
## 126 -0.9196983 -0.9333649 -0.76849531 -0.65841341 -0.7190716 -0.9214262
## 127 -0.8284704 -0.9625984 -0.75488612 -0.61827052 -0.7016260 -0.8453947
## 128 -0.7661713 -0.9924281 -0.59168932 -0.60635011 -0.7754383 -0.7947179
## 129 -0.9067468 -0.9276248 -0.47865355 -0.54161838 -0.6511417 -0.9093844
## 130 -0.9116012 -0.9841209 -0.53654054 -0.59133057 -0.5430448 -0.9207537
## 131 -0.9464340 -0.9966135 -0.46420662 -0.53576560 -0.5660834 -0.9527682
## 132 -0.7345294 -0.9366845 -0.63283085 -0.48172227 -0.7158173 -0.7600354
## 133 -0.7493387 -0.8907683 -0.73890150 -0.57831060 -0.8273448 -0.7671841
## 134 -0.8647687 -0.9931493 -0.71364028 -0.61452075 -0.8276290 -0.8809681
## 135 -0.8239345 -0.7582267 -0.50784553 -0.65952833 -0.3968660 -0.8156489
## 136 -0.8523508 -0.9863682 -0.65519702 -0.45741266 -0.6024894 -0.8692613
## 137 -0.6813460 -0.8087218 -0.31298724 -0.42857333 -0.6497137 -0.6974183
## 138 -0.7646131 -0.9839357 -0.37266145 -0.43205135 -0.7753368 -0.7922850
## 139 -0.9481719 -0.9848984 -0.70598820 -0.68188912 -0.7929630 -0.9528090
## 140 -0.8608258 -0.9978349 -0.66044833 -0.55984231 -0.8507301 -0.8781137
## 141 -0.6997593 -0.8471897 -0.74585632 -0.54665152 -0.7206042 -0.7183616
## 142 -0.8132938 -0.9974253 -0.83899634 -0.66031685 -0.6562157 -0.8365263
## 143 -0.8639256 -0.9683940 -0.67738862 -0.57385541 -0.7077001 -0.8771083
## 144 -0.8105242 -0.9565165 -0.74755146 -0.56393817 -0.6591006 -0.8289452
## 145 -0.8940822 -0.9595268 -0.48140707 -0.47533647 -0.6169307 -0.9023420
## 146 -0.8731380 -0.9830770 -0.46678913 -0.34010205 -0.5999688 -0.8870109
## 147 -0.7446132 -0.9732375 -0.65026178 -0.73355251 -0.7228704 -0.7734585
## 148 -0.8565527 -0.9277220 -0.74885370 -0.81666519 -0.8799244 -0.8655347
## 149 -0.9061924 -0.9767531 -0.80802454 -0.72828043 -0.7458034 -0.9150977
## 150 -0.8666292 -0.9408066 -0.79201928 -0.55621581 -0.6928218 -0.8759906
## 151 -0.9516351 -0.9996086 -0.83250207 -0.92792643 -0.8624908 -0.9576910
## 152 -0.9310684 -0.9986497 -0.85397686 -0.94092702 -0.8372989 -0.9395979
## 153 -0.9506737 -0.9935336 -0.79463237 -0.90753195 -0.8619815 -0.9560846
## 154 -0.9190149 -0.8867532 -0.70701312 -0.87475763 -0.7923911 -0.9149488
## 155 -0.9251125 -0.9210958 -0.70561255 -0.84816711 -0.8814269 -0.9246096
## 156 -0.9725901 -0.9297644 -0.78057363 -0.88731838 -0.9328975 -0.9671914
## 157 -0.9683522 -0.9921164 -0.77978641 -0.90669768 -0.9377201 -0.9713541
## 158 -0.9492156 -0.9996078 -0.80541001 -0.84729548 -0.8882957 -0.9555766
## 159 -0.9357025 -0.9837632 -0.82144145 -0.90623363 -0.9365541 -0.9417694
## 160 -0.9464233 -0.9986423 -0.84730157 -0.90498238 -0.9386598 -0.9530148
## 161 -0.7973491 -0.9976285 -0.77723623 -0.84408121 -0.9346404 -0.8226186
## 162 -0.8349043 -0.9686129 -0.77849213 -0.89456844 -0.9153471 -0.8517758
## 163 -0.9692957 -0.9877084 -0.87319635 -0.88571230 -0.9265244 -0.9716225
## 164 -0.9191966 -0.9974882 -0.81706621 -0.83631710 -0.8551486 -0.9290772
## 165 -0.9016826 -0.9848322 -0.86440693 -0.83759751 -0.8825345 -0.9121761
## 166 -0.9609756 -0.9917468 -0.89188905 -0.92518630 -0.9652021 -0.9648614
## 167 -0.9596529 -0.9466384 -0.88646559 -0.92597154 -0.9409911 -0.9580150
## 168 -0.9524900 -0.9992190 -0.82226077 -0.88786668 -0.8576420 -0.9583890
## 169 -0.9692193 -0.9860564 -0.73146252 -0.77016178 -0.8414066 -0.9713473
## 170 -0.9445427 -0.9843741 -0.68359337 -0.77394675 -0.8392533 -0.9495714
## 171 -0.9278431 -0.9998449 -0.72428579 -0.87342128 -0.9148178 -0.9369302
## 172 -0.9358859 -0.9896478 -0.72807155 -0.83594412 -0.9032027 -0.9426720
## 173 -0.9020074 -0.9663371 -0.74756596 -0.80314987 -0.9128062 -0.9101266
## 174 -0.8930909 -0.9167718 -0.71934333 -0.83289449 -0.9256406 -0.8960821
## 175 -0.9793479 -0.9998055 -0.76431603 -0.90801692 -0.9234445 -0.9819326
```

```
## 176 -0.9096933 -0.9286954 -0.79628224 -0.79402320 -0.8987441 -0.9120943
## 177 -0.9988948 -0.9999885 -0.99979203 -0.99967211 -0.9996558 -0.9990368
##               NA         NA          NA          NA         NA         NA
## 1   -0.99985216 -0.9998221 -0.9993999 -0.9997656 -0.9999585 -0.9999495
## 2   -0.99962988 -0.9997593 -0.9998589 -0.9998465 -0.9997949 -0.9998009
## 3   -0.99961317 -0.9997732 -0.9998709 -0.9997839 -0.9997397 -0.9997866
## 4   -0.99980556 -0.9998560 -0.9998848 -0.9997237 -0.9998414 -0.9999425
## 5   -0.99982993 -0.9998744 -0.9998451 -0.9998530 -0.9998899 -0.9998177
## 6   -0.99985656 -0.9998302 -0.9998633 -0.9997931 -0.9999047 -0.9998218
## 7   -0.99980032 -0.9996782 -0.9999156 -0.9998359 -0.9995279 -0.9998681
## 8   -0.99974875 -0.9994894 -0.9999102 -0.9998953 -0.9996097 -0.9998446
## 9   -0.99972502 -0.9994425 -0.9998191 -0.9999091 -0.9999575 -0.9998801
## 10  -0.99932067 -0.9991960 -0.9998327 -0.9995707 -0.9997519 -0.9998838
## 11  -0.99949112 -0.9992919 -0.9998425 -0.9994388 -0.9996698 -0.9997604
## 12  -0.99990806 -0.9997581 -0.9999715 -0.9997011 -0.9997464 -0.9998171
## 13  -0.99991289 -0.9997808 -0.9998866 -0.9998641 -0.9998133 -0.9998326
## 14  -0.99991156 -0.9999016 -0.9999027 -0.9997984 -0.9998101 -0.9998494
## 15  -0.99975545 -0.9997168 -0.9997898 -0.9995279 -0.9999240 -0.9998162
## 16  -0.99995439 -0.9999283 -0.9997770 -0.9999595 -0.9999090 -0.9998564
## 17  -0.99991884 -0.9998860 -0.9998475 -0.9998272 -0.9999519 -0.9999314
## 18  -0.99988565 -0.9999048 -0.9998911 -0.9998157 -0.9998808 -0.9999252
## 19  -0.99989647 -0.9999370 -0.9999055 -0.9997979 -0.9998729 -0.9999207
## 20  -0.99990024 -0.9999450 -0.9999520 -0.9998162 -0.9999112 -0.9999575
## 21  -0.99992270 -0.9999191 -0.9999255 -0.9998320 -0.9998801 -0.9998739
## 22  -0.99986212 -0.9996622 -0.9999652 -0.9998221 -0.9998759 -0.9998175
## 23  -0.99976294 -0.9995969 -0.9999124 -0.9999046 -0.9998573 -0.9997869
## 24  -0.99981210 -0.9997200 -0.9998350 -0.9997125 -0.9999447 -0.9998274
## 25  -0.99984189 -0.9997141 -0.9998706 -0.9999480 -0.9999098 -0.9997993
## 26  -0.99983502 -0.9997152 -0.9999334 -0.9998509 -0.9998999 -0.9997839
## 27  -0.99987298 -0.9998078 -0.9999433 -0.9998359 -0.9998498 -0.9997667
## 28  -0.99895000 -0.9996865 -0.9977676 -0.9994648 -0.9998988 -0.9997686
## 29  -0.99982565 -0.9998580 -0.9998132 -0.9998292 -0.9999122 -0.9998651
## 30  -0.99992428 -0.9998882 -0.9998767 -0.9997932 -0.9998593 -0.9998132
## 31  -0.98584801 -0.9952690 -0.9631200 -0.9934522 -0.9984235 -0.9990934
## 32  -0.98316105 -0.9941141 -0.9515325 -0.9923164 -0.9976733 -0.9984094
## 33  -0.99712469 -0.9984548 -0.9902846 -0.9988316 -0.9990851 -0.9990241
## 34  -0.99964972 -0.9997019 -0.9996278 -0.9998306 -0.9999280 -0.9999352
## 35  -0.99992544 -0.9997918 -0.9998314 -0.9999100 -0.9999484 -0.9999680
## 36  -0.99994345 -0.9998159 -0.9999543 -0.9999276 -0.9999175 -0.9999155
## 37  -0.99991219 -0.9998219 -0.9999661 -0.9999599 -0.9999064 -0.9998584
## 38  -0.99988949 -0.9998398 -0.9999439 -0.9999039 -0.9999082 -0.9999173
## 39  -0.99939151 -0.9994023 -0.9995668 -0.9996414 -0.9997467 -0.9997347
## 40  -0.99994045 -0.9997376 -0.9998628 -0.9997118 -0.9998285 -0.9998743
## 41  -0.99993552 -0.9998308 -0.9998554 -0.9996137 -0.9999003 -0.9998473
## 42  -0.99988258 -0.9998656 -0.9998757 -0.9998120 -0.9997895 -0.9998059
## 43  -0.99987277 -0.9998512 -0.9999020 -0.9998878 -0.9997729 -0.9998461
## 44  -0.99987873 -0.9998600 -0.9998701 -0.9998211 -0.9998269 -0.9998900
## 45  -0.99990084 -0.9998319 -0.9997819 -0.9999302 -0.9998525 -0.9999231
## 46  -0.99993640 -0.9998795 -0.9998875 -0.9999310 -0.9998616 -0.9999498
## 47  -0.99988396 -0.9998468 -0.9998689 -0.9999138 -0.9998771 -0.9999268
```

```
## 48    -0.99985653 -0.9998399 -0.9998220 -0.9998070 -0.9998969 -0.9999141
## 49    -0.99993391 -0.9998955 -0.9997981 -0.9996375 -0.9999413 -0.9998965
## 50    -0.99993656 -0.9998086 -0.9999168 -0.9997626 -0.9999729 -0.9998456
## 51    -0.99989833 -0.9998411 -0.9999794 -0.9998890 -0.9999240 -0.9998072
## 52    -0.99484445 -0.9927992 -0.9984884 -0.9992138 -0.9998215 -0.9994738
## 53    -0.99985729 -0.9998489 -0.9999617 -0.9997047 -0.9999029 -0.9997772
## 54    -0.99989713 -0.9998700 -0.9999715 -0.9996921 -0.9999563 -0.9998469
## 55    -0.99995506 -0.9998450 -0.9999318 -0.9999113 -0.9999305 -0.9999182
## 56    -0.99996421 -0.9998353 -0.9998533 -0.9999332 -0.9998729 -0.9999424
## 57    -0.99993021 -0.9998686 -0.9997951 -0.9998568 -0.9998176 -0.9997909
## 58    -0.99987958 -0.9998753 -0.9998274 -0.9998242 -0.9999328 -0.9997903
## 59    -0.99991784 -0.9998430 -0.9998781 -0.9997293 -0.9999864 -0.9998114
## 60    -0.99988215 -0.9996865 -0.9998856 -0.9996997 -0.9999827 -0.9997570
## 61    -0.99984614 -0.9996689 -0.9998899 -0.9997753 -0.9999270 -0.9998372
## 62    -0.99992259 -0.9998726 -0.9997973 -0.9999374 -0.9998257 -0.9998738
## 63    -0.99993702 -0.9999280 -0.9998743 -0.9998683 -0.9998787 -0.9997887
## 64    -0.99992745 -0.9999375 -0.9999160 -0.9998774 -0.9998356 -0.9997940
## 65    -0.99459100 -0.9843613 -0.9927659 -0.9965199 -0.9986074 -0.9964010
## 66    -0.99980675 -0.9996586 -0.9995209 -0.9995290 -0.9995926 -0.9995222
## 67    -0.92250274 -0.9776727 -0.9244363 -0.9891870 -0.9934661 -0.9945520
## 68    -0.91923840 -0.9760471 -0.9138272 -0.9892827 -0.9924962 -0.9946366
## 69    -0.99520270 -0.9974430 -0.9902140 -0.9992681 -0.9991657 -0.9994393
## 70    -0.97891276 -0.9790914 -0.9760664 -0.9888368 -0.9946327 -0.9938967
## 71    -0.76919083 -0.6999602 -0.6387027 -0.8553354 -0.9908352 -0.9825670
## 72    -0.78387438 -0.7135269 -0.7214795 -0.8339511 -0.9896220 -0.9884908
## 73    -0.99208552 -0.9950656 -0.9975999 -0.9916135 -0.9960649 -0.9982036
## 74    -0.99898965 -0.9994405 -0.9997094 -0.9998512 -0.9996077 -0.9998820
## 75    -0.99970800 -0.9995244 -0.9998434 -0.9998088 -0.9997298 -0.9998970
## 76    -0.99991801 -0.9997623 -0.9999531 -0.9997683 -0.9999489 -0.9998786
## 77    -0.99991063 -0.9998930 -0.9999909 -0.9997805 -0.9998098 -0.9998698
## 78    -0.99986046 -0.9998368 -0.9999054 -0.9998514 -0.9997675 -0.9998673
## 79    -0.57350196 -0.8870414 -0.8213194 -0.9268195 -0.9218756 -0.9543635
## 80    -0.46628283 -0.7169212 -0.8146295 -0.9108706 -0.8633176 -0.9390303
## 81    -0.48408763 -0.7014619 -0.8760733 -0.9262144 -0.8787063 -0.9401698
## 82    -0.35954661 -0.8081416 -0.8289594 -0.8445814 -0.8786560 -0.9197796
## 83    -0.37192990 -0.6972707 -0.7746406 -0.7679222 -0.8619700 -0.9200155
## 84    -0.48871461 -0.6887495 -0.8149266 -0.7728063 -0.8785877 -0.8968605
## 85    -0.43632571 -0.8824159 -0.8455825 -0.8129849 -0.8776005 -0.8990667
## 86    -0.38672207 -0.8092647 -0.8489436 -0.8481593 -0.8620506 -0.8942386
## 87    -0.51818976 -0.7449266 -0.8539577 -0.8700839 -0.9249945 -0.9523049
## 88    -0.36658336 -0.6619882 -0.8368176 -0.8590110 -0.8601913 -0.8999295
## 89    -0.49692969 -0.7842272 -0.8697589 -0.8677689 -0.8784029 -0.8972539
## 90    -0.44911134 -0.7947348 -0.8675926 -0.8978576 -0.8862641 -0.9136042
## 91    -0.35543722 -0.7233870 -0.8189313 -0.8895662 -0.8103878 -0.9232967
## 92    -0.23168291 -0.6293594 -0.8384289 -0.8611580 -0.7645461 -0.8994122
## 93    -0.15482835 -0.6184666 -0.8489393 -0.8687739 -0.7975641 -0.8837227
## 94    -0.29526266 -0.7402621 -0.8713769 -0.8641164 -0.8178613 -0.9434042
## 95    -0.38629997 -0.8348948 -0.8522227 -0.8015381 -0.8219504 -0.9427329
## 96    -0.42200705 -0.8076421 -0.8614910 -0.7663532 -0.8725391 -0.9274678
## 97    -0.33445160 -0.7069631 -0.8728441 -0.8015484 -0.8751990 -0.9391008
```

```
## 98   -0.37172618 -0.6692170 -0.8480195 -0.8408708 -0.8958169 -0.8903570
## 99   -0.33126781 -0.7507503 -0.8373192 -0.8485877 -0.8728701 -0.9192589
## 100  -0.39791846 -0.7382991 -0.7946929 -0.9166043 -0.8794757 -0.9403230
## 101  -0.46085663 -0.7101592 -0.8659372 -0.9200792 -0.8848263 -0.9454635
## 102  -0.12722771 -0.5603594 -0.8113636 -0.8604886 -0.8330031 -0.9045797
## 103  -0.10600230 -0.5066803 -0.8290270 -0.8426593 -0.8322066 -0.9086294
## 104  -0.06265552 -0.5423308 -0.8075064 -0.8385905 -0.8169908 -0.9266615
## 105  -0.22370698 -0.6777032 -0.8312090 -0.8568628 -0.8572688 -0.9436033
## 106  -0.49733023 -0.7704690 -0.8567446 -0.8692530 -0.9381533 -0.9479047
## 107  -0.27618104 -0.7612752 -0.8289746 -0.8221913 -0.9156175 -0.8945811
## 108  -0.07915208 -0.7110750 -0.8176261 -0.8112044 -0.8723810 -0.9049290
## 109  -0.15807255 -0.6125053 -0.8337433 -0.8568460 -0.8524275 -0.9321750
## 110  -0.26752464 -0.6192725 -0.8484493 -0.8552471 -0.8866809 -0.9326119
## 111  -0.34854863 -0.7050424 -0.8691596 -0.8847795 -0.9063790 -0.9518196
## 112  -0.11425791 -0.5320691 -0.8154618 -0.8184955 -0.7863273 -0.8177537
## 113  -0.42727076 -0.7686663 -0.8646632 -0.9125377 -0.8935734 -0.9360735
## 114  -0.49947562 -0.7573582 -0.8589007 -0.9005555 -0.8944127 -0.9269804
## 115  -0.42209359 -0.8159098 -0.8185631 -0.8493462 -0.9311313 -0.9130512
## 116  -0.32883348 -0.8238001 -0.8350563 -0.8551212 -0.9032540 -0.9234537
## 117  -0.29515538 -0.8025740 -0.8658960 -0.8829168 -0.8735588 -0.9139519
## 118  -0.38727806 -0.7491208 -0.8597443 -0.8631709 -0.9133867 -0.9320131
## 119  -0.48051228 -0.7718155 -0.8857133 -0.8581547 -0.9361821 -0.9204763
## 120  -0.56947381 -0.8235679 -0.8904891 -0.8716581 -0.9340538 -0.9371322
## 121  -0.55329275 -0.8067794 -0.8682422 -0.8450452 -0.9359388 -0.9495342
## 122  -0.44070805 -0.6829975 -0.8542357 -0.8506547 -0.9428381 -0.9273871
## 123  -0.37893671 -0.7292369 -0.8697251 -0.8493486 -0.9153702 -0.9301225
## 124  -0.42212764 -0.8227428 -0.8418771 -0.8174307 -0.8814922 -0.9564915
## 125  -0.45129453 -0.8410261 -0.8520025 -0.8326858 -0.9269505 -0.9495443
## 126  -0.71970337 -0.6837825 -0.9429385 -0.9516590 -0.8701427 -0.9259693
## 127  -0.68726544 -0.6733314 -0.9469367 -0.9211645 -0.8731288 -0.8459917
## 128  -0.54384316 -0.7404734 -0.9512947 -0.8639841 -0.8300836 -0.7890544
## 129  -0.42711557 -0.6824537 -0.9308943 -0.8478762 -0.8258126 -0.7622056
## 130  -0.47178479 -0.7012297 -0.9274239 -0.7774688 -0.7274352 -0.7745518
## 131  -0.39582948 -0.6876535 -0.9275260 -0.8002073 -0.5284437 -0.7808228
## 132  -0.48239739 -0.7531022 -0.9348899 -0.8776885 -0.4281365 -0.8328666
## 133  -0.59056372 -0.8562958 -0.9547253 -0.7743944 -0.6648496 -0.8624595
## 134  -0.60912688 -0.8231371 -0.9652877 -0.8188682 -0.7394814 -0.7860219
## 135  -0.52113969 -0.5806925 -0.7799540 -0.4095141 -0.6130268 -0.6302373
## 136  -0.53301734 -0.6012503 -0.9033843 -0.6209973 -0.4948478 -0.7207114
## 137  -0.24590656 -0.6653448 -0.8560499 -0.7460772 -0.5642054 -0.8492159
## 138  -0.27712962 -0.7453280 -0.9276372 -0.7084742 -0.7960575 -0.7356239
## 139  -0.69105310 -0.7064648 -0.9197176 -0.6702871 -0.8955756 -0.6713891
## 140  -0.60443250 -0.6843182 -0.9303234 -0.7453051 -0.7279701 -0.9373959
## 141  -0.65845698 -0.6343928 -0.8572275 -0.7406384 -0.6351593 -0.8358914
## 142  -0.76960211 -0.6650982 -0.8638302 -0.7142575 -0.6456251 -0.7187219
## 143  -0.56007470 -0.7727517 -0.8853990 -0.8977962 -0.8050751 -0.9264641
## 144  -0.59563156 -0.7749249 -0.8836839 -0.9033245 -0.8059710 -0.9282128
## 145  -0.36461956 -0.7232783 -0.9052756 -0.7163096 -0.6811731 -0.9016716
## 146  -0.31209092 -0.6291531 -0.8786514 -0.6749329 -0.7074976 -0.9021828
## 147  -0.65301764 -0.7426549 -0.9157795 -0.8272673 -0.8250222 -0.9280480
```

```
## 148 -0.73940238 -0.8815269 -0.9181084 -0.9128253 -0.7714010 -0.8839827
## 149 -0.73385827 -0.8192714 -0.9271574 -0.8368735 -0.7786785 -0.8049667
## 150 -0.62574085 -0.7825928 -0.9088739 -0.8413363 -0.7384105 -0.8683720
## 151 -0.84935891 -0.9145539 -0.8170543 -0.9252830 -0.9084020 -0.9860651
## 152 -0.86683074 -0.9180469 -0.8336712 -0.8964782 -0.9659007 -0.9855802
## 153 -0.81004331 -0.9131740 -0.8592017 -0.9370728 -0.9843940 -0.9880419
## 154 -0.73777556 -0.8615224 -0.8008302 -0.9565729 -0.9705325 -0.9828104
## 155 -0.72066099 -0.8959997 -0.7832075 -0.9432177 -0.9270723 -0.9748976
## 156 -0.79357556 -0.9274129 -0.8131225 -0.9490715 -0.9564675 -0.9747290
## 157 -0.80367174 -0.9315368 -0.7878644 -0.9307742 -0.9503720 -0.9860591
## 158 -0.79627377 -0.8908218 -0.7423282 -0.9265799 -0.9475562 -0.9835268
## 159 -0.83785455 -0.9219024 -0.7917956 -0.9554336 -0.9549207 -0.9818006
## 160 -0.85750713 -0.9191909 -0.8045706 -0.9381999 -0.9556117 -0.9827732
## 161 -0.78022103 -0.8946425 -0.8133576 -0.9372320 -0.9485429 -0.9744119
## 162 -0.80390687 -0.9041644 -0.7955486 -0.9736311 -0.9446402 -0.9800840
## 163 -0.85821500 -0.9288370 -0.8676518 -0.9701949 -0.9802601 -0.9883817
## 164 -0.78812617 -0.9000816 -0.8689334 -0.9629692 -0.9749129 -0.9908706
## 165 -0.82303786 -0.9113026 -0.8233814 -0.9687553 -0.9844465 -0.9822129
## 166 -0.89169553 -0.9524485 -0.8300074 -0.9822713 -0.9795578 -0.9865875
## 167 -0.88478465 -0.9506891 -0.8123110 -0.9742374 -0.9724726 -0.9905831
## 168 -0.82547979 -0.8956034 -0.7410043 -0.9567585 -0.9787843 -0.9930427
## 169 -0.72592737 -0.8065920 -0.8051944 -0.9576943 -0.9665240 -0.9915777
## 170 -0.68737653 -0.8190298 -0.8179277 -0.9710035 -0.9594172 -0.9872946
## 171 -0.74292750 -0.9233455 -0.8014358 -0.9504463 -0.9713581 -0.9849053
## 172 -0.72997178 -0.9036308 -0.8529589 -0.9421187 -0.9719142 -0.9865083
## 173 -0.72328941 -0.9097013 -0.8222517 -0.9613044 -0.9820636 -0.9819378
## 174 -0.71639337 -0.9241774 -0.7330315 -0.9629952 -0.9842988 -0.9746598
## 175 -0.78562227 -0.9427713 -0.7788337 -0.9718922 -0.9824583 -0.9842811
## 176 -0.75598723 -0.8981620 -0.8436465 -0.9820914 -0.9703115 -0.9832345
## 177 -0.99974206 -0.9996805 -0.9991329 -0.9995295 -0.9997160 -0.9998678
##              NA         NA         NA          NA         NA          NA
## 1    -0.9998385 -0.9998135 -0.9987805 -0.99857783 -0.9996197 -0.9999836
## 2    -0.9998193 -0.9997692 -0.9996370 -0.99995450 -0.9998519 -0.9998273
## 3    -0.9997722 -0.9996260 -0.9994874 -0.99999573 -0.9998025 -0.9997921
## 4    -0.9998694 -0.9997353 -0.9992040 -0.99966198 -0.9997560 -0.9999203
## 5    -0.9997595 -0.9996878 -0.9991695 -0.99998229 -0.9998525 -0.9998841
## 6    -0.9997550 -0.9996238 -0.9993829 -0.99991021 -0.9998077 -0.9998937
## 7    -0.9997666 -0.9996341 -0.9994816 -0.99957202 -0.9998630 -0.9997238
## 8    -0.9999055 -0.9995402 -0.9995968 -0.99998343 -0.9999119 -0.9997540
## 9    -0.9999201 -0.9996917 -0.9997406 -0.99979609 -0.9998913 -0.9999492
## 10   -0.9996226 -0.9995985 -0.9997386 -0.99998066 -0.9996066 -0.9998459
## 11   -0.9996715 -0.9993691 -0.9994645 -0.99994709 -0.9994972 -0.9997436
## 12   -0.9997668 -0.9995497 -0.9993470 -0.99992867 -0.9997675 -0.9998105
## 13   -0.9997863 -0.9998065 -0.9998291 -0.99998367 -0.9998768 -0.9998522
## 14   -0.9998512 -0.9997877 -0.9999492 -0.99997603 -0.9998263 -0.9998588
## 15   -0.9998134 -0.9997249 -0.9996949 -0.99991005 -0.9995547 -0.9999008
## 16   -0.9999147 -0.9996229 -0.9993929 -0.99969329 -0.9999195 -0.9999128
## 17   -0.9998750 -0.9996387 -0.9996075 -0.99972769 -0.9998313 -0.9999714
## 18   -0.9998674 -0.9998614 -0.9998012 -0.99968510 -0.9998370 -0.9999320
## 19   -0.9999501 -0.9995868 -0.9998013 -0.99999181 -0.9998269 -0.9999258
```

```
## 20   -0.9999240 -0.9996044 -0.9997602 -0.99974909 -0.9998590 -0.9999633
## 21   -0.9998084 -0.9996795 -0.9996605 -0.99999694 -0.9998631 -0.9999065
## 22   -0.9997227 -0.9997816 -0.9993243 -0.99967511 -0.9998687 -0.9998768
## 23   -0.9998278 -0.9995946 -0.9995176 -0.99999825 -0.9999206 -0.9998524
## 24   -0.9998149 -0.9997014 -0.9994108 -0.99969127 -0.9997288 -0.9999168
## 25   -0.9996042 -0.9997226 -0.9994957 -0.99990119 -0.9999429 -0.9998853
## 26   -0.9995883 -0.9996556 -0.9996847 -0.99987285 -0.9998821 -0.9998727
## 27   -0.9997444 -0.9994983 -0.9995779 -0.99993095 -0.9998728 -0.9998387
## 28   -0.9998878 -0.9993281 -0.9993211 -0.99947829 -0.9987828 -0.9998646
## 29   -0.9998649 -0.9995515 -0.9995399 -0.99981936 -0.9998209 -0.9999187
## 30   -0.9998430 -0.9994375 -0.9996915 -0.99997726 -0.9998126 -0.9998663
## 31   -0.9980512 -0.9970583 -0.9990282 -0.99995653 -0.9813359 -0.9987805
## 32   -0.9976005 -0.9963604 -0.9983044 -0.99997401 -0.9762498 -0.9980627
## 33   -0.9993551 -0.9992113 -0.9987152 -0.99975505 -0.9955840 -0.9990847
## 34   -0.9998837 -0.9998320 -0.9997760 -0.99997342 -0.9997562 -0.9999610
## 35   -0.9999421 -0.9997558 -1.0000000 -0.99999422 -0.9998964 -0.9999875
## 36   -0.9998690 -0.9997941 -0.9998966 -0.99989013 -0.9999552 -0.9999460
## 37   -0.9998725 -0.9998498 -0.9998457 -0.99997975 -0.9999869 -0.9999124
## 38   -0.9998731 -0.9998975 -0.9997793 -0.99996861 -0.9999312 -0.9999421
## 39   -0.9997497 -0.9992178 -0.9994054 -0.99945997 -0.9995727 -0.9997703
## 40   -0.9999035 -0.9994209 -0.9998077 -0.99998269 -0.9997380 -0.9998804
## 41   -0.9999256 -0.9991631 -0.9996760 -0.99998299 -0.9996514 -0.9999039
## 42   -0.9999164 -0.9995775 -0.9994187 -0.99999337 -0.9998283 -0.9998270
## 43   -0.9998352 -0.9996526 -0.9995250 -0.99999976 -0.9999025 -0.9998382
## 44   -0.9998041 -0.9995894 -0.9993272 -0.99981769 -0.9998341 -0.9998873
## 45   -0.9998959 -0.9998531 -0.9993892 -0.99987746 -0.9998961 -0.9999165
## 46   -0.9999761 -0.9997536 -0.9998531 -0.99999252 -0.9999343 -0.9999342
## 47   -0.9999326 -0.9997040 -0.9997302 -0.99997811 -0.9999131 -0.9999309
## 48   -0.9998210 -0.9998085 -0.9995041 -0.99988715 -0.9998050 -0.9999348
## 49   -0.9998159 -0.9997163 -0.9998634 -0.99997777 -0.9996515 -0.9999489
## 50   -0.9999586 -0.9997859 -0.9997664 -0.99935946 -0.9998006 -0.9999402
## 51   -0.9999008 -0.9996517 -0.9990295 -0.99984896 -0.9999310 -0.9998964
## 52   -0.9994880 -0.9994663 -0.9983263 -0.99983763 -0.9988239 -0.9996810
## 53   -0.9997167 -0.9998433 -0.9994594 -0.99998560 -0.9997671 -0.9998710
## 54   -0.9998118 -0.9997463 -0.9994736 -0.99998093 -0.9997597 -0.9999323
## 55   -0.9998570 -0.9996465 -0.9992785 -0.99985841 -0.9999332 -0.9999540
## 56   -0.9997593 -0.9997041 -0.9995817 -0.99975023 -0.9999241 -0.9999364
## 57   -0.9997870 -0.9998625 -0.9992688 -0.99987645 -0.9998380 -0.9998340
## 58   -0.9998328 -0.9995987 -0.9991623 -0.99949671 -0.9998217 -0.9998926
## 59   -0.9999109 -0.9993784 -0.9995597 -0.99991537 -0.9997584 -0.9999303
## 60   -0.9999034 -0.9996994 -0.9992566 -0.99999616 -0.9997357 -0.9999019
## 61   -0.9997510 -0.9996104 -0.9994555 -0.99939311 -0.9998020 -0.9999126
## 62   -0.9997456 -0.9996372 -0.9994445 -0.99979667 -0.9999078 -0.9998787
## 63   -0.9998361 -0.9996304 -0.9995545 -0.99983178 -0.9998761 -0.9998642
## 64   -0.9998356 -0.9998165 -0.9994542 -0.99986675 -0.9998986 -0.9998448
## 65   -0.9988759 -0.9908162 -0.9941433 -0.99879666 -0.9944870 -0.9975581
## 66   -0.9995834 -0.9992148 -0.9993412 -0.99987066 -0.9994602 -0.9995877
## 67   -0.9802514 -0.9903141 -0.9978606 -0.99753372 -0.9639511 -0.9940265
## 68   -0.9791301 -0.9893513 -0.9972815 -0.99855115 -0.9602662 -0.9935721
## 69   -0.9985972 -0.9975395 -0.9982975 -0.99200001 -0.9959324 -0.9993290
```

```
## 70   -0.9966538 -0.9943532 -0.9826530 -0.99695360 -0.9819836 -0.9943023
## 71   -0.9727777 -0.8768046 -0.6522210 -0.99752722 -0.7479672 -0.9868220
## 72   -0.9696903 -0.8785805 -0.6302262 -0.99555953 -0.7590607 -0.9890983
## 73   -0.9948730 -0.9873655 -0.9929007 -0.99992464 -0.9920053 -0.9971400
## 74   -0.9998803 -0.9995580 -0.9994433 -0.99957196 -0.9998029 -0.9997713
## 75   -0.9999635 -0.9996870 -0.9995962 -0.99990210 -0.9998142 -0.9998411
## 76   -0.9999256 -0.9997554 -0.9997292 -0.99984969 -0.9998185 -0.9999440
## 77   -0.9998358 -0.9995569 -0.9996119 -0.99979658 -0.9998423 -0.9998686
## 78   -0.9998397 -0.9994996 -0.9996510 -0.99998607 -0.9998726 -0.9998458
## 79   -0.9825605 -0.9087330 -0.8237071 -0.32863285 -0.8739732 -0.9377885
## 80   -0.9594975 -0.9053495 -0.9152942 -0.83051574 -0.8579512 -0.9003638
## 81   -0.9697618 -0.9134329 -0.8914641 -0.73592980 -0.8928967 -0.9087857
## 82   -0.9512242 -0.9016605 -0.9555916 -0.98981153 -0.8063188 -0.8987905
## 83   -0.9340713 -0.9005234 -0.9204542 -0.97362704 -0.7214386 -0.8903780
## 84   -0.9260085 -0.8728179 -0.8684089 -0.95186132 -0.7399218 -0.8875497
## 85   -0.9503882 -0.9091991 -0.9386096 -0.93538191 -0.7851855 -0.8881238
## 86   -0.9622826 -0.8919805 -0.7681877 -0.95937535 -0.8164759 -0.8778160
## 87   -0.9747351 -0.9405216 -0.9439561 -0.99074206 -0.8370161 -0.9383759
## 88   -0.9512247 -0.8844780 -0.9447668 -0.98988277 -0.8214556 -0.8796482
## 89   -0.9389015 -0.8693331 -0.7760740 -0.96989957 -0.8406457 -0.8876475
## 90   -0.9600618 -0.8783438 -0.8280709 -0.99341153 -0.8656219 -0.8996595
## 91   -0.9420007 -0.9412109 -0.9186256 -0.98700575 -0.8412494 -0.8656198
## 92   -0.9324776 -0.9315096 -0.8828174 -0.65604017 -0.8238648 -0.8305131
## 93   -0.9373612 -0.8357562 -0.7677720 -0.95328763 -0.8341133 -0.8397167
## 94   -0.9429528 -0.8034860 -0.5961246 -0.77374702 -0.8380949 -0.8792706
## 95   -0.9763794 -0.8673689 -0.8338826 -0.97365952 -0.7777488 -0.8810322
## 96   -0.9728741 -0.8620017 -0.7999312 -0.95317000 -0.7509336 -0.8994234
## 97   -0.9544448 -0.8910016 -0.8000881 -0.98247433 -0.7850794 -0.9064706
## 98   -0.9644084 -0.9048759 -0.8632559 -0.83899621 -0.8099114 -0.8931753
## 99   -0.9398094 -0.9074924 -0.7437153 -0.95351662 -0.8127151 -0.8955789
## 100  -0.9217684 -0.8441850 -0.6996127 -0.96597402 -0.8557785 -0.9092539
## 101  -0.9433198 -0.8532973 -0.8575675 -0.83941364 -0.8840481 -0.9145018
## 102  -0.9451709 -0.9254454 -0.8487589 -0.97000659 -0.8136822 -0.8680265
## 103  -0.9711240 -0.9300476 -0.8776045 -0.99152880 -0.8046982 -0.8695995
## 104  -0.9739177 -0.9568924 -0.8829593 -0.99709466 -0.7935755 -0.8706395
## 105  -0.9761187 -0.9427554 -0.8526558 -0.98955178 -0.8176261 -0.8995083
## 106  -0.9380513 -0.8744558 -0.9014195 -0.90344075 -0.8372946 -0.9429498
## 107  -0.9092615 -0.9052128 -0.9181442 -0.99821989 -0.7871661 -0.9053603
## 108  -0.9671116 -0.8470991 -0.9459808 -0.88219043 -0.7737357 -0.8883225
## 109  -0.9789413 -0.8633017 -0.8870749 -0.99493557 -0.8185116 -0.8914462
## 110  -0.9630160 -0.8561880 -0.8311578 -0.99594246 -0.8223651 -0.9091660
## 111  -0.9555840 -0.9200654 -0.8234624 -0.99821847 -0.8549880 -0.9286247
## 112  -0.9336387 -0.8171005 -0.6022734 -0.99837344 -0.7792059 -0.8017192
## 113  -0.9733239 -0.8498019 -0.5559095 -0.95301561 -0.8771429 -0.9143812
## 114  -0.9193140 -0.9236221 -0.7996001 -0.94879445 -0.8648442 -0.9103642
## 115  -0.9223172 -0.8498516 -0.8777501 -0.99848751 -0.8067044 -0.9223198
## 116  -0.9642750 -0.9025680 -0.8484932 -0.97189311 -0.8175020 -0.9131584
## 117  -0.9648542 -0.9769931 -0.9186023 -0.99993486 -0.8522354 -0.8933361
## 118  -0.9484126 -0.9667795 -0.9270606 -0.99970984 -0.8331555 -0.9225220
## 119  -0.9605104 -0.9570966 -0.9386909 -0.99996368 -0.8380841 -0.9285315
```

```
## 120  -0.9783836  -0.9828257  -0.9706761  -0.99851016  -0.8513340  -0.9355875
## 121  -0.9684295  -0.9690582  -0.9641698  -0.95489164  -0.8206636  -0.9426146
## 122  -0.9545789  -0.9319509  -0.9404061  -0.99944830  -0.8204901  -0.9353122
## 123  -0.9600919  -0.9543298  -0.9354442  -0.99405825  -0.8248723  -0.9226114
## 124  -0.9674210  -0.9675195  -0.8792171  -0.98589309  -0.7876739  -0.9181898
## 125  -0.9640738  -0.9596779  -0.8159148  -0.99860268  -0.8043221  -0.9380259
## 126  -0.9810609  -0.9564791  -0.9161265  -0.96910389  -0.9384098  -0.8974660
## 127  -0.8743790  -0.8200884  -0.9428272  -0.99388098  -0.9137367  -0.8598881
## 128  -0.8688475  -0.8057022  -0.7922008  -0.91204197  -0.8663576  -0.8100499
## 129  -0.8954051  -0.8311981  -0.7822187  -0.93499611  -0.8453314  -0.7947397
## 130  -0.8092017  -0.7862016  -0.8152157  -0.87078745  -0.7838550  -0.7504977
## 131  -0.9110483  -0.8591421  -0.8903726  -0.98010926  -0.8033475  -0.6518635
## 132  -0.8627193  -0.8714269  -0.7903554  -0.93096014  -0.8722591  -0.6260448
## 133  -0.8481880  -0.8161256  -0.4021591  -0.89546311  -0.7909182  -0.7614928
## 134  -0.8819042  -0.7026426  -0.2777430  -0.63157235  -0.8327226  -0.7622624
## 135  -0.7761538  -0.4531661   0.2046828  -0.28107015  -0.4166529  -0.6214654
## 136  -0.9214169  -0.5961047  -0.8225372  -0.99197471  -0.6414345  -0.6053028
## 137  -0.8790099  -0.6311858  -0.5473213   0.03014473  -0.7316524  -0.7035804
## 138  -0.8563655  -0.8880059  -0.8494838  -0.90156185  -0.7248954  -0.7665358
## 139  -0.8849722  -0.8739487  -0.8489134  -0.51726146  -0.6894087  -0.7859907
## 140  -0.8800841  -0.8822104  -0.8650880  -0.95316637  -0.7573637  -0.8303914
## 141  -0.8749231  -0.5833159  -0.7783829  -0.69460375  -0.7274169  -0.7333286
## 142  -0.9116639  -0.5668983  -0.6964192  -0.98796229  -0.7071884  -0.6813891
## 143  -0.9140371  -0.8711156  -0.9295086  -0.97749920  -0.8718918  -0.8644532
## 144  -0.9248895  -0.8184682  -0.9584749  -0.95991450  -0.8760132  -0.8657661
## 145  -0.9721722  -0.8579063  -0.9631793  -0.99979365  -0.7236601  -0.7890076
## 146  -0.9466101  -0.8656367  -0.9068608  -0.99995182  -0.6788027  -0.8027114
## 147  -0.9364183  -0.9535661  -0.8330235  -0.99059128  -0.8223307  -0.8754222
## 148  -0.9331327  -0.8966842  -0.8514132  -0.99483749  -0.8963654  -0.8264724
## 149  -0.9349940  -0.7982763  -0.6686165  -0.99862443  -0.8345902  -0.7915580
## 150  -0.9567333  -0.8329126  -0.5733149  -0.87238695  -0.8319169  -0.8019790
## 151  -0.9885987  -0.9839979  -0.9716512  -0.98333353  -0.8711441  -0.9464025
## 152  -0.9851856  -0.9862119  -0.9837962  -0.99921464  -0.8523973  -0.9755517
## 153  -0.9916644  -0.9853125  -0.9718857  -0.97117195  -0.8961971  -0.9862069
## 154  -0.9745208  -0.9661230  -0.9799450  -0.97920659  -0.8921568  -0.9765647
## 155  -0.9815137  -0.9758948  -0.9784197  -0.96282405  -0.8744722  -0.9504843
## 156  -0.9871260  -0.9752122  -0.9740597  -0.90816787  -0.8901028  -0.9654251
## 157  -0.9742512  -0.9281786  -0.9352934  -0.99801226  -0.8654784  -0.9678495
## 158  -0.9777863  -0.9221838  -0.9290159  -0.99940181  -0.8457213  -0.9651722
## 159  -0.9771318  -0.9376252  -0.9574496  -0.98359942  -0.8879741  -0.9680921
## 160  -0.9899145  -0.9728229  -0.9772996  -0.99997649  -0.8777639  -0.9689208
## 161  -0.9841418  -0.9872951  -0.9703493  -0.96817232  -0.8800557  -0.9612200
## 162  -0.9762129  -0.9698936  -0.9779194  -0.99796641  -0.9048773  -0.9619986
## 163  -0.9877562  -0.9651034  -0.9810487  -0.98769392  -0.9275385  -0.9842602
## 164  -0.9909660  -0.9827123  -0.9826143  -0.99196650  -0.9218108  -0.9827443
## 165  -0.9902593  -0.9909456  -0.9850880  -0.99823201  -0.9105878  -0.9833837
## 166  -0.9872134  -0.9890348  -0.9449439  -0.96705381  -0.9245054  -0.9830241
## 167  -0.9859669  -0.9643887  -0.9786668  -0.99432314  -0.9113478  -0.9813565
## 168  -0.9929654  -0.9654284  -0.9518009  -0.99996055  -0.8710735  -0.9857850
## 169  -0.9860556  -0.9607176  -0.9700749  -0.96123126  -0.8946659  -0.9788026
```

```
## 170 -0.9797828 -0.9508411 -0.9796744 -0.99823925 -0.9105750 -0.9730764
## 171 -0.9824448 -0.9506959 -0.9450147 -0.99572052 -0.8871296 -0.9780109
## 172 -0.9822165 -0.9550994 -0.9576218 -0.95924579 -0.8982981 -0.9790788
## 173 -0.9839184 -0.9795022 -0.9524018 -0.99968534 -0.9038113 -0.9820313
## 174 -0.9925620 -0.9580371 -0.9214449 -0.97636005 -0.8735792 -0.9796152
## 175 -0.9944161 -0.9494234 -0.9665387 -0.99549711 -0.8974546 -0.9833788
## 176 -0.9885977 -0.9682367 -0.9826572 -0.99980949 -0.9291942 -0.9766591
## 177 -0.9995091 -0.9993761 -0.9978865 -0.99824349 -0.9993229 -0.9998197
##              NA         NA         NA         NA         NA         NA
## 1   -0.9998281 -0.9986807 -0.9998442 -0.9999279 -0.986574420 -0.981761530
## 2   -0.9998001 -0.9996510 -0.9998350 -0.9998267 -0.977386710 -0.992530030
## 3   -0.9997208 -0.9995138 -0.9997753 -0.9997868 -0.975433220 -0.993714670
## 4   -0.9998281 -0.9992066 -0.9998244 -0.9999237 -0.987109580 -0.993601510
## 5   -0.9997297 -0.9992106 -0.9999004 -0.9998092 -0.982446480 -0.992983800
## 6   -0.9997069 -0.9994048 -0.9998907 -0.9998027 -0.984890220 -0.992786210
## 7   -0.9997189 -0.9994597 -0.9996570 -0.9998356 -0.986027350 -0.990499090
## 8   -0.9997968 -0.9996161 -0.9997347 -0.9998519 -0.987330160 -0.990014250
## 9   -0.9998537 -0.9997312 -0.9999640 -0.9998959 -0.989097920 -0.991966910
## 10  -0.9995981 -0.9997504 -0.9996968 -0.9997976 -0.981777670 -0.988001140
## 11  -0.9995661 -0.9994865 -0.9995921 -0.9997101 -0.981912510 -0.987822720
## 12  -0.9996935 -0.9993728 -0.9997644 -0.9997946 -0.992583950 -0.996218330
## 13  -0.9997861 -0.9998366 -0.9998587 -0.9998404 -0.994487220 -0.998056710
## 14  -0.9998300 -0.9999497 -0.9998341 -0.9998679 -0.996308630 -0.997468000
## 15  -0.9997821 -0.9997008 -0.9997917 -0.9998289 -0.972464780 -0.950368870
## 16  -0.9998288 -0.9993895 -0.9999432 -0.9998716 -0.990833120 -0.976888220
## 17  -0.9998032 -0.9995970 -0.9999335 -0.9999072 -0.990754520 -0.986141150
## 18  -0.9998647 -0.9997760 -0.9998873 -0.9999276 -0.989078110 -0.991402190
## 19  -0.9998449 -0.9998112 -0.9998774 -0.9999170 -0.990514340 -0.997901330
## 20  -0.9998303 -0.9997444 -0.9999179 -0.9999336 -0.995178020 -0.998242100
## 21  -0.9997646 -0.9996782 -0.9998984 -0.9998570 -0.996783360 -0.998467650
## 22  -0.9997299 -0.9993223 -0.9998980 -0.9998092 -0.996380390 -0.998444540
## 23  -0.9997538 -0.9995428 -0.9999083 -0.9998000 -0.997094200 -0.997881710
## 24  -0.9997762 -0.9994063 -0.9998831 -0.9998334 -0.997635280 -0.997991550
## 25  -0.9996215 -0.9995108 -0.9999541 -0.9997556 -0.995122610 -0.997562620
## 26  -0.9995891 -0.9996870 -0.9999204 -0.9997335 -0.992720510 -0.997336250
## 27  -0.9996609 -0.9995922 -0.9998820 -0.9997512 -0.992060610 -0.997320340
## 28  -0.9997191 -0.9992967 -0.9994322 -0.9997753 -0.967536000 -0.969043800
## 29  -0.9997691 -0.9995434 -0.9999017 -0.9998535 -0.993854300 -0.979784960
## 30  -0.9997179 -0.9997054 -0.9998617 -0.9998019 -0.995285580 -0.983424810
## 31  -0.9976285 -0.9990736 -0.9906856 -0.9985440 -0.748661440 -0.697378450
## 32  -0.9970729 -0.9983888 -0.9879165 -0.9979104 -0.774049850 -0.687225700
## 33  -0.9992764 -0.9987535 -0.9974563 -0.9991493 -0.886302790 -0.916796460
## 34  -0.9998683 -0.9997851 -0.9998838 -0.9999350 -0.993992800 -0.973740290
## 35  -0.9998899 -1.0000000 -0.9999600 -0.9999634 -0.998073900 -0.991257600
## 36  -0.9998456 -0.9998899 -0.9999649 -0.9999141 -0.996962810 -0.993340080
## 37  -0.9998651 -0.9998519 -0.9999713 -0.9998871 -0.998722310 -0.992969950
## 38  -0.9998800 -0.9997877 -0.9999478 -0.9999287 -0.997945480 -0.994459740
## 39  -0.9995801 -0.9993747 -0.9996782 -0.9997001 -0.958255740 -0.978820100
## 40  -0.9997592 -0.9998162 -0.9998075 -0.9998552 -0.940089160 -0.989201000
## 41  -0.9996981 -0.9996913 -0.9998183 -0.9998148 -0.960686470 -0.991242220
```

```
## 42   -0.9998164 -0.9994483 -0.9998209 -0.9998361 -0.981520400 -0.993480020
## 43   -0.9997770 -0.9995499 -0.9998424 -0.9998451 -0.993160690 -0.994831970
## 44   -0.9997340 -0.9993413 -0.9998491 -0.9998548 -0.998729620 -0.995535020
## 45   -0.9998840 -0.9994070 -0.9998941 -0.9999338 -0.997107620 -0.994997940
## 46   -0.9999153 -0.9998604 -0.9999173 -0.9999623 -0.997839900 -0.993761980
## 47   -0.9998670 -0.9997421 -0.9999185 -0.9999294 -0.997844330 -0.994918830
## 48   -0.9998132 -0.9995172 -0.9998842 -0.9999006 -0.997519110 -0.995490160
## 49   -0.9997815 -0.9998685 -0.9998465 -0.9998774 -0.997608020 -0.995797280
## 50   -0.9999116 -0.9997056 -0.9999343 -0.9998976 -0.997487730 -0.994866210
## 51   -0.9998269 -0.9990625 -0.9999586 -0.9998410 -0.996576180 -0.993691140
## 52   -0.9994551 -0.9983940 -0.9993975 -0.9994926 -0.952175960 -0.933133760
## 53   -0.9997440 -0.9994860 -0.9998715 -0.9997903 -0.981591560 -0.993963280
## 54   -0.9997874 -0.9994990 -0.9999048 -0.9998497 -0.988778680 -0.996887410
## 55   -0.9997918 -0.9992998 -0.9999640 -0.9998946 -0.996252090 -0.997273110
## 56   -0.9997345 -0.9995752 -0.9999205 -0.9998868 -0.998507970 -0.996889930
## 57   -0.9998035 -0.9992927 -0.9998444 -0.9998219 -0.998519870 -0.996472740
## 58   -0.9997588 -0.9991482 -0.9999161 -0.9998040 -0.998519300 -0.995737400
## 59   -0.9997519 -0.9995732 -0.9999248 -0.9998141 -0.998668090 -0.995865170
## 60   -0.9998433 -0.9992948 -0.9999122 -0.9998170 -0.999225380 -0.997274540
## 61   -0.9996998 -0.9994145 -0.9999034 -0.9998093 -0.999555070 -0.997483470
## 62   -0.9997038 -0.9994502 -0.9998809 -0.9998331 -0.998115210 -0.996332370
## 63   -0.9997709 -0.9995587 -0.9999031 -0.9998078 -0.997497700 -0.995845220
## 64   -0.9998268 -0.9994675 -0.9998837 -0.9998330 -0.999069690 -0.995840000
## 65   -0.9963726 -0.9943056 -0.9966426 -0.9964159 -0.892357950 -0.916699740
## 66   -0.9994521 -0.9993608 -0.9995227 -0.9995208 -0.947165170 -0.979387820
## 67   -0.9819775 -0.9976882 -0.9795804 -0.9896379 -0.375390890 -0.822731270
## 68   -0.9808290 -0.9972553 -0.9772819 -0.9892380 -0.351375830 -0.805422840
## 69   -0.9981916 -0.9974690 -0.9976661 -0.9989752 -0.771394780 -0.930473510
## 70   -0.9957423 -0.9831918 -0.9883750 -0.9946478 -0.359650280 -0.796383390
## 71   -0.9419542 -0.6697202 -0.8820151 -0.9666372  0.005782580 -0.662755260
## 72   -0.9401299 -0.6486247 -0.8861023 -0.9695171  0.200235710 -0.680593490
## 73   -0.9922684 -0.9932557 -0.9937999 -0.9958979 -0.643893890 -0.860358950
## 74   -0.9997829 -0.9994234 -0.9996850 -0.9998692 -0.955000160 -0.979995110
## 75   -0.9998855 -0.9996063 -0.9997737 -0.9999186 -0.945938920 -0.986246140
## 76   -0.9998772 -0.9997265 -0.9999257 -0.9999042 -0.964574190 -0.993830360
## 77   -0.9997485 -0.9996091 -0.9998409 -0.9998482 -0.978788810 -0.994053000
## 78   -0.9997342 -0.9996679 -0.9998254 -0.9998411 -0.991951840 -0.996482980
## 79   -0.9590859 -0.7558354 -0.8906256 -0.9562443 -0.184780680 -0.198024410
## 80   -0.9404256 -0.9002162 -0.8433923 -0.9396038 -0.204509540 -0.245831370
## 81   -0.9507185 -0.8667723 -0.8694321 -0.9443394 -0.317081550 -0.208158800
## 82   -0.9329835 -0.9566960 -0.8310110 -0.9249921 -0.162210580  0.026553035
## 83   -0.9195219 -0.9215017 -0.7819422 -0.9198467 -0.237105820  0.047211246
## 84   -0.9049820 -0.8696248 -0.8015253 -0.9000760 -0.347534710 -0.035159614
## 85   -0.9346227 -0.9343490 -0.8209176 -0.9130605 -0.395905490 -0.146165690
## 86   -0.9385148 -0.7753884 -0.8241348 -0.9116582 -0.320082710 -0.106937410
## 87   -0.9627093 -0.9457620 -0.8763770 -0.9564180 -0.327679600 -0.257785990
## 88   -0.9277905 -0.9464329 -0.8250685 -0.9109002 -0.293153600 -0.186978580
## 89   -0.9137888 -0.7840767 -0.8460573 -0.9037748 -0.378328810 -0.245780100
## 90   -0.9326948 -0.8361077 -0.8625184 -0.9211293 -0.397886910 -0.040889270
## 91   -0.9378837 -0.9212988 -0.7997146 -0.9290527 -0.404898700 -0.064843113
```

```
## 92   -0.9276686  -0.8494187  -0.7605915  -0.9105382  -0.360944860  -0.028597978
## 93   -0.9024624  -0.7742968  -0.7877625  -0.8911096  -0.387269290  -0.120556800
## 94   -0.8969851  -0.5908643  -0.8034374  -0.9251928  -0.365931600  -0.152854640
## 95   -0.9418567  -0.8393602  -0.7794836  -0.9424141  -0.292596370  -0.102789390
## 96   -0.9375539  -0.8047982  -0.8022626  -0.9314555  -0.264767500  -0.006820883
## 97   -0.9322249  -0.8083031  -0.8192249  -0.9364248  -0.336392640   0.062868703
## 98   -0.9440381  -0.8518098  -0.8443641  -0.9114715  -0.396207950  -0.047367101
## 99   -0.9260166  -0.7514963  -0.8298819  -0.9219388  -0.264663650  -0.022227644
## 100  -0.8930851  -0.7110753  -0.8535020  -0.9217899  -0.445973230  -0.137396990
## 101  -0.9123210  -0.8464601  -0.8697028  -0.9324681  -0.379001200  -0.068570936
## 102  -0.9355430  -0.8530576  -0.8029900  -0.9167692  -0.320074850   0.086356117
## 103  -0.9567820  -0.8828931  -0.7984608  -0.9275722  -0.180303780   0.047774390
## 104  -0.9670322  -0.8886115  -0.7831020  -0.9425472  -0.232487930  -0.001871663
## 105  -0.9644426  -0.8589936  -0.8213679  -0.9518159  -0.311638700  -0.049073985
## 106  -0.9146869  -0.8954024  -0.8855182  -0.9348798  -0.396368990  -0.162934410
## 107  -0.9019657  -0.9221262  -0.8478486  -0.8975070  -0.373377780  -0.129744850
## 108  -0.9286426  -0.9352517  -0.8122641  -0.9142703  -0.416223490  -0.096523957
## 109  -0.9425867  -0.8922694  -0.8184427  -0.9362907  -0.267045990  -0.099487838
## 110  -0.9282576  -0.8393266  -0.8436250  -0.9309264  -0.340663040  -0.018104025
## 111  -0.9418805  -0.8322853  -0.8715882  -0.9479403  -0.321722800  -0.078371185
## 112  -0.8939770  -0.6224234  -0.7557173  -0.8477235  -0.248403870  -0.064541537
## 113  -0.9342105  -0.5732356  -0.8726356  -0.9353668  -0.344640970  -0.180021870
## 114  -0.9152177  -0.8039830  -0.8677578  -0.9223843  -0.341508180  -0.076987151
## 115  -0.8952176  -0.8838281  -0.8671430  -0.9060698  -0.296261030  -0.067781490
## 116  -0.9432386  -0.8530214  -0.8528263  -0.9312517  -0.291928080  -0.077095911
## 117  -0.9661761  -0.9227573  -0.8478762  -0.9344943  -0.276327830  -0.110432860
## 118  -0.9505153  -0.9307574  -0.8667105  -0.9393073  -0.394274250  -0.185956800
## 119  -0.9568405  -0.9418221  -0.8845173  -0.9347879  -0.357038950  -0.170158340
## 120  -0.9782857  -0.9720055  -0.8889335  -0.9533256  -0.464274560  -0.172179390
## 121  -0.9665121  -0.9608365  -0.8766267  -0.9562298  -0.420047540  -0.221817050
## 122  -0.9447042  -0.9433906  -0.8812779  -0.9342156  -0.299825550  -0.123497400
## 123  -0.9556842  -0.9380651  -0.8643972  -0.9401902  -0.193809940  -0.101403680
## 124  -0.9652758  -0.8837778  -0.8246879  -0.9599681  -0.209155830  -0.135365140
## 125  -0.9603459  -0.8251676  -0.8632217  -0.9538134  -0.404712890  -0.081876484
## 126  -0.9723701  -0.9168773  -0.8837430  -0.9442241  -0.527837910  -0.347818880
## 127  -0.8495605  -0.9450503  -0.8748499  -0.8474179  -0.618679650  -0.077744072
## 128  -0.8409821  -0.7927530  -0.8243444  -0.8094787  -0.268212290   0.036999570
## 129  -0.8689983  -0.7859101  -0.8120949  -0.8041845  -0.235849160  -0.092314472
## 130  -0.7894733  -0.8098666  -0.7174201  -0.7804372  -0.437584180  -0.203681790
## 131  -0.8894076  -0.8937005  -0.5896947  -0.8235061  -0.255524770  -0.081013533
## 132  -0.8561604  -0.7931685  -0.5515085  -0.8420420  -0.166862240  -0.015233740
## 133  -0.8283329  -0.4207553  -0.6776621  -0.8490764  -0.622798310  -0.220425730
## 134  -0.8198181  -0.2724793  -0.7473421  -0.7993228  -0.606352860  -0.123465750
## 135  -0.6635412   0.2254203  -0.4762076  -0.6433428  -0.424289070   0.173533150
## 136  -0.8178352  -0.8306924  -0.4948831  -0.7588912  -0.515325710   0.104061060
## 137  -0.7960071  -0.4524933  -0.5824141  -0.8283357  -0.307355290   0.183716030
## 138  -0.8563122  -0.8459069  -0.7383054  -0.7830617  -0.173931640   0.124965370
## 139  -0.8739408  -0.8013550  -0.7907706  -0.7509880  -0.181916700   0.174084690
## 140  -0.8726997  -0.8666232  -0.7060410  -0.9120038  -0.224261770   0.137360960
## 141  -0.7784132  -0.7547402  -0.6291605  -0.8133337   0.078521558   0.038950991
```

```
## 142 -0.8015490 -0.7105632 -0.6273638 -0.7512849 -0.574537050 -0.092519165
## 143 -0.8953122 -0.9305366 -0.8096598 -0.9142505 -0.491351530 -0.115452540
## 144 -0.8876993 -0.9560081 -0.8121012 -0.9123213 -0.375032870 -0.112789500
## 145 -0.9357792 -0.9650390 -0.6590278 -0.9150964 -0.184705900 -0.045068466
## 146 -0.9185668 -0.9116181 -0.6571792 -0.9086444  0.007844835  0.177468700
## 147 -0.9373488 -0.8404841 -0.8013553 -0.9317272 -0.147471320 -0.045512517
## 148 -0.9176437 -0.8584198 -0.7974342 -0.8972318 -0.216794140 -0.136292300
## 149 -0.8893239 -0.6854031 -0.7750317 -0.8381319 -0.412968180 -0.084508567
## 150 -0.9164179 -0.5805173 -0.7462510 -0.8872723 -0.574917050 -0.198643980
## 151 -0.9864521 -0.9711926 -0.8801378 -0.9862431 -0.603068890 -0.271916690
## 152 -0.9845112 -0.9845354 -0.9112295 -0.9851861 -0.671173550 -0.294727960
## 153 -0.9891940 -0.9700224 -0.9433227 -0.9885205 -0.378672810 -0.297671530
## 154 -0.9702833 -0.9785898 -0.9320321 -0.9779147 -0.329607970 -0.192068450
## 155 -0.9785847 -0.9752663 -0.8944081 -0.9763719 -0.525469820 -0.207835070
## 156 -0.9826705 -0.9648699 -0.9214828 -0.9778747 -0.525472900 -0.202917860
## 157 -0.9586086 -0.9383748 -0.9063876 -0.9753005 -0.504333240 -0.228698740
## 158 -0.9595003 -0.9325774 -0.8956981 -0.9741133 -0.629835900 -0.302027680
## 159 -0.9636668 -0.9577476 -0.9194789 -0.9747022 -0.524527930 -0.337276670
## 160 -0.9840809 -0.9784582 -0.9154255 -0.9833129 -0.508411270 -0.318702070
## 161 -0.9840403 -0.9682210 -0.9115974 -0.9782204 -0.371069980 -0.250673930
## 162 -0.9727170 -0.9788162 -0.9199283 -0.9772155 -0.324533830 -0.259444210
## 163 -0.9800971 -0.9806090 -0.9543858 -0.9851528 -0.449240450 -0.388134460
## 164 -0.9878740 -0.9825838 -0.9481818 -0.9897193 -0.524711410 -0.347937120
## 165 -0.9898220 -0.9856486 -0.9497392 -0.9852281 -0.437969760 -0.391377870
## 166 -0.9869151 -0.9439865 -0.9525597 -0.9867421 -0.693088590 -0.390588740
## 167 -0.9785127 -0.9791081 -0.9418705 -0.9858669 -0.576095570 -0.439053750
## 168 -0.9841791 -0.9542614 -0.9283392 -0.9895865 -0.570874260 -0.456373650
## 169 -0.9774709 -0.9671658 -0.9303976 -0.9860615 -0.584446580 -0.412014410
## 170 -0.9696887 -0.9805127 -0.9325811 -0.9804036 -0.381047820 -0.312550320
## 171 -0.9716806 -0.9473366 -0.9303689 -0.9797356 -0.249247160 -0.251086130
## 172 -0.9728369 -0.9551220 -0.9357018 -0.9811631 -0.547968750 -0.378005130
## 173 -0.9815141 -0.9548001 -0.9451016 -0.9817972 -0.488469530 -0.389808750
## 174 -0.9816366 -0.9227548 -0.9332292 -0.9774266 -0.306989050 -0.351238250
## 175 -0.9804511 -0.9677345 -0.9425538 -0.9828023 -0.686356890 -0.452887950
## 176 -0.9816877 -0.9835228 -0.9483022 -0.9826527 -0.495146350 -0.420083180
## 177 -0.9994440 -0.9977941 -0.9995464 -0.9997274 -0.968464280 -0.951416300
##                NA          NA           NA            NA            NA
NA
## 1    -0.989514780 -0.98503264 -0.973886070 -0.99403493 -0.98653085 -
0.983616360
## 2    -0.989605780 -0.98490434 -0.987168070 -0.98978468 -0.97936121 -
0.991836830
## 3    -0.986755700 -0.97664224 -0.993398950 -0.98732821 -0.97560910 -
0.993707100
## 4    -0.987191260 -0.99281036 -0.991646050 -0.98867764 -0.98967126 -
0.993460700
## 5    -0.988666440 -0.98598182 -0.991955820 -0.98794433 -0.98258095 -
0.993342630
## 6    -0.980778400 -0.98528707 -0.991659530 -0.98536610 -0.98343427 -
0.992910550
```

```
## 7    -0.978456040 -0.98878814 -0.988405830 -0.98114710 -0.98515649 -
0.989924560
## 8    -0.980360830 -0.98960041 -0.985917200 -0.97968102 -0.98777519 -
0.990020550
## 9    -0.984028030 -0.99137591 -0.993515950 -0.98962879 -0.98874778 -
0.994109880
## 10   -0.977452980 -0.98586913 -0.986862400 -0.98378763 -0.98130960 -
0.986831880
## 11   -0.977271890 -0.98546890 -0.988463950 -0.98394887 -0.98054257 -
0.988035070
## 12   -0.995127910 -0.99461526 -0.995095040 -0.99637239 -0.99390904 -
0.996066360
## 13   -0.996454880 -0.99568481 -0.996462110 -0.99589308 -0.99535230 -
0.997757970
## 14   -0.995775170 -0.99806499 -0.997648920 -0.99660307 -0.99734124 -
0.997671200
## 15   -0.910317290 -0.97906665 -0.937411920 -0.91991214 -0.97503017 -
0.952975310
## 16   -0.949078650 -0.98824485 -0.962474440 -0.93544517 -0.99036998 -
0.976952910
## 17   -0.974295880 -0.98869915 -0.980028650 -0.97655213 -0.99089979 -
0.986135400
## 18   -0.982190240 -0.98921392 -0.988769900 -0.98337078 -0.99055076 -
0.991120980
## 19   -0.994287530 -0.99146979 -0.997491330 -0.99613008 -0.99082240 -
0.997631200
## 20   -0.995936000 -0.99606208 -0.997034220 -0.99502512 -0.99566902 -
0.997723610
## 21   -0.996958950 -0.99765151 -0.997994880 -0.99889310 -0.99730473 -
0.998364200
## 22   -0.996400390 -0.99797979 -0.998742530 -0.99850636 -0.99694604 -
0.998564130
## 23   -0.994678770 -0.99840904 -0.997320100 -0.99529435 -0.99743134 -
0.998218540
## 24   -0.994212100 -0.99855020 -0.998308620 -0.99714765 -0.99802992 -
0.998298370
## 25   -0.993416830 -0.99656089 -0.997686800 -0.99477065 -0.99564968 -
0.997605560
## 26   -0.993251760 -0.99372716 -0.997432700 -0.99626738 -0.99246385 -
0.997644220
## 27   -0.995342920 -0.99504265 -0.997527320 -0.99774839 -0.99298500 -
0.997687320
## 28   -0.899922510 -0.97513158 -0.974476780 -0.93123209 -0.96905851 -
0.976397790
## 29   -0.978209710 -0.99427314 -0.972974260 -0.96880151 -0.99487581 -
0.981368920
## 30   -0.969932960 -0.99568476 -0.975485680 -0.96842315 -0.99598517 -
0.984638950
## 31   -0.653524710 -0.73003425 -0.412917910 -0.58390665 -0.72861845 -
0.590986010
```

```
## 32   -0.684640640 -0.71281525 -0.401578130 -0.50884639 -0.72649694 -
0.590922210
## 33   -0.780069860 -0.93920178 -0.887023170 -0.72890522 -0.92671103 -
0.915999430
## 34   -0.981586710 -0.99699378 -0.981573820 -0.97832539 -0.99564758 -
0.982079470
## 35   -0.980909490 -0.99808887 -0.990067570 -0.97768507 -0.99842209 -
0.991939610
## 36   -0.986240040 -0.99658723 -0.994859930 -0.98790654 -0.99711889 -
0.995166240
## 37   -0.990916930 -0.99920566 -0.992840800 -0.99161487 -0.99914303 -
0.993983570
## 38   -0.994844060 -0.99842318 -0.994020780 -0.99684885 -0.99853094 -
0.994883140
## 39   -0.848167280 -0.95333014 -0.969892310 -0.85297934 -0.95777491 -
0.981850100
## 40   -0.838442390 -0.94678149 -0.988385930 -0.85070435 -0.95144340 -
0.991049850
## 41   -0.911500160 -0.96305174 -0.987222790 -0.90654805 -0.96603403 -
0.990708520
## 42   -0.980011410 -0.98344879 -0.993455300 -0.97605565 -0.98320634 -
0.994338680
## 43   -0.983593830 -0.99458049 -0.994608440 -0.98246771 -0.99379711 -
0.995395080
## 44   -0.990974070 -0.99894645 -0.995581450 -0.98667052 -0.99879059 -
0.996499380
## 45   -0.986534040 -0.99735949 -0.994455970 -0.98509781 -0.99736543 -
0.995928860
## 46   -0.991404790 -0.99875773 -0.994462610 -0.98872747 -0.99863516 -
0.994848340
## 47   -0.991115270 -0.99915562 -0.995095020 -0.98843770 -0.99882004 -
0.995534830
## 48   -0.991904460 -0.99862690 -0.994488070 -0.99280705 -0.99836266 -
0.996122910
## 49   -0.989425030 -0.99886473 -0.995642210 -0.98974277 -0.99847131 -
0.996112730
## 50   -0.990119500 -0.99851691 -0.995124950 -0.98931266 -0.99827670 -
0.996100670
## 51   -0.990265920 -0.99870298 -0.992747580 -0.98893074 -0.99817453 -
0.995206890
## 52   -0.835540130 -0.95626437 -0.934278420 -0.82168422 -0.95400752 -
0.929767620
## 53   -0.898320600 -0.98114495 -0.991928830 -0.89997136 -0.98198630 -
0.994313050
## 54   -0.950362660 -0.99048968 -0.995629600 -0.95058438 -0.99087512 -
0.997321430
## 55   -0.990153540 -0.99608674 -0.993821480 -0.98946384 -0.99673185 -
0.996698650
## 56   -0.994033430 -0.99938980 -0.994609840 -0.99472831 -0.99917356 -
0.996169580
```

```
## 57   -0.992421180 -0.99933533 -0.993917490 -0.99582028 -0.99907676 -
0.996312460
## 58   -0.990401190 -0.99911010 -0.993638110 -0.98589917 -0.99889185 -
0.995853920
## 59   -0.995053230 -0.99935123 -0.992878840 -0.99505690 -0.99903476 -
0.995679110
## 60   -0.994846310 -0.99920646 -0.994833620 -0.99380408 -0.99921934 -
0.996777020
## 61   -0.994006000 -0.99959020 -0.995000600 -0.99488986 -0.99979548 -
0.997574310
## 62   -0.995512280 -0.99911868 -0.994439080 -0.99528288 -0.99883008 -
0.996443110
## 63   -0.995082980 -0.99876663 -0.994285250 -0.99449132 -0.99836635 -
0.995967070
## 64   -0.994721430 -0.99898397 -0.993379480 -0.99331486 -0.99924462 -
0.995512190
## 65   -0.878825620 -0.88720193 -0.916053020 -0.88165396 -0.87927929 -
0.928593710
## 66   -0.874084670 -0.94539767 -0.978925890 -0.86993672 -0.94718996 -
0.980877480
## 67   -0.623897340 -0.44130719 -0.770617320 -0.58715200 -0.23054879 -
0.802286000
## 68   -0.632054930 -0.40513477 -0.715266110 -0.62155844 -0.19005035 -
0.781613150
## 69   -0.902068890 -0.81971179 -0.922034770 -0.94246788 -0.77263759 -
0.937094890
## 70   -0.639498900 -0.73703623 -0.776564540 -0.65428401 -0.68401384 -
0.812056310
## 71   -0.536992970 -0.11375026 -0.677226570 -0.62303729  0.21404412 -
0.673346600
## 72   -0.642741980 -0.21899757 -0.723346220 -0.78386911  0.08169319 -
0.690724790
## 73   -0.893686010 -0.72434139 -0.857801010 -0.88464973 -0.69964569 -
0.853474610
## 74   -0.973151340 -0.94457602 -0.985269980 -0.96520378 -0.95325234 -
0.983357280
## 75   -0.974481740 -0.95173175 -0.989455130 -0.97049747 -0.95434285 -
0.988642870
## 76   -0.984263320 -0.96212210 -0.992620760 -0.98191200 -0.97106635 -
0.994340460
## 77   -0.991721030 -0.98264523 -0.995609240 -0.99150563 -0.98051233 -
0.995644750
## 78   -0.994831330 -0.99273888 -0.997183890 -0.99555046 -0.99242159 -
0.997011720
## 79   -0.307558440 -0.36807715 -0.115047260 -0.56531090 -0.12947063 -
0.172563270
## 80   -0.311178040 -0.46131690 -0.009837662 -0.48985502 -0.29253197 -
0.208283670
## 81   -0.185798360 -0.48630588  0.009726873 -0.46935672 -0.31281079 -
0.212172190
```

```
## 82   -0.180468720 -0.42349050  0.044652222 -0.37656508 -0.13999646 -
0.065875521
## 83   -0.257958100 -0.42234310  0.176016240 -0.38859710 -0.22144818
0.049323351
## 84   -0.333845740 -0.56299575  0.055512057 -0.44288023 -0.44551339 -
0.160550170
## 85   -0.276225890 -0.53891142 -0.082039892 -0.40013872 -0.40076176 -
0.205851630
## 86   -0.224305490 -0.52062201 -0.041151170 -0.38854764 -0.36561321 -
0.217912480
## 87   -0.356218530 -0.50858961 -0.121940590 -0.51041089 -0.34949394 -
0.311038800
## 88   -0.285351590 -0.52341889 -0.039331806 -0.46859871 -0.38841560 -
0.255343670
## 89   -0.287402260 -0.55327845 -0.024582546 -0.43039089 -0.39894350 -
0.273016940
## 90   -0.250035620 -0.52210762 -0.086809650 -0.40161970 -0.40093307 -
0.211178440
## 91   -0.275699000 -0.45102377  0.083256156 -0.38366033 -0.40024148 -
0.061797249
## 92   -0.191219520 -0.49125647  0.064627021 -0.43796308 -0.36487978 -
0.081314825
## 93   -0.187585130 -0.55411036 -0.015970550 -0.38260535 -0.40504057 -
0.167942650
## 94   -0.163619660 -0.50630080  0.035207478 -0.36580919 -0.31616108 -
0.128854750
## 95   -0.242377440 -0.45985076  0.032708055 -0.39403883 -0.29982945 -
0.088462192
## 96   -0.170788020 -0.47210504 -0.024013313 -0.40207336 -0.31096922 -
0.157818870
## 97   -0.129341610 -0.48419664  0.036567426 -0.38778165 -0.37240942 -
0.090157025
## 98   -0.158925360 -0.53889621  0.045752512 -0.41702966 -0.44635237 -
0.061348634
## 99   -0.176872070 -0.51730061  0.054090936 -0.36488007 -0.33218289 -
0.075054682
## 100 -0.168827060 -0.49772630  0.035986130 -0.42705194 -0.41465345 -
0.151022240
## 101 -0.297408150 -0.53423662 -0.094185659 -0.44403162 -0.46534090 -
0.190930230
## 102 -0.169574760 -0.51689717 -0.009801549 -0.41485024 -0.43115512 -
0.085783645
## 103 -0.278793580 -0.53752582  0.053384941 -0.37268498 -0.41780861 -
0.098631582
## 104 -0.347837360 -0.52808092  0.104265620 -0.40880947 -0.31591888 -
0.084152226
## 105 -0.312547690 -0.56941851  0.036521428 -0.44538980 -0.44182587 -
0.187309840
## 106 -0.337458560 -0.59511019 -0.028177781 -0.45976081 -0.46110276 -
0.217037680
```

```
## 107 -0.235285960 -0.55058840  0.048823244 -0.43882330 -0.38150500 -
0.137065980
## 108 -0.226935020 -0.50437561  0.069127180 -0.41003426 -0.42293082 -
0.156723300
## 109 -0.276371000 -0.51716779  0.068541157 -0.39929844 -0.42115830 -
0.145251340
## 110 -0.216363960 -0.48503534  0.069468459 -0.40466947 -0.33974845 -
0.124185160
## 111 -0.242902150 -0.53257069  0.055081144 -0.39183766 -0.39261391 -
0.127954840
## 112 -0.285942160 -0.49056651  0.016132458 -0.37931218 -0.33590608 -
0.097985118
## 113 -0.322280550 -0.48840178 -0.001365821 -0.39076327 -0.35506426 -
0.190667400
## 114 -0.337609650 -0.51819574 -0.047302696 -0.31987556 -0.35062280 -
0.229319860
## 115 -0.339218780 -0.49586009  0.032170681 -0.38090061 -0.34436886 -
0.157261940
## 116 -0.282688240 -0.49416454  0.003171230 -0.43106151 -0.26643591 -
0.214447800
## 117 -0.208799940 -0.56715256 -0.061581940 -0.39435631 -0.44279446 -
0.214490120
## 118 -0.272769520 -0.55620141 -0.080903578 -0.40534824 -0.40753834 -
0.218770880
## 119 -0.306811510 -0.56064031 -0.087482007 -0.42469675 -0.42740301 -
0.275467240
## 120 -0.298607730 -0.59468495 -0.061325220 -0.43205880 -0.47466813 -
0.215643010
## 121 -0.211812990 -0.58614621 -0.087816812 -0.47594816 -0.42125930 -
0.192041550
## 122 -0.185825000 -0.53626854 -0.115868220 -0.37134406 -0.32191435 -
0.210043420
## 123 -0.096659776 -0.46837916 -0.038552002 -0.32939761 -0.19506841 -
0.134320810
## 124 -0.172390650 -0.46407226  0.013899831 -0.40578308 -0.24779555 -
0.215390410
## 125 -0.253450980 -0.54853603 -0.061857929 -0.42181647 -0.45678929 -
0.134767880
## 126 -0.190864050 -0.72811282 -0.325791630 -0.44209844 -0.56694059 -
0.415687950
## 127 -0.270346120 -0.76194292 -0.221154090 -0.38349567 -0.64152103 -
0.262212390
## 128 -0.134242180 -0.37320372 -0.230625570 -0.36905526 -0.36276826 -
0.191633860
## 129 -0.131506330 -0.27403230 -0.235255980 -0.34825361 -0.25204192 -
0.238016880
## 130 -0.137999100 -0.57617629 -0.220659350 -0.25653779 -0.44442903 -
0.253234180
## 131  0.078356584 -0.24629699 -0.098203389 -0.18627212 -0.25288431 -
0.106982130
```

```
## 132   0.040856096 -0.15241152 -0.110192100 -0.23051350 -0.22556564 -
0.166080660
## 133 -0.108696690 -0.77084856 -0.269150720 -0.27700453 -0.64548976 -
0.315504320
## 134 -0.160742870 -0.79533775 -0.343985400 -0.33550162 -0.67519742 -
0.299312080
## 135 -0.035426948 -0.69948637 -0.151089150 -0.18226259 -0.54954437 -
0.116474830
## 136 -0.009059133 -0.71350861 -0.136190420 -0.21287291 -0.56239430 -
0.116885180
## 137   0.090170615 -0.32870688 -0.077970601 -0.19658815 -0.28952090 -
0.027660624
## 138   0.304052600 -0.07748080 -0.007824701 -0.04019322 -0.20421774
0.053683092
## 139   0.261011950 -0.42046701 -0.016945189 -0.03402841 -0.41375196 -
0.004020071
## 140 -0.058966568 -0.24512095 -0.030541483 -0.24618705 -0.21492719
0.012970362
## 141 -0.130926540 -0.38052959 -0.225683560 -0.24794923 -0.23968091 -
0.208898570
## 142 -0.097836502 -0.76049065 -0.176226150 -0.15084801 -0.64272683 -
0.177758440
## 143 -0.064656901 -0.69463631 -0.180174060 -0.26724965 -0.53641431 -
0.169614340
## 144 -0.055381283 -0.67756906 -0.169357010 -0.28087492 -0.49530902 -
0.202379480
## 145   0.196716060 -0.33632894 -0.114935020 -0.22826933 -0.20968967 -
0.122358960
## 146   0.026734935 -0.09923316 -0.066297718 -0.20102145   0.01019535 -
0.037966149
## 147 -0.006547873 -0.24387140 -0.145951240 -0.26909476 -0.15877653 -
0.233740610
## 148 -0.146493000 -0.27778255 -0.127699390 -0.26887791 -0.17864481 -
0.124389430
## 149 -0.157309160 -0.66459571 -0.168808940 -0.36316255 -0.52954370 -
0.141558400
## 150 -0.146244190 -0.72474524 -0.220595210 -0.29179293 -0.58812869 -
0.216639870
## 151 -0.523650160 -0.71273105   0.127155880 -0.60834086 -0.61487241 -
0.191835080
## 152 -0.495436740 -0.75905985   0.108455330 -0.62598643 -0.67522684 -
0.223741450
## 153 -0.421354100 -0.35351507   0.102009700 -0.47193162 -0.36910550 -
0.184317810
## 154 -0.292513100 -0.18391367   0.104647930 -0.44812124 -0.27926392 -
0.169657570
## 155 -0.398255210 -0.54600378   0.115834100 -0.53317355 -0.51072777 -
0.248065150
## 156 -0.422911320 -0.63018617   0.037708293 -0.52475430 -0.54479243 -
0.351256240
```

```
## 157 -0.505571700 -0.55956010  0.082867268 -0.57005153 -0.52033922 -
0.165606240
## 158 -0.508075480 -0.75634413  0.158485130 -0.63764458 -0.65244337 -
0.167380700
## 159 -0.555572620 -0.69597999  0.127173060 -0.67475699 -0.54671972 -
0.275797530
## 160 -0.550629100 -0.70748016  0.118655440 -0.65761505 -0.55625775 -
0.230937210
## 161 -0.276676620 -0.42571307  0.233264110 -0.38337147 -0.34738935 -
0.134512200
## 162 -0.298900400 -0.22944781  0.241691330 -0.41772985 -0.33002903 -
0.167328490
## 163 -0.501056850 -0.47425494  0.009654182 -0.60587157 -0.54399800 -
0.308238080
## 164 -0.471262840 -0.48987807 -0.075789258 -0.58269526 -0.46585201 -
0.341779420
## 165 -0.547532590 -0.63804730  0.023381992 -0.66512990 -0.51973982 -
0.362263070
## 166 -0.543624960 -0.78121940  0.073515128 -0.65269888 -0.70365891 -
0.369588060
## 167 -0.623370050 -0.74582764  0.070169081 -0.70839222 -0.66359039 -
0.343253910
## 168 -0.543617830 -0.68323644  0.143760540 -0.67795630 -0.58397231 -
0.356755100
## 169 -0.539058520 -0.72660395  0.142233520 -0.65572339 -0.59285435 -
0.319595290
## 170 -0.371449210 -0.46221484  0.186528560 -0.48703689 -0.33681512 -
0.218456010
## 171 -0.364865960 -0.17834721  0.145042010 -0.48619989 -0.20980625 -
0.218109440
## 172 -0.485377170 -0.65597022 -0.022809809 -0.61251208 -0.54532574 -
0.352443060
## 173 -0.498402180 -0.54724639 -0.172741920 -0.59477023 -0.45520160 -
0.395038910
## 174 -0.482104130 -0.43994263 -0.008993622 -0.61090508 -0.29870046 -
0.279640140
## 175 -0.511214670 -0.78818615  0.129108620 -0.63294127 -0.68806030 -
0.361613480
## 176 -0.477787900 -0.70532017  0.109551760 -0.67352516 -0.58337979 -
0.358727790
## 177 -0.915685100 -0.96764765 -0.932485910 -0.90767263 -0.96671466 -
0.954301800
##               NA          NA          NA          NA          NA
NA
## 1   -0.992352010 -0.98049843 -0.972270920 -0.9949443 -0.9975686 -
0.98408510
## 2   -0.987965140 -0.98735382 -0.984786440 -0.9901508 -0.9868918 -
0.99905355
## 3   -0.985030320 -0.97290121 -0.994985970 -0.9912830 -0.9883117 -
0.99723271
```

```
## 4    -0.986526380 -0.99451839 -0.991801410 -0.9922807 -0.9897006 -
0.99434379
## 5    -0.986461250 -0.98795019 -0.993228270 -0.9914436 -0.9937381 -
0.99372533
## 6    -0.984088290 -0.98296563 -0.993198970 -0.9876443 -0.9993609 -
0.99784518
## 7    -0.978270750 -0.99048358 -0.991546060 -0.9866849 -0.9999740 -
0.99440080
## 8    -0.979144310 -0.98985900 -0.985695060 -0.9816202 -0.9958029 -
0.99488144
## 9    -0.986430910 -0.99211007 -0.993701150 -0.9931820 -0.9994003 -
0.98155042
## 10   -0.976648810 -0.98817202 -0.991353000 -0.9910311 -0.9987889 -
0.99127092
## 11   -0.978262860 -0.98908194 -0.991691200 -0.9925339 -0.9978372 -
0.98971631
## 12   -0.995259940 -0.99406008 -0.994216740 -0.9976932 -0.9940021 -
0.99967255
## 13   -0.995969330 -0.99473596 -0.995691650 -0.9958695 -0.9977411 -
0.99850193
## 14   -0.995640550 -0.99812529 -0.997398360 -0.9974593 -0.9989565 -
0.99658007
## 15   -0.920089110 -0.97859099 -0.940330250 -0.9308079 -0.9935129 -
0.95350437
## 16   -0.947501400 -0.98659163 -0.959769320 -0.9347667 -0.9975428 -
0.97272815
## 17   -0.976158910 -0.98392644 -0.982900050 -0.9818933 -0.9936126 -
0.98755003
## 18   -0.982216300 -0.98537289 -0.991403790 -0.9868642 -0.9940814 -
0.99185969
## 19   -0.994502010 -0.99086984 -0.998314250 -0.9974382 -0.9975813 -
0.99810279
## 20   -0.995540830 -0.99505892 -0.996148690 -0.9937308 -0.9979443 -
0.99883646
## 21   -0.997814060 -0.99681936 -0.997291530 -0.9994749 -0.9969118 -
0.99959574
## 22   -0.997738700 -0.99836579 -0.999302150 -0.9987693 -0.9988004 -
0.99924806
## 23   -0.995025250 -0.99885643 -0.996289910 -0.9948751 -0.9996824 -
0.99852898
## 24   -0.996347260 -0.99861985 -0.998647100 -0.9971534 -0.9993770 -
0.99910672
## 25   -0.994359650 -0.99666683 -0.997745360 -0.9946753 -0.9982249 -
0.99931767
## 26   -0.995189690 -0.99449412 -0.997233940 -0.9973407 -0.9977296 -
0.99848973
## 27   -0.996431190 -0.99670223 -0.997565820 -0.9986123 -0.9974862 -
0.99946549
## 28   -0.916139140 -0.97898612 -0.976872770 -0.9469263 -0.9970608 -
0.94533236
```

```
## 29   -0.975193100 -0.99282305 -0.970357520 -0.9684163 -0.9965013 -
0.97152349
## 30   -0.971894300 -0.99456968 -0.973486340 -0.9695003 -0.9988904 -
0.96810804
## 31   -0.577246570 -0.73957724 -0.561983120 -0.7078950 -0.9067683 -
0.94904269
## 32   -0.584613200 -0.72030215 -0.518864680 -0.5939484 -0.9931789 -
0.95488689
## 33   -0.755629050 -0.94282730 -0.905860870 -0.7739335 -0.8617875 -
0.94757713
## 34   -0.979509690 -0.99749890 -0.983782780 -0.9784065 -0.9987565 -
0.96269336
## 35   -0.981478430 -0.99683292 -0.988761530 -0.9769377 -0.9983682 -
0.99135501
## 36   -0.987202140 -0.99491833 -0.995401010 -0.9900813 -0.9974072 -
0.98904748
## 37   -0.992014830 -0.99913054 -0.991765240 -0.9912051 -0.9974962 -
0.99351677
## 38   -0.995641840 -0.99727992 -0.994193980 -0.9977112 -0.9976832 -
0.99577978
## 39   -0.870036740 -0.94073212 -0.967582290 -0.8582590 -0.9832787 -
0.98795098
## 40   -0.862176400 -0.93310350 -0.991097800 -0.8601241 -0.9274187 -
0.98457654
## 41   -0.920205130 -0.95358879 -0.987659040 -0.9088307 -0.9495097 -
0.99605488
## 42   -0.980359650 -0.98002791 -0.994098360 -0.9765221 -0.9881199 -
0.99694283
## 43   -0.982527200 -0.99353995 -0.994405650 -0.9846995 -0.9995808 -
0.99712859
## 44   -0.989913730 -0.99904452 -0.994433840 -0.9849356 -0.9992787 -
0.99756437
## 45   -0.987783740 -0.99649569 -0.992784380 -0.9834134 -0.9987729 -
0.99890602
## 46   -0.990474790 -0.99830147 -0.995738750 -0.9884250 -0.9996466 -
0.98928955
## 47   -0.991533460 -0.99884065 -0.995918490 -0.9876339 -0.9981325 -
0.99541994
## 48   -0.992213140 -0.99808823 -0.993314980 -0.9926935 -0.9985684 -
0.99917091
## 49   -0.991413770 -0.99885204 -0.996622160 -0.9883843 -0.9975786 -
0.99351754
## 50   -0.989766420 -0.99794342 -0.994651280 -0.9887667 -0.9981048 -
0.99893208
## 51   -0.988597440 -0.99849784 -0.990544870 -0.9890613 -0.9950719 -
0.98894183
## 52   -0.842212460 -0.96200492 -0.964116900 -0.8269258 -0.9905166 -
0.98576005
## 53   -0.911022390 -0.97684241 -0.990659140 -0.9037616 -0.9916698 -
0.99481644
```

```
## 54   -0.957643930 -0.98814381 -0.994150650 -0.9499786 -0.9902783 -
0.99631568
## 55   -0.990309620 -0.99440004 -0.992218240 -0.9886866 -0.9973636 -
0.99987377
## 56   -0.995711740 -0.99918490 -0.993770660 -0.9945786 -0.9984513 -
0.99849100
## 57   -0.994676740 -0.99921103 -0.992376140 -0.9975484 -0.9987058 -
0.99793103
## 58   -0.989348470 -0.99900980 -0.992509750 -0.9839811 -0.9994579 -
0.99793578
## 59   -0.995881730 -0.99930934 -0.991379550 -0.9936647 -0.9997030 -
0.99574381
## 60   -0.995426860 -0.99860257 -0.993431120 -0.9921383 -0.9990648 -
0.99914262
## 61   -0.995334820 -0.99948559 -0.992940630 -0.9936206 -0.9990168 -
0.99956968
## 62   -0.995270290 -0.99925531 -0.992991000 -0.9946765 -0.9995498 -
0.99774999
## 63   -0.995411110 -0.99872827 -0.992904330 -0.9930740 -0.9995013 -
0.99509661
## 64   -0.994871430 -0.99858753 -0.991861170 -0.9917429 -0.9991164 -
0.99807129
## 65   -0.871624280 -0.90071417 -0.929593310 -0.9208822 -0.9767923 -
0.96249190
## 66   -0.881154650 -0.93156061 -0.983123490 -0.8810663 -0.9629219 -
0.98759920
## 67   -0.548966040 -0.58158472 -0.812750790 -0.6482589 -0.9634983 -
0.92466824
## 68   -0.559658630 -0.50770173 -0.713847440 -0.7160944 -0.9737412 -
0.94877502
## 69   -0.924936860 -0.84773805 -0.922654380 -0.9556968 -0.9175410 -
0.97163393
## 70   -0.640700030 -0.72768146 -0.839844220 -0.7746922  0.3142842 -
0.86710802
## 71   -0.499786620 -0.28225064 -0.768110200 -0.7460309 -0.8557813 -
0.86618865
## 72   -0.711198100 -0.37551528 -0.864020620 -0.8676925 -0.5512649 -
0.89231312
## 73   -0.868079590 -0.69645430 -0.921068940 -0.9371657 -0.5981224 -
0.93056818
## 74   -0.970266990 -0.93238462 -0.991476160 -0.9710199 -0.9969001 -
0.99289029
## 75   -0.974435670 -0.93964947 -0.993104320 -0.9741581 -0.9676598 -
0.98916127
## 76   -0.983590840 -0.94879508 -0.992595660 -0.9814718 -0.9703179 -
0.99433182
## 77   -0.991587570 -0.98390964 -0.996382360 -0.9929745 -0.9899795 -
0.99678274
## 78   -0.994729010 -0.99179933 -0.997148840 -0.9962569 -0.9978146 -
0.99835386
```

```
## 79   -0.413242750 -0.38959038 -0.146975870 -0.7309785 -0.9475466 -
0.80230702
## 80   -0.371005450 -0.54904955 -0.202038560 -0.5937640 -0.5317802 -
0.86119043
## 81   -0.385327130 -0.52785959 -0.148863860 -0.5566675 -0.9979864 -
0.98115674
## 82   -0.299042090 -0.56475322 -0.200888320 -0.4825108 -0.9310150 -
0.43744850
## 83   -0.341738480 -0.44523711 -0.050917175 -0.5120211 -0.9768832 -
0.75014446
## 84   -0.398873510 -0.52498103 -0.111483700 -0.5392817 -0.6978488 -
0.18150121
## 85   -0.296534480 -0.59407274 -0.246336240 -0.5070970 -0.8770048 -
0.74010537
## 86   -0.218782260 -0.56072391 -0.111568230 -0.5294645 -0.8956117 -
0.62785349
## 87   -0.384151070 -0.54302656 -0.159457560 -0.7043149 -0.9334437 -
0.45929153
## 88   -0.349655440 -0.56241717 -0.171018750 -0.6012559 -0.8032440 -
0.54457819
## 89   -0.362947520 -0.59253575 -0.160286450 -0.5294396 -0.9576179 -
0.13849006
## 90   -0.310667340 -0.47328795 -0.263881370 -0.5253507 -0.9889826 -
0.67662689
## 91   -0.268070290 -0.35470290 -0.143574820 -0.5414137 -0.9531852 -
0.88010662
## 92   -0.327708930 -0.44461484 -0.155458630 -0.5401774 -0.9638866 -
0.51424655
## 93   -0.299609370 -0.56042217 -0.216541560 -0.5121115 -0.9873767 -
0.49580091
## 94   -0.214647150 -0.63534118 -0.165129310 -0.4910896 -0.9902687 -
0.63221744
## 95   -0.302330190 -0.47187269 -0.213511300 -0.4943212 -0.8640051 -
0.94199887
## 96   -0.329172030 -0.52901144 -0.225278070 -0.4959237 -0.8480931 -
0.90287388
## 97   -0.176474130 -0.46560617 -0.173244110 -0.6330216 -0.8481452 -
0.79228739
## 98   -0.251640750 -0.59685051 -0.091082017 -0.6048117 -0.8511234 -
0.85849613
## 99   -0.287123880 -0.54768856 -0.082212025 -0.4517593 -0.7750271 -
0.68183843
## 100 -0.283054190 -0.44030688 -0.163413250 -0.5777148 -0.9792391 -
0.69445522
## 101 -0.403857560 -0.45871391 -0.271558220 -0.4931585 -0.9233971 -
0.42610919
## 102 -0.261853860 -0.46914403 -0.195054310 -0.5558449 -0.7517953 -
0.36530895
## 103 -0.369441370 -0.47333887 -0.126065840 -0.4855510 -0.4761027 -
0.66018287
```

```
## 104 -0.333541590 -0.64874150  0.011899957 -0.5193692 -0.7128268 -
0.70585930
## 105 -0.322855250 -0.64785237 -0.136104770 -0.5429249 -0.6952428 -
0.63105641
## 106 -0.362539320 -0.57664863 -0.210490040 -0.5735599 -0.8802558 -
0.83339596
## 107 -0.349998530 -0.62933530 -0.096750152 -0.5398753 -0.7998154 -
0.42148652
## 108 -0.257712110 -0.42767143 -0.070966541 -0.5308514 -0.9741440 -
0.89329763
## 109 -0.328354960 -0.47510545 -0.057470681 -0.5034040 -0.7343863 -
0.82946602
## 110 -0.260216830 -0.49264698 -0.062662334 -0.5702141 -0.9575636 -
0.79418411
## 111 -0.270229170 -0.57950520 -0.128344600 -0.5365057 -0.7010047 -
0.44924841
## 112 -0.352876750 -0.53843880 -0.130297540 -0.4188037 -0.7957642 -
0.80274110
## 113 -0.344201880 -0.49603818 -0.198655900 -0.4906081 -0.9367780 -
0.96168832
## 114 -0.324992480 -0.52194645 -0.200108510 -0.4623251 -0.9533852 -
0.49010622
## 115 -0.333913160 -0.48394938 -0.129591040 -0.5136600 -0.8085172 -
0.71180103
## 116 -0.329961510 -0.62576702 -0.188850030 -0.5480211 -0.8328977 -
0.43331845
## 117 -0.271005690 -0.65157002 -0.245183290 -0.5107921 -0.8862698 -
0.58132223
## 118 -0.261415500 -0.64431932 -0.259486200 -0.5401835 -0.9119562 -
0.43114233
## 119 -0.318322710 -0.60632088 -0.154796020 -0.5701321 -0.8852690 -
0.48748827
## 120 -0.301176430 -0.62424531 -0.234767410 -0.5818980 -0.9928336 -
0.83951317
## 121 -0.319837700 -0.60016130 -0.269153000 -0.6155656 -0.9540613 -
0.99335714
## 122 -0.289340060 -0.58483197 -0.223992570 -0.5746003 -0.9077500 -
0.75965617
## 123 -0.209604240 -0.60898605 -0.153923860 -0.5811113 -0.9007637 -
0.53643293
## 124 -0.228281480 -0.49442681 -0.073041946 -0.5583346 -0.7981303 -
0.61977747
## 125 -0.241772250 -0.54110101 -0.266260290 -0.6510914 -0.7805981 -
0.52792085
## 126 -0.348706960 -0.81172932 -0.505393050 -0.5407858 -0.9322237 -
0.99447845
## 127 -0.292339630 -0.83931602 -0.468909970 -0.4570780 -0.9870152 -
0.99157115
## 128 -0.181637510 -0.22463664 -0.547404330 -0.4834214 -0.6830114 -
0.90894958
```

```
## 129 -0.176866090 -0.09003682 -0.465266060 -0.4957163 -0.8457930 -
0.40003004
## 130 -0.130385720 -0.53433506 -0.459194800 -0.4094720 -0.9791820 -
0.85465277
## 131  0.081035727 -0.04508696 -0.306591660 -0.3920255 -0.9007411 -
0.81345803
## 132 -0.006919852  0.07404777 -0.279893140 -0.3959914 -0.9027238 -
0.18345553
## 133 -0.165720520 -0.85229369 -0.436467800 -0.3588399 -0.9660828 -
0.67238480
## 134 -0.138557510 -0.86964881 -0.578257500 -0.5343231 -0.9656502 -
0.54702836
## 135 -0.020337841 -0.78052857 -0.493269400 -0.4475877 -0.8591569
0.02164084
## 136  0.009496041 -0.76390860 -0.413622600 -0.4505337 -0.9929012 -
0.85215234
## 137  0.065638376 -0.26565297 -0.318717150 -0.3962991 -0.8952992 -
0.16336213
## 138  0.295840080  0.19547923 -0.310112940 -0.2875468 -0.7418387 -
0.65421192
## 139  0.164400640 -0.31241761 -0.209596010 -0.3581690 -0.4171579 -
0.69753065
## 140 -0.003951824 -0.07727254 -0.309325780 -0.5413088 -0.9451449 -
0.98574501
## 141 -0.131535280 -0.34627112 -0.394366880 -0.3476433  0.2108835 -
0.13434337
## 142 -0.101914850 -0.79509762 -0.460870130 -0.1932668 -0.9695287 -
0.21250008
## 143 -0.080695430 -0.80346659 -0.459624570 -0.4555914 -0.9378980 -
0.84417818
## 144 -0.100339470 -0.78433921 -0.445876470 -0.4239970 -0.7728059 -
0.61487867
## 145 -0.054032529 -0.23734197 -0.247525960 -0.3573546 -0.8864613 -
0.67138200
## 146  0.004120575  0.03513249 -0.343065090 -0.4352607 -0.6287657 -
0.56374338
## 147 -0.050737109 -0.10763387 -0.372579530 -0.4572768 -0.8129085 -
0.53211991
## 148 -0.160448620 -0.15883971 -0.396637500 -0.4261841 -0.8011944 -
0.86021352
## 149 -0.191468710 -0.72915171 -0.413659840 -0.5336271 -0.6996841 -
0.63070770
## 150 -0.161305800 -0.78989570 -0.452631930 -0.5400001 -0.9881591 -
0.72717245
## 151 -0.500296300 -0.77872777  0.236628930 -0.7535226 -0.9815318 -
0.93785482
## 152 -0.599360680 -0.80883524  0.210634600 -0.7076021 -0.8952615 -
0.89303580
## 153 -0.328997160 -0.33731347  0.180680260 -0.5876831 -0.7111249 -
0.81464816
```

```
## 154 -0.316240390  0.06235339  0.180004550 -0.6029530 -0.9330951 -
0.63911403
## 155 -0.372321780 -0.46644099  0.268688850 -0.6892175 -0.9014112 -
0.59621374
## 156 -0.396985100 -0.67038048  0.096918819 -0.7057474 -0.9676077 -
0.09257257
## 157 -0.481840590 -0.52666310  0.172380300 -0.7004864 -0.8739018 -
0.76887463
## 158 -0.546654450 -0.81758052  0.253828050 -0.7467580 -0.9217778 -
0.87717879
## 159 -0.526734500 -0.80084851  0.279744350 -0.8056794 -0.8323390 -
0.99321006
## 160 -0.554223520 -0.79618152  0.241094030 -0.7849055 -0.9098287 -
0.80458865
## 161 -0.225372430 -0.39399909  0.345630820 -0.5815481 -0.8384281 -
0.97610761
## 162 -0.247844300 -0.07158146  0.336222360 -0.6057497 -0.7084758 -
0.58596085
## 163 -0.494208090 -0.29617382  0.073405623 -0.7160984 -0.9208090 -
0.85909723
## 164 -0.451962480 -0.35764600 -0.002847376 -0.7072468 -0.9591456 -
0.76211739
## 165 -0.565687030 -0.65940018  0.175676220 -0.7990919 -0.8764393 -
0.86688988
## 166 -0.548754730 -0.79612129  0.246134390 -0.7794679 -0.9572127 -
0.62261964
## 167 -0.635814820 -0.77103469  0.220896150 -0.7918593 -0.7420926 -
0.89291387
## 168 -0.582928100 -0.76869492  0.316049250 -0.8135182 -0.8770008 -
0.89549466
## 169 -0.525756180 -0.81520581  0.293903950 -0.8049618 -0.9667124 -
0.93398729
## 170 -0.313195450 -0.47487953  0.294723150 -0.6382706 -0.9273115 -
0.72918263
## 171 -0.309584930  0.04218976  0.211298230 -0.6572702 -0.9623754 -
0.83022694
## 172 -0.488890000 -0.65353014  0.068846297 -0.7371976 -0.9084653 -
0.55241379
## 173 -0.484640600 -0.48607583 -0.119400230 -0.7536012 -0.9727149 -
0.68416363
## 174 -0.488772710 -0.39059473  0.011056562 -0.7286361 -0.8279900 -
0.91200662
## 175 -0.508583990 -0.83303434  0.293238670 -0.7505125 -0.9864063 -
0.94573083
## 176 -0.518606980 -0.76174242  0.278635560 -0.8340289 -0.6835989 -
0.82796769
## 177 -0.922421820 -0.96596717 -0.931129090 -0.9064975 -0.9928327 -
0.93778109
##              NA          NA          NA          NA          NA          NA
## 1    -0.9943354 -0.985276210 -0.9998637 -0.9996661 -0.9999346 -0.99034389
```

```
## 2     -0.9944137 -0.986868700 -0.9998249 -0.9999115 -0.9998921 -0.98709935
## 3     -0.9936360 -0.986008710 -0.9996733 -0.9999624 -0.9998463 -0.98553645
## 4     -0.9931436 -0.990344280 -0.9999462 -0.9999514 -0.9998668 -0.99287780
## 5     -0.9948352 -0.988706210 -0.9998616 -0.9999510 -0.9998642 -0.99046444
## 6     -0.9816007 -0.987610460 -0.9998615 -0.9999484 -0.9997811 -0.98832177
## 7     -0.9933058 -0.986418460 -0.9999072 -0.9999136 -0.9996897 -0.98614699
## 8     -0.9929672 -0.987133000 -0.9999196 -0.9998879 -0.9996735 -0.99061560
## 9     -0.9870549 -0.989561140 -0.9999408 -0.9999562 -0.9998614 -0.98958313
## 10    -0.9875073 -0.983472040 -0.9998575 -0.9998863 -0.9997310 -0.98492932
## 11    -0.9862054 -0.983395990 -0.9998528 -0.9998999 -0.9997324 -0.98465169
## 12    -0.9971496 -0.995465720 -0.9999717 -0.9999786 -0.9999722 -0.99534259
## 13    -0.9983233 -0.997327040 -0.9999808 -0.9999883 -0.9999729 -0.99633801
## 14    -0.9990927 -0.997561150 -0.9999925 -0.9999909 -0.9999755 -0.99617340
## 15    -0.8679414 -0.946608940 -0.9997043 -0.9981620 -0.9957100 -0.97554375
## 16    -0.9464517 -0.974855470 -0.9999149 -0.9993795 -0.9975353 -0.99405980
## 17    -0.9889583 -0.985150140 -0.9999196 -0.9997949 -0.9995571 -0.99416864
## 18    -0.9915152 -0.988851810 -0.9999207 -0.9999209 -0.9997569 -0.99428435
## 19    -0.9997869 -0.995276200 -0.9999451 -0.9999913 -0.9999681 -0.99663514
## 20    -0.9985806 -0.997540380 -0.9999836 -0.9999906 -0.9999654 -0.99654484
## 21    -0.9972390 -0.998479220 -0.9999919 -0.9999938 -0.9999899 -0.99596914
## 22    -0.9962893 -0.998186180 -0.9999924 -0.9999955 -0.9999869 -0.99511128
## 23    -0.9949492 -0.997774780 -0.9999944 -0.9999908 -0.9999637 -0.99583465
## 24    -0.9939096 -0.997911130 -0.9999954 -0.9999937 -0.9999739 -0.99620294
## 25    -0.9991983 -0.996601090 -0.9999857 -0.9999912 -0.9999558 -0.99548912
## 26    -0.9916076 -0.995576440 -0.9999666 -0.9999900 -0.9999655 -0.99635113
## 27    -0.9995317 -0.995831170 -0.9999729 -0.9999902 -0.9999805 -0.99180056
## 28    -0.8604018 -0.950863180 -0.9995938 -0.9995417 -0.9962130 -0.97924822
## 29    -0.9965741 -0.984314390 -0.9999721 -0.9996328 -0.9993777 -0.99685338
## 30    -0.9526302 -0.984514130 -0.9999820 -0.9997066 -0.9992955 -0.99650622
## 31    -0.8605316 -0.686561310 -0.9633303 -0.8738437 -0.9056005 -0.89087905
## 32    -0.9612086 -0.698715480 -0.9604946 -0.8684289 -0.8779497 -0.86963574
## 33    -0.8046250 -0.868209900 -0.9971009 -0.9944409 -0.9598705 -0.94187703
## 34    -0.9947082 -0.982406070 -0.9999855 -0.9997057 -0.9996525 -0.99503093
## 35    -0.9805131 -0.991776120 -0.9999946 -0.9999306 -0.9996336 -0.99825683
## 36    -0.9927836 -0.993608890 -0.9999883 -0.9999684 -0.9998516 -0.99710450
## 37    -0.9963562 -0.995211760 -0.9999978 -0.9999564 -0.9999181 -0.99908200
## 38    -0.9990072 -0.996556930 -0.9999954 -0.9999682 -0.9999742 -0.99719696
## 39    -0.7479625 -0.939469230 -0.9988501 -0.9995649 -0.9866901 -0.98647582
## 40    -0.7192823 -0.935224670 -0.9983850 -0.9999069 -0.9859664 -0.96975294
## 41    -0.8563805 -0.961325780 -0.9992189 -0.9999065 -0.9946722 -0.98367155
## 42    -0.9707079 -0.986507950 -0.9998227 -0.9999618 -0.9995893 -0.99301554
## 43    -0.9945295 -0.992260980 -0.9999726 -0.9999723 -0.9997492 -0.99433809
## 44    -0.9953147 -0.996405000 -0.9999973 -0.9999788 -0.9998562 -0.99923478
## 45    -0.9832682 -0.994493460 -0.9999913 -0.9999721 -0.9998113 -0.99764312
## 46    -0.9975397 -0.995369080 -0.9999961 -0.9999680 -0.9998864 -0.99797077
## 47    -0.9967536 -0.995831650 -0.9999969 -0.9999748 -0.9998815 -0.99679529
## 48    -0.9930237 -0.996164710 -0.9999954 -0.9999737 -0.9999337 -0.99732379
## 49    -0.9964846 -0.995740560 -0.9999961 -0.9999798 -0.9998908 -0.99705523
## 50    -0.9965614 -0.995436690 -0.9999951 -0.9999748 -0.9998885 -0.99706676
## 51    -0.9983846 -0.994598570 -0.9999945 -0.9999586 -0.9998843 -0.99709415
```

```
## 52    -0.7594027 -0.913235960 -0.9989083 -0.9976277 -0.9815358 -0.98099820
## 53    -0.8260709 -0.967064550 -0.9997864 -0.9999545 -0.9937361 -0.99520947
## 54    -0.9283727 -0.983586570 -0.9999322 -0.9999825 -0.9983640 -0.99381337
## 55    -0.9987849 -0.996095930 -0.9999853 -0.9999750 -0.9998905 -0.99807164
## 56    -0.9913442 -0.997682750 -0.9999980 -0.9999780 -0.9999575 -0.99780629
## 57    -0.9899635 -0.997107090 -0.9999979 -0.9999736 -0.9999597 -0.99777679
## 58    -0.9940483 -0.996282620 -0.9999975 -0.9999701 -0.9998422 -0.99805701
## 59    -0.9921568 -0.997517160 -0.9999980 -0.9999662 -0.9999631 -0.99739942
## 60    -0.9970177 -0.998318260 -0.9999982 -0.9999800 -0.9999526 -0.99901659
## 61    -0.9902648 -0.998332480 -0.9999991 -0.9999812 -0.9999586 -0.99976294
## 62    -0.9977670 -0.997639370 -0.9999971 -0.9999758 -0.9999661 -0.99809281
## 63    -0.9933816 -0.997085920 -0.9999957 -0.9999738 -0.9999589 -0.99724227
## 64    -0.9969910 -0.997572930 -0.9999977 -0.9999690 -0.9999480 -0.99865130
## 65    -0.9852586 -0.894190990 -0.9934268 -0.9962603 -0.9913032 -0.96207783
## 66    -0.8502011 -0.941909300 -0.9984014 -0.9997268 -0.9898157 -0.97301655
## 67    -0.9881335 -0.600025100 -0.8326394 -0.9770543 -0.9039314 -0.68561220
## 68    -0.9978354 -0.585242870 -0.8123908 -0.9668532 -0.9169188 -0.71222292
## 69    -0.8479210 -0.861747450 -0.9812229 -0.9969897 -0.9969348 -0.88486171
## 70    -0.8504854 -0.585924940 -0.9318323 -0.9759506 -0.9282508 -0.66911609
## 71    -0.9508173 -0.365882670 -0.5770174 -0.9449067 -0.9068470 -0.65505056
## 72    -0.9550821 -0.328237760 -0.6091895 -0.9558526 -0.9612286 -0.51298337
## 73    -0.9957265 -0.780797000 -0.9559508 -0.9896021 -0.9920930 -0.83743117
## 74    -0.9918417 -0.968941100 -0.9984403 -0.9998118 -0.9992209 -0.96779185
## 75    -0.9934214 -0.968806230 -0.9986660 -0.9998984 -0.9993988 -0.97011552
## 76    -0.9959660 -0.981478280 -0.9992189 -0.9999583 -0.9997428 -0.98362158
## 77    -0.9869536 -0.988591510 -0.9997985 -0.9999742 -0.9999201 -0.99012870
## 78    -0.9932192 -0.995283810 -0.9999583 -0.9999872 -0.9999660 -0.99397776
## 79    -0.9846769 -0.167264560 -0.7703287 -0.6305734 -0.8505732 -0.15776225
## 80    -0.9678245 -0.197305510 -0.8187058 -0.5832140 -0.8194029 -0.54217351
## 81    -0.4364814 -0.191087790 -0.8454500 -0.5597972 -0.7848326 -0.28566143
## 82    -0.6651556 -0.025322004 -0.7946119 -0.4554220 -0.7359166  0.08463824
## 83    -0.6266031 -0.061992113 -0.8054479 -0.3560664 -0.7586200 -0.06126157
## 84    -0.7306807 -0.158575700 -0.8796323 -0.4718881 -0.8011200 -0.52250939
## 85    -0.9765380 -0.213354140 -0.8764160 -0.5954795 -0.7684132 -0.44780354
## 86    -0.8515697 -0.155032800 -0.8600072 -0.5583359 -0.7518043 -0.40761937
## 87    -0.4408440 -0.258821460 -0.8561269 -0.6521035 -0.8365630 -0.33431292
## 88    -0.8545341 -0.196591750 -0.8575698 -0.5834730 -0.8047021 -0.32939949
## 89    -0.9594286 -0.255302070 -0.8797912 -0.5922555 -0.7863251 -0.46205845
## 90    -0.6069706 -0.159469780 -0.8700821 -0.5615585 -0.7640730 -0.34021069
## 91    -0.9346674 -0.179216900 -0.8405355 -0.4641778 -0.7593765 -0.51884477
## 92    -0.5623065 -0.126104390 -0.8530665 -0.4634112 -0.7706980 -0.27520985
## 93    -0.9970591 -0.177071540 -0.8811495 -0.5476840 -0.7408006 -0.40457240
## 94    -0.7740468 -0.178286200 -0.8599401 -0.5261041 -0.7261809 -0.42718715
## 95    -0.7684429 -0.147404880 -0.8306255 -0.5109466 -0.7584676 -0.28111627
## 96    -0.5939101 -0.075914054 -0.8322510 -0.5117152 -0.7476866 -0.23145994
## 97    -0.6140508 -0.060221567 -0.8470190 -0.4461148 -0.7306194 -0.36824448
## 98    -0.6183226 -0.139864130 -0.8764449 -0.4827895 -0.7529308 -0.37233459
## 99    -0.9037121 -0.084410713 -0.8512252 -0.4680018 -0.7285763 -0.22061620
## 100   -0.6978310 -0.201806470 -0.8654346 -0.5205241 -0.7602965 -0.44354040
## 101   -0.7409618 -0.176661680 -0.8726448 -0.5758000 -0.7950567 -0.22348424
```

```
## 102 -0.7289512 -0.053159358 -0.8585156 -0.4657912 -0.7541596 -0.44184307
## 103 -0.9106158 -0.045922958 -0.8467131 -0.4412481 -0.7538864 -0.21354887
## 104 -0.8866334 -0.104481350 -0.8509104 -0.4264468 -0.7861259 -0.23252229
## 105 -0.7394926 -0.146659990 -0.8773750 -0.4894190 -0.7985289 -0.49584749
## 106 -0.8956398 -0.235977040 -0.8967116 -0.5691159 -0.8100226 -0.45712070
## 107 -0.9038748 -0.187689900 -0.8782009 -0.5096155 -0.7803424 -0.37252498
## 108 -0.8653823 -0.186150450 -0.8649730 -0.4848639 -0.7638556 -0.54170113
## 109 -0.7194300 -0.144713180 -0.8515042 -0.4862821 -0.7679913 -0.37617616
## 110 -0.7917395 -0.119912290 -0.8479154 -0.4562480 -0.7588333 -0.32976786
## 111 -0.7359245 -0.147011530 -0.8649232 -0.4878239 -0.7573817 -0.34781788
## 112 -0.7617155 -0.124150510 -0.8379006 -0.5080979 -0.7589378 -0.38805402
## 113 -0.6247836 -0.221185610 -0.8498492 -0.5580459 -0.7719440 -0.32831033
## 114 -0.7708384 -0.176462010 -0.8617634 -0.5515659 -0.7339394 -0.20445186
## 115 -0.9502382 -0.156031420 -0.8467490 -0.4989953 -0.7695597 -0.32626768
## 116 -0.7248074 -0.145089020 -0.8454557 -0.5207557 -0.7857692 -0.26520357
## 117 -0.8892048 -0.136851030 -0.8718229 -0.5716462 -0.7517279 -0.52472410
## 118 -0.9947681 -0.230177820 -0.8827349 -0.6075752 -0.7705211 -0.43567660
## 119 -0.5605787 -0.217478910 -0.8799442 -0.6063521 -0.7870465 -0.40873990
## 120 -0.9364813 -0.255759080 -0.9039289 -0.5918627 -0.7892786 -0.41173614
## 121 -0.5997143 -0.241389050 -0.8963241 -0.6225014 -0.7934729 -0.44894501
## 122 -0.6763244 -0.145924880 -0.8634863 -0.6069996 -0.7341649 -0.16649623
## 123 -0.4699850 -0.075412986 -0.8202201 -0.5548722 -0.6895396 -0.01617439
## 124 -0.4405457 -0.114876550 -0.8206366 -0.5339962 -0.7500113 -0.10055991
## 125 -0.8517200 -0.181600430 -0.8810732 -0.5618952 -0.7753490 -0.52979407
## 126 -0.7171491 -0.333679630 -0.9476466 -0.7751744 -0.7726874 -0.35028443
## 127 -0.6665807 -0.262252980 -0.9622292 -0.6459298 -0.7582512 -0.50834476
## 128 -0.8891015 -0.048264612 -0.7852705 -0.6073553 -0.7213711 -0.39981145
## 129 -0.8742393 -0.095061293 -0.7249376 -0.6578559 -0.7088483 -0.27585145
## 130 -0.9943539 -0.221708420 -0.8947558 -0.6872580 -0.6533278 -0.32246988
## 131 -0.8843860 -0.046506569 -0.7107115 -0.5824908 -0.5489045 -0.35610485
## 132 -0.8305113  0.007150605 -0.6349900 -0.5651605 -0.5906322 -0.22694439
## 133 -0.8842831 -0.290257270 -0.9642628 -0.7152266 -0.6598759 -0.54075988
## 134 -0.9072602 -0.252288440 -0.9674870 -0.7168432 -0.7079981 -0.47700234
## 135 -0.9591267 -0.019051427 -0.9304913 -0.5091940 -0.5768223 -0.41556006
## 136 -0.7691997 -0.077956754 -0.9431082 -0.5315813 -0.5918554 -0.35777514
## 137 -0.9121673  0.058782358 -0.7665707 -0.4641153 -0.5529358 -0.38299351
## 138 -0.5829863  0.132319760 -0.5810299 -0.4481817 -0.3623397 -0.45516219
## 139 -0.5396101  0.141550990 -0.7962581 -0.4321412 -0.3716813 -0.51879633
## 140 -0.8455113  0.032042974 -0.7054596 -0.4567253 -0.6275098 -0.43059477
## 141 -0.7663177  0.080600315 -0.7294746 -0.6041924 -0.6459813 -0.30531558
## 142 -0.8296131 -0.211258700 -0.9585437 -0.6286101 -0.5689705 -0.47574240
## 143 -0.8906996 -0.183272440 -0.9361877 -0.6385308 -0.6428729 -0.47280916
## 144 -0.7396597 -0.137153050 -0.9191802 -0.6320434 -0.6493710 -0.31084123
## 145  0.2738583  0.024488104 -0.7532273 -0.5789019 -0.5428622 -0.17422576
## 146 -0.8940236  0.156230290 -0.5658515 -0.4601759 -0.5739057  0.07628877
## 147 -0.3657264 -0.011055064 -0.6928005 -0.5959252 -0.6292051 -0.24853213
## 148 -0.7902767 -0.111860870 -0.7243927 -0.6177712 -0.6633679 -0.47463437
## 149 -0.8852218 -0.162661170 -0.9199993 -0.6219685 -0.7232742 -0.44173736
## 150 -0.9816711 -0.271753780 -0.9509036 -0.6856804 -0.6780042 -0.39336415
## 151 -0.9598783 -0.406666530 -0.9502940 -0.5000206 -0.9001204 -0.63869259
```

```
## 152 -0.6170503 -0.435309540 -0.9652121 -0.5193654 -0.9024682 -0.59021927
## 153 -0.9320671 -0.311523140 -0.7890612 -0.5246129 -0.8296901 -0.55886692
## 154 -0.7020478 -0.214023340 -0.6800010 -0.4921471 -0.7961598 -0.62041823
## 155 -0.7906246 -0.318580930 -0.8924148 -0.4892342 -0.8532554 -0.55690090
## 156 -0.9398798 -0.322269410 -0.9212654 -0.5402968 -0.8535861 -0.54167816
## 157 -0.9602892 -0.346268590 -0.8955047 -0.5181461 -0.8837145 -0.61663240
## 158 -0.9462020 -0.426543700 -0.9619044 -0.4859049 -0.9079904 -0.59625242
## 159 -0.9848054 -0.415540510 -0.9396377 -0.5174825 -0.9253569 -0.46543671
## 160 -0.9219177 -0.399916300 -0.9410112 -0.5186587 -0.9196411 -0.38799576
## 161 -0.9201588 -0.252299560 -0.8247814 -0.4157545 -0.7594059 -0.53067166
## 162 -0.7509658 -0.244612170 -0.7093563 -0.4117511 -0.7819827 -0.61174118
## 163 -0.8655158 -0.398118990 -0.8557472 -0.6084038 -0.8963104 -0.52390455
## 164 -0.8214859 -0.400176050 -0.8698466 -0.6502685 -0.8838173 -0.66981458
## 165 -0.9722308 -0.406676040 -0.9150255 -0.6004448 -0.9215467 -0.66214959
## 166 -0.8426900 -0.498941190 -0.9707933 -0.5674151 -0.9172752 -0.70184448
## 167 -0.7917237 -0.497488700 -0.9556514 -0.5805685 -0.9421071 -0.63436113
## 168 -0.7808728 -0.484295700 -0.9403374 -0.5333514 -0.9248451 -0.78124870
## 169 -0.9981617 -0.467823730 -0.9520923 -0.5247828 -0.9176518 -0.59866209
## 170 -0.9754666 -0.307190860 -0.8428369 -0.4681652 -0.8286829 -0.41047295
## 171 -0.9533660 -0.229065750 -0.6653625 -0.4814123 -0.8271917 -0.58811932
## 172 -0.7598021 -0.425902670 -0.9309121 -0.6261549 -0.8965104 -0.53561433
## 173 -0.8670018 -0.412635140 -0.8894092 -0.7135099 -0.8919882 -0.46058461
## 174 -0.9755349 -0.324450440 -0.8234371 -0.6111165 -0.8955013 -0.41238333
## 175 -0.9201784 -0.517241110 -0.9716460 -0.5430228 -0.9068664 -0.57787445
## 176 -0.7569917 -0.424004100 -0.9392243 -0.5495855 -0.9149560 -0.55541652
## 177 -0.8861409 -0.946916110 -0.9994135 -0.9979763 -0.9948705 -0.99011953
##                 NA              NA              NA              NA              NA
NA
## 1   -0.994835690 -0.9944115800 -0.71240225 -0.64484236 -0.83899298 -
1.00000000
## 2   -0.995563750 -0.9872544800 -0.61111189 -0.76460301 -0.75107966 -
1.00000000
## 3   -0.995392090 -0.9925506500 -0.59098655 -0.80828724 -0.75107966 -
1.00000000
## 4   -0.996288800 -0.9902236000 -0.72366552 -0.80375407 -0.81728590 -
1.00000000
## 5   -0.996122820 -0.9974263400 -0.65261680 -0.82721239 -0.73745777 -
1.00000000
## 6   -0.994086100 -0.9904452200 -0.67818627 -0.80828724 -0.75107966 -
0.93333333
## 7   -0.992654940 -0.9870957600 -0.66105912 -0.71588695 -0.70894966 -
1.00000000
## 8   -0.995250190 -0.9927599400 -0.70705422 -0.73969167 -0.73270749 -
0.86666667
## 9   -0.993872770 -0.9906848600 -0.70705422 -0.82721239 -0.73053702 -
1.00000000
## 10  -0.990468850 -0.9775954200 -0.63519981 -0.68508075 -0.64651900 -
0.53333333
## 11  -0.988368020 -0.9770836800 -0.61754980 -0.65524407 -0.73053702 -
1.00000000
```

```
## 12   -0.995980300 -0.9956069900 -0.82184063 -0.89492156 -0.88888489 -
0.80000000
## 13   -0.998810880 -0.9950285500 -0.86612578 -0.92277168 -0.91833498 -
1.00000000
## 14   -0.996703420 -0.9964253100 -0.95391262 -0.95530222 -0.91833498 -
0.80000000
## 15   -0.980634090 -0.9715479300 -0.51124873 -0.29482153 -0.25977222 -
0.86666667
## 16   -0.990058690 -0.9861509400 -0.86216623 -0.54992485 -0.54665218 -
1.00000000
## 17   -0.995591490 -0.9915744700 -0.79765302 -0.70819189 -0.69142778 -
1.00000000
## 18   -0.995940830 -0.9899393600 -0.82062055 -0.75172117 -0.71777025 -
1.00000000
## 19   -0.998669370 -0.9922205100 -0.79765302 -0.92277168 -0.91833498 -
1.00000000
## 20   -0.998535070 -0.9939249400 -0.89165479 -0.95530222 -0.95273437 -
0.80000000
## 21   -0.998235070 -0.9957073200 -0.95391262 -0.95530222 -1.00000000 -
0.80000000
## 22   -0.998359300 -0.9958231800 -0.95391262 -1.00000000 -1.00000000 -
1.00000000
## 23   -0.998443560 -0.9952390000 -1.00000000 -0.95530222 -0.95273437 -
0.53333333
## 24   -0.998467740 -0.9954867000 -1.00000000 -1.00000000 -0.95273437 -
0.86666667
## 25   -0.997511460 -0.9940565200 -0.86612578 -0.95530222 -0.88888489 -
0.93333333
## 26   -0.997892410 -0.9959981200 -0.82184063 -0.92277168 -0.88888489 -
1.00000000
## 27   -0.997844460 -0.9937630300 -0.78425315 -0.92277168 -1.00000000 -
0.86666667
## 28   -0.976770700 -0.9300827200 -0.51190757 -0.44799535 -0.20988466 -
1.00000000
## 29   -0.989481020 -0.9902013400 -0.87456970 -0.57107159 -0.70504967 -
1.00000000
## 30   -0.993806130 -0.9936340200 -0.92037074 -0.66064667 -0.66662180 -
1.00000000
## 31   -0.887204710 -0.8564255700 -0.06841067  0.14469114 -0.02774620 -
0.93333333
## 32   -0.843201250 -0.8363589200  0.06065306  0.15269787 -0.01567151 -
0.93333333
## 33   -0.961009740 -0.9350240300 -0.34623165 -0.12840274 -0.23961983 -
1.00000000
## 34   -0.981317980 -0.9939987500 -0.86612578 -0.48544409 -0.75107966 -
1.00000000
## 35   -0.991639310 -0.9951897900 -0.95391262 -0.76460301 -0.76952156 -
1.00000000
## 36   -0.994596000 -0.9916152700 -0.92037074 -0.87016227 -0.79247992 -
1.00000000
```

```
## 37   -0.992736200 -0.9945036400 -1.00000000 -0.82602909 -0.84206336 -
0.20000000
## 38   -0.995798910 -0.9938582900 -0.95391262 -0.87016227 -0.91833498 -
1.00000000
## 39   -0.987559130 -0.9410843800 -0.53238385 -0.59472789 -0.44079195 -
1.00000000
## 40   -0.994050520 -0.9361640500 -0.34771383 -0.74483279 -0.39619027 -
1.00000000
## 41   -0.993601160 -0.9694070600 -0.47433511 -0.79407249 -0.31285644 -
1.00000000
## 42   -0.994315520 -0.9916374000 -0.66250006 -0.84774017 -0.72473719 -
1.00000000
## 43   -0.995630910 -0.9905803300 -0.82062055 -0.84774017 -0.76952156 -
1.00000000
## 44   -0.996239500 -0.9955513800 -1.00000000 -0.92277168 -0.84206336 -
1.00000000
## 45   -0.995117320 -0.9912794000 -0.92037074 -0.95530222 -0.77093105 -
1.00000000
## 46   -0.994911650 -0.9936235400 -0.95391262 -0.82721239 -0.90561440 -
1.00000000
## 47   -0.996585440 -0.9954074700 -1.00000000 -0.80828724 -0.84206336 -
0.80000000
## 48   -0.996103930 -0.9929333900 -0.95391262 -0.92277168 -0.83899298 -
1.00000000
## 49   -0.996616600 -0.9914904600 -1.00000000 -0.87016227 -0.90561440 -
0.93333333
## 50   -0.996221600 -0.9917829000 -0.95391262 -0.84774017 -0.81603462 -
1.00000000
## 51   -0.996043680 -0.9920672000 -1.00000000 -0.91074218 -0.81603462 -
0.86666667
## 52   -0.936641280 -0.9473447300 -0.43240036 -0.13009034 -0.51444423 -
0.73333333
## 53   -0.996531590 -0.9609439900 -0.67493232 -0.85064374 -0.25740967 -
1.00000000
## 54   -0.997523340 -0.9807928200 -0.75245371 -0.92277168 -0.50990446 -
1.00000000
## 55   -0.999058690 -0.9938245800 -0.92037074 -0.91074218 -0.81603462 -
1.00000000
## 56   -0.996888640 -0.9964514100 -1.00000000 -0.89492156 -0.88888489 -
1.00000000
## 57   -0.997407850 -0.9964263600 -1.00000000 -0.91074218 -0.86270321 -
0.60000000
## 58   -0.997065390 -0.9958761600 -1.00000000 -0.91074218 -0.84206336 -
0.40000000
## 59   -0.997234080 -0.9956747700 -1.00000000 -0.85064374 -0.95273437 -
1.00000000
## 60   -0.998398770 -0.9956018600 -1.00000000 -0.92277168 -0.91833498 -
1.00000000
## 61   -0.998027200 -0.9938118200 -1.00000000 -0.95530222 -0.95273437 -
0.60000000
```

```
## 62   -0.997539710 -0.9968346100 -1.00000000 -0.91074218 -0.91833498 -
0.33333333
## 63   -0.996709640 -0.9951557900 -1.00000000 -0.91074218 -0.95273437 -
1.00000000
## 64   -0.996511060 -0.9952028500 -1.00000000 -0.87835160 -0.95273437 -
0.40000000
## 65   -0.931959040 -0.9260497700 -0.25162709 -0.09330635 -0.19413082 -
0.93333333
## 66   -0.980656380 -0.9584294400 -0.42908052 -0.53756092 -0.20022343 -
1.00000000
## 67   -0.847305080 -0.6897261100  0.27951208  0.13253721  0.20213126 -
1.00000000
## 68   -0.840139510 -0.7090740600  0.37944809  0.09057969  0.19024931 -
1.00000000
## 69   -0.949726070 -0.9210734600 -0.03335559 -0.15708304 -0.18797373 -
0.80000000
## 70   -0.848911500 -0.8116921500  0.23922584  0.19499491  0.03444464 -
0.93333333
## 71   -0.670746850 -0.5614179900  0.46300896  0.42174943  0.36733777 -
0.93333333
## 72   -0.661363660 -0.7542518500  0.62625433  0.39489623  0.23475662 -
0.93333333
## 73   -0.876483030 -0.9503137200  0.03144654 -0.07071600 -0.29711769 -
1.00000000
## 74   -0.979887060 -0.9904726100 -0.48176016 -0.52801522 -0.67870720 -
1.00000000
## 75   -0.986908150 -0.9863055100 -0.36065109 -0.67004601 -0.69993121 -
1.00000000
## 76   -0.995590280 -0.9936692500 -0.53726857 -0.85064374 -0.77093105 -
1.00000000
## 77   -0.994888800 -0.9972907900 -0.60199115 -0.89492156 -0.83899298 -
1.00000000
## 78   -0.995697920 -0.9949938600 -0.82062055 -0.95530222 -0.88888489 -
1.00000000
## 79   -0.157220510 -0.2727760900  0.51136604  0.52091537  0.64419959 -
1.00000000
## 80   -0.374696420 -0.3380534600  0.49594046  0.68853815  0.58728389 -
0.26666667
## 81   -0.358834170 -0.3942889600  0.60032604  0.73435991  0.64503627 -
0.93333333
## 82   -0.233651240 -0.2594351400  0.64005669  0.71344949  0.58391618 -
0.26666667
## 83   -0.051355921 -0.4317071600  0.65811649  0.75841890  0.52700267 -
0.26666667
## 84   -0.242643650 -0.5400960100  0.56517669  0.75890675  0.40578415 -
0.26666667
## 85   -0.251012910 -0.4100973600  0.45996871  0.77685812  0.57595296 -
0.33333333
## 86   -0.240811860 -0.2676676800  0.56888015  0.70830837  0.58582170 -
0.33333333
```

```
## 87  -0.410380510 -0.5377148100  0.58744641  0.65064130  0.37390231 -
0.33333333
## 88  -0.271992130 -0.3417494200  0.57045950  0.54838583  0.58451414 -
0.26666667
## 89  -0.538525460 -0.4515490900  0.60150827  0.56668652  0.55911020 -
0.26666667
## 90  -0.296629570 -0.3374293000  0.42507886  0.74233680  0.46460318 -
0.26666667
## 91  -0.309497180 -0.4671065700  0.48085657  0.81501713  0.58435635 -
0.26666667
## 92  -0.088878386 -0.4108266000  0.60378600  0.69782614  0.58834950 -
0.26666667
## 93  -0.301448520 -0.3954454200  0.57284525  0.68907770  0.59764097 -
0.26666667
## 94  -0.210807120 -0.1955380100  0.52765345  0.68833817  0.62293528 -
0.26666667
## 95  -0.287180050 -0.3912682400  0.57603913  0.79330605  0.61462952 -
0.26666667
## 96  -0.185369220 -0.4434108100  0.59830670  0.86297974  0.56959772 -
0.33333333
## 97  -0.196290870 -0.1457041300  0.49984141  0.80124039  0.58738459 -
0.33333333
## 98  -0.130189700 -0.3266707700  0.45050617  0.68185685  0.53613324 -
0.33333333
## 99  -0.129674850 -0.2957414800  0.59464712  0.73519576  0.60543990 -
0.26666667
## 100 -0.304580870 -0.2801077200  0.48382322  0.68907770  0.63686831 -
0.26666667
## 101 -0.256392300 -0.4169106900  0.58678319  0.72941878  0.52975160 -
0.26666667
## 102 -0.040947102 -0.2518217900  0.63175936  0.84850602  0.58535083 -
0.26666667
## 103 -0.114760230 -0.5311332200  0.61557013  0.87221602  0.58747432 -
0.26666667
## 104 -0.116036780 -0.4249691400  0.57740295  0.80124039  0.52464695 -
0.26666667
## 105 -0.275038480 -0.3702462900  0.53136331  0.68967837  0.40759145 -
0.33333333
## 106 -0.256615370 -0.4980786900  0.50871776  0.73328060  0.52238311 -
0.26666667
## 107 -0.423868500 -0.3838859600  0.47181272  0.65205607  0.61764565 -
0.26666667
## 108 -0.332312170 -0.2016302800  0.54727577  0.79805663  0.63020193 -
0.26666667
## 109 -0.252875190 -0.4772449800  0.59326638  0.74311755  0.50404431 -
0.26666667
## 110 -0.169060200 -0.1856672900  0.63691713  0.72284298  0.55200013 -
0.33333333
## 111 -0.242179510 -0.3491617100  0.57360018  0.67425500  0.51173235 -
0.33333333
```

```
## 112 -0.119882900 -0.4771227400  0.59628848  0.78641768  0.50812605 -
0.26666667
## 113 -0.326203600 -0.5366456900  0.60181378  0.76371540  0.44380693 -
0.26666667
## 114 -0.372810410 -0.5958372800  0.56236915  0.76810048  0.40721568 -
0.26666667
## 115 -0.260317350 -0.4834001400  0.56009238  0.68002150  0.51344323 -
0.26666667
## 116 -0.404408090 -0.4644990200  0.49641662  0.79584758  0.47254896 -
0.26666667
## 117 -0.319121030 -0.2383793600  0.54093577  0.77892865  0.66393813 -
0.33333333
## 118 -0.281275360 -0.2863658200  0.53551090  0.65938974  0.62839930 -
0.33333333
## 119 -0.358730610 -0.5213035400  0.59656715  0.73030731  0.43537956 -
0.33333333
## 120 -0.367161530 -0.4179236700  0.57335769  0.71323300  0.49330605 -
0.33333333
## 121 -0.258330950 -0.2437957200  0.54324978  0.72459023  0.53003314 -
0.33333333
## 122 -0.326544230 -0.3716462300  0.58138293  0.66253830  0.51382866 -
0.33333333
## 123 -0.182011310 -0.4268759500  0.61077220  0.69547822  0.52622065 -
0.93333333
## 124 -0.314078850 -0.2193535100  0.57871651  0.69313031  0.43434327 -
0.93333333
## 125 -0.193368930 -0.3920695500  0.45600127  0.71113677  0.51719532 -
0.33333333
## 126 -0.625656400 -0.3731208900  0.57335769  0.72506888  0.57441647 -
0.46666667
## 127 -0.282960880 -0.3348167800  0.44468518  0.84935836  0.46865002 -
0.06666667
## 128  0.002573135 -0.0240545010  0.55323235  0.80298763  0.67417591 -
1.00000000
## 129 -0.274805260 -0.0853799210  0.59402778  0.81453848  0.68622282 -
1.00000000
## 130 -0.399980100 -0.1741239500  0.60588650  0.68453724  0.66580515 -
1.00000000
## 131 -0.063854847  0.0523593070  0.58842456  0.74045706  0.65410660 -
1.00000000
## 132 -0.240838360  0.1271292000  0.61853247  0.81688639  0.74405196 -
1.00000000
## 133 -0.405689700  0.0233300940  0.44887327  0.73242825  0.69528341 -
0.73333333
## 134 -0.287462380 -0.1968508600  0.50998418  0.82437543  0.51261621 -
1.00000000
## 135 -0.024055218 -0.0958392460  0.47303326  0.83218775  0.62050616 -
0.80000000
## 136  0.075986334 -0.0324141970  0.52084672  0.91639421  0.59478914 -
1.00000000
```

```
## 137  0.202812340  0.2691285700  0.59051214  0.81167800  0.71079337 -
1.00000000
## 138  0.183624810  0.5939286400  0.54058638  0.84152133  0.67484830 -
1.00000000
## 139  0.137263030  0.0844340350  0.48937196  0.86313511  0.71093906 -
1.00000000
## 140  0.114836360 -0.2758253400  0.54911362  0.84202470  0.67050461 -
1.00000000
## 141 -0.078539451 -0.1888025600  0.62563499  0.78296574  0.54693163 -
1.00000000
## 142 -0.239823850 -0.3353196800  0.48747309  0.79390672  0.64831854 -
1.00000000
## 143 -0.112934760 -0.3445897400  0.48951715  0.88339317  0.52691517 -
1.00000000
## 144 -0.282660920  0.0568963350  0.53941706  0.78267788  0.54520357 -
0.73333333
## 145 -0.069342859  0.0839910460  0.62405452  0.80213529  0.65695843 -
1.00000000
## 146  0.076781858 -0.0004963149  0.48384847  0.82951655  0.72228824 -
1.00000000
## 147 -0.367257200 -0.0916995800  0.55259599  0.76136748  0.50114395 -
1.00000000
## 148 -0.121435170 -0.2589447400  0.53505064  0.79155881  0.57365980 -
1.00000000
## 149 -0.117411520 -0.1593893700  0.48731289  0.74825867  0.61988844 -
1.00000000
## 150 -0.156907440 -0.2275771100  0.49720462  0.72407767  0.64436389 -
1.00000000
## 151 -0.265853030 -0.5175564000  0.37598498  0.68329336  0.39987679 -
0.66666667
## 152 -0.506922830 -0.6240161000  0.20562007  0.63333819  0.34872834 -
0.66666667
## 153 -0.435639700 -0.5092801700  0.42452356  0.45179895  0.37655913 -
1.00000000
## 154 -0.348159070 -0.3204168500  0.51001181  0.65913806  0.45289534 -
1.00000000
## 155 -0.431039950 -0.3736632500  0.37578593  0.64751561  0.35492938 -
1.00000000
## 156 -0.577785000 -0.5359998600  0.42277227  0.60876848  0.33791679 -
1.00000000
## 157 -0.261519430 -0.5532190400  0.38219129  0.53236179  0.39087331 -
1.00000000
## 158 -0.401510840 -0.5634054300  0.45453114  0.56090954  0.39874415 -
0.66666667
## 159 -0.434443420 -0.4202875200  0.38620892  0.57893251  0.36612988 -
0.93333333
## 160 -0.395681070 -0.6238702900  0.49261385  0.59433731  0.30781662 -
0.40000000
## 161 -0.341682800 -0.3574981900  0.40315297  0.62796373  0.54855162 -
1.00000000
```

```
## 162 -0.568647170 -0.3742662500  0.47745537  0.57566065  0.29027834 -
1.00000000
## 163 -0.498450430 -0.5796683700  0.48088205  0.56154540  0.41311325 -
1.00000000
## 164 -0.534612720 -0.4010017200  0.35239969  0.60366956  0.40468677 -
1.00000000
## 165 -0.574497210 -0.5817686000  0.36508072  0.61870910  0.41204764 -
1.00000000
## 166 -0.537926700 -0.5363052600  0.32880900  0.48616709  0.30468224 -
0.66666667
## 167 -0.651006200 -0.7541835900  0.35867536  0.48519053  0.19938232 -
0.66666667
## 168 -0.679458780 -0.6792023500  0.17276447  0.41656281  0.30702636 -
0.93333333
## 169 -0.544702880 -0.5252386500  0.45329435  0.52729099  0.41444500 -
0.40000000
## 170 -0.573025930 -0.1905023700  0.55039618  0.49315177  0.41918385 -
1.00000000
## 171 -0.569614510 -0.3201890500  0.45538193  0.60661849  0.43775388 -
1.00000000
## 172 -0.562680230 -0.5397705700  0.42914950  0.51439064  0.27348913 -
1.00000000
## 173 -0.685077640 -0.5275309000  0.49728604  0.46806441  0.36643594 -
1.00000000
## 174 -0.443617720 -0.5363591500  0.41149315  0.59127458  0.36540575 -
1.00000000
## 175 -0.625916680 -0.4924721500  0.30050694  0.45663558  0.45236672 -
0.40000000
## 176 -0.545327380 -0.4218259300  0.39859426  0.31948076  0.38370507 -
0.93333333
## 177 -0.982303710 -0.9673529100 -0.60571124 -0.35144809 -0.31631303 -
1.00000000
##                NA          NA          NA          NA          NA
NA
## 1   -1.00000000 -1.0000000 -0.257548880  0.097947109  0.547151050
0.377311210
## 2   -1.00000000 -1.0000000 -0.048167435 -0.401607910 -0.068178329 -
0.458553310
## 3   -0.87096774 -1.0000000 -0.216685070 -0.017264171 -0.110720290
0.090519474
## 4   -1.00000000 -0.7931035  0.216862460 -0.135245360 -0.049727978 -
0.572087600
## 5   -0.80645161 -1.0000000 -0.153342580 -0.088402726 -0.162230390 -
0.339596820
## 6   -0.93548387 -0.9310345 -0.363039680 -0.133238310  0.194833240 -
0.004027766
## 7   -0.93548387 -1.0000000 -0.307125430 -0.345672350 -0.079245503 -
0.406014170
## 8   -1.00000000 -1.0000000 -0.088135904 -0.208115150 -0.075989386 -
0.180735280
```

```
## 9    -1.00000000 -0.7931035 -0.184054600  0.176727260  0.212799940 -
0.346130470
## 10   -0.54838710 -0.7931035 -0.172767850 -0.249084800 -0.060978402 -
0.411613990
## 11   -0.54838710 -0.7241379 -0.279813710 -0.051035768  0.098829200 -
0.429648340
## 12   -1.00000000 -0.5862069  0.076938014 -0.106821220  0.265521280 -
0.222658010
## 13   -1.00000000 -1.0000000  0.024244269 -0.104572710  0.066322633 -
0.163253090
## 14   -1.00000000 -1.0000000  0.269347630  0.153873780  0.155010920 -
0.587059620
## 15   -1.00000000 -1.0000000 -0.019135493 -0.180810370  0.032643334 -
0.119324690
## 16   -1.00000000 -1.0000000 -0.298132870 -0.301921440 -0.207959480
0.231915350
## 17   -1.00000000 -0.9310345 -0.141756700 -0.213753830  0.078100498
0.628678450
## 18   -0.93548387 -1.0000000  0.013179090 -0.270679270 -0.122861760
0.398868260
## 19   -0.48387097 -1.0000000 -0.032881452 -0.032916715  0.071666087 -
0.109321240
## 20   -1.00000000 -1.0000000  0.047905446 -0.194127230  0.073319687 -
0.135194670
## 21   -1.00000000 -0.1724138  0.244888520  0.040963158  0.538052870 -
0.245709040
## 22   -1.00000000 -0.4482759  0.173206400  0.176265050  0.519471820 -
0.689223450
## 23   -1.00000000 -1.0000000  0.152867780  0.127488590  0.157891380 -
0.761817980
## 24   -1.00000000 -1.0000000  0.202108780  0.149955880  0.467748380 -
0.604167580
## 25   -1.00000000 -1.0000000 -0.013018887  0.043613052  0.259453200 -
0.416788750
## 26   -1.00000000 -0.9310345 -0.167580880  0.132312930  0.405599820 -
0.366416410
## 27   -1.00000000 -0.7931035  0.039766646  0.240390510  0.399691600 -
0.585380340
## 28   -1.00000000 -1.0000000 -0.065895342  0.170246870  0.132541140 -
0.292383550
## 29   -1.00000000 -1.0000000  0.100660450 -0.149223230 -0.303980280
0.086807423
## 30   -1.00000000 -1.0000000  0.004411003 -0.181670200  0.032572191
0.022476192
## 31   -0.93548387 -0.9310345 -0.382648070 -0.943974780 -0.570219370
0.002283131
## 32   -0.87096774 -0.9310345 -0.748897090 -0.929298180 -0.788565910
0.073017193
## 33   -0.93548387 -1.0000000  0.365211330 -0.275484920 -0.363118500 -
0.292856580
```

```
## 34   -1.00000000 -1.0000000   0.407850680   0.390122340  -0.199648400 -
0.604579830
## 35   -1.00000000 -1.0000000   0.176088840   0.011722064  -0.011644735
0.077987764
## 36   -1.00000000 -1.0000000   0.021293298   0.387837590   0.078644167
0.233773230
## 37   -1.00000000 -1.0000000   0.508896840   0.078256408   0.189182500 -
0.554893560
## 38   -1.00000000 -1.0000000   0.226754400   0.117984800   0.414301660 -
0.037981634
## 39   -1.00000000 -1.0000000  -0.266903980  -0.034240203   0.020744702
0.415522820
## 40   -1.00000000 -1.0000000  -0.006195488   0.105735340   0.028201727
0.354427880
## 41   -1.00000000 -1.0000000  -0.055776458  -0.341826880  -0.029434105
0.336306840
## 42   -0.93548387 -1.0000000  -0.053054666   0.054628796  -0.097023482
0.139758330
## 43   -1.00000000 -1.0000000  -0.025235088   0.115093150  -0.190595190 -
0.161586850
## 44   -0.93548387 -1.0000000   0.152303990   0.297617400  -0.146189140 -
0.567020030
## 45   -1.00000000 -1.0000000   0.085242794   0.041432036   0.030780583 -
0.142660440
## 46   -1.00000000 -0.9310345   0.506718310   0.075560070  -0.106985640 -
0.420006650
## 47   -0.67741935 -1.0000000   0.515708410   0.012158485   0.021367340 -
0.626332020
## 48   -1.00000000 -1.0000000   0.404578290  -0.029123489   0.100322390 -
0.430757700
## 49   -0.93548387 -1.0000000   0.423799610   0.150680320   0.244971380 -
0.597688010
## 50   -1.00000000 -1.0000000   0.289586850   0.240368010  -0.081032820 -
0.418354650
## 51   -1.00000000 -1.0000000   0.547813440   0.198003190  -0.205258520 -
0.614163600
## 52   -1.00000000 -1.0000000  -0.129463190  -0.309655510  -0.067389048 -
0.146505240
## 53   -1.00000000 -1.0000000  -0.177294700  -0.088881882  -0.001677066
0.222842290
## 54   -1.00000000 -1.0000000   0.039468108   0.126619590   0.065183838
0.135277370
## 55   -1.00000000 -1.0000000   0.088837787  -0.229763950   0.065986097
0.203151870
## 56   -1.00000000 -1.0000000   0.425051940  -0.230510800   0.416154030 -
0.685026860
## 57   -1.00000000 -0.3793103   0.357211840  -0.182859490   0.457239100 -
0.696682530
## 58   -1.00000000 -1.0000000   0.327643990  -0.065534723  -0.158283110 -
0.612055470
```

```
## 59  -1.00000000 -1.0000000  0.274076000 -0.185850850  0.344276430 -
0.745659960
## 60  -1.00000000 -1.0000000  0.240344100 -0.244588240  0.251622770 -
0.362405800
## 61  -1.00000000 -1.0000000  0.361707840 -0.063420823  0.334651060 -
0.556679340
## 62  -1.00000000 -1.0000000  0.434532900 -0.217294520  0.115203510 -
0.701307010
## 63  -1.00000000 -1.0000000  0.332185080 -0.124006230  0.216568690 -
0.635927310
## 64  -1.00000000 -1.0000000  0.261273400 -0.214712740  0.138874450 -
0.243958630
## 65  -1.00000000 -1.0000000 -0.406273810 -0.008389396 -0.363912810 -
0.170362540
## 66  -1.00000000 -1.0000000 -0.284899730 -0.189956500 -0.097143842
0.352359680
## 67  -1.00000000 -1.0000000 -0.635255950 -0.464462440 -0.642706100 -
0.423934350
## 68  -1.00000000 -1.0000000 -0.684586340 -0.543455890 -0.614135460 -
0.402361740
## 69  -0.93548387 -0.9310345 -0.191151360 -0.142787650  0.437217290 -
0.298035690
## 70  -0.93548387 -1.0000000  0.647802880 -0.151683600 -0.166214160 -
0.183717360
## 71  -1.00000000 -1.0000000 -0.539330040 -0.051106787 -0.354013970 -
0.424954720
## 72   0.09677419 -0.7931035  0.036605456  0.010096269  0.261337040 -
0.470160310
## 73  -0.80645161 -1.0000000  0.008769714 -0.283283490 -0.556243520
0.019438835
## 74  -1.00000000 -0.9310345 -0.366659440  0.275148540 -0.265426780
0.389002200
## 75  -1.00000000 -1.0000000 -0.015075881  0.319061840 -0.144292610
0.308875660
## 76  -1.00000000 -1.0000000 -0.009131195  0.031022827 -0.104425230
0.635267120
## 77  -0.87096774 -1.0000000 -0.101427210  0.160151200  0.121361020 -
0.153349260
## 78   0.09677419 -0.9310345 -0.136188710  0.444590770  0.102437860 -
0.070824249
## 79  -0.93548387 -0.5862069 -0.330997110 -0.233157760  0.085932199 -
0.328274940
## 80  -0.93548387 -0.5862069  0.107934450 -0.306520560  0.087772901 -
0.320674390
## 81  -0.93548387 -0.5862069 -0.179806730 -0.241827980  0.243442240 -
0.340868690
## 82  -0.61290323 -0.5862069 -0.175159580  0.063447474  0.229134880 -
0.561989850
## 83  -0.61290323 -0.5862069 -0.176371710 -0.144037600  0.059106372 -
0.285776650
```

```
## 84   -0.93548387 -0.5862069  0.192511600  0.012079807  0.001941880 -
0.146971520
## 85   -0.93548387 -0.5862069  0.053237664 -0.108108040 -0.108423390 -
0.324522090
## 86   -0.93548387 -0.5862069  0.096134195 -0.067297563 -0.016259307 -
0.314819760
## 87   -0.93548387 -0.5862069 -0.070288769 -0.113083130 -0.020525379 -
0.341564560
## 88   -0.61290323 -0.5862069  0.215049000 -0.069224902 -0.022534522 -
0.281784090
## 89   -0.93548387 -0.5862069  0.015490945 -0.031424588  0.131208890 -
0.356866150
## 90   -0.93548387 -0.5862069 -0.093225047  0.124766650  0.126136020 -
0.093531363
## 91   -0.61290323 -0.5862069 -0.099440510 -0.223247300 -0.056947522
0.139598300
## 92   -0.93548387 -0.5862069 -0.094465238 -0.057402259  0.303891960 -
0.093437573
## 93   -0.61290323 -0.5862069 -0.093528107 -0.062564688  0.056758584 -
0.282279980
## 94   -0.93548387 -0.5862069 -0.160468170 -0.161135590  0.059063705 -
0.436475040
## 95   -0.61290323 -0.5862069 -0.093259832 -0.172193320  0.064732887 -
0.259978210
## 96   -0.93548387 -0.5862069  0.007181370  0.157095470  0.335902770 -
0.350035600
## 97   -0.93548387 -0.5862069  0.079862733  0.114940020 -0.026331045 -
0.149875720
## 98   -0.93548387 -0.7931035  0.157775630 -0.060304675  0.177889280 -
0.203358340
## 99   -0.61290323 -0.5862069  0.035581175 -0.112759790  0.031980681 -
0.392584590
## 100 -0.61290323 -0.5862069 -0.211377770 -0.179375650  0.145716910
0.018251499
## 101 -0.61290323 -0.5862069  0.086360665  0.008461133  0.169932020
0.050798684
## 102 -0.61290323 -0.5862069  0.171607670  0.130523610  0.142688560 -
0.069414663
## 103 -0.61290323 -0.5862069  0.417764330  0.022161469  0.089850824 -
0.092038846
## 104 -0.61290323 -0.5862069  0.166467080 -0.049550401 -0.167058970 -
0.521537150
## 105 -0.93548387 -0.5862069  0.300663830  0.023011309 -0.005762288 -
0.366943070
## 106 -0.61290323 -0.5862069  0.141806560 -0.139465410 -0.044702788 -
0.251030290
## 107 -0.61290323 -0.5862069  0.031361340 -0.059003099  0.098759545 -
0.431273850
## 108 -0.61290323 -0.5862069 -0.059055883 -0.153797610  0.100038130
0.060660311
```

```
## 109 -0.61290323 -0.5862069  0.347995890 -0.205627200  0.140365180 -
0.090786781
## 110 -0.61290323 -0.5862069  0.015475838 -0.053423728  0.034968190 -
0.236365610
## 111 -0.93548387 -0.5862069  0.164289330 -0.009551474 -0.025302140 -
0.306849390
## 112 -0.61290323 -0.5862069  0.093320478 -0.058011686  0.084639142 -
0.341667850
## 113 -0.61290323 -0.5862069 -0.126434720 -0.192063120 -0.036058172 -
0.231203930
## 114 -0.93548387 -0.5862069 -0.164975860  0.186302930 -0.080894909 -
0.295999220
## 115 -0.61290323 -0.5862069  0.085882020 -0.076718325 -0.234889040 -
0.236588930
## 116 -0.93548387 -0.5862069 -0.097264816  0.144694560  0.013290581 -
0.504906590
## 117 -0.93548387 -0.5862069  0.301567990 -0.060010380  0.011039751 -
0.368051030
## 118 -0.61290323 -0.5862069  0.004451371 -0.103531270 -0.099350904 -
0.403809340
## 119 -0.93548387 -0.5862069  0.079667705 -0.034231901 -0.010705905 -
0.322793430
## 120 -0.93548387 -0.5862069 -0.111624830 -0.107021250 -0.090697355 -
0.288742170
## 121 -0.93548387 -0.5862069  0.009590735 -0.287443420  0.125040480 -
0.348972320
## 122 -0.93548387 -0.5862069 -0.022771345 -0.124691380  0.095250191 -
0.466792070
## 123 -0.93548387 -0.9310345 -0.191392740 -0.076126971  0.059448969 -
0.577586210
## 124 -0.93548387 -0.5862069 -0.042109493 -0.055083698  0.015352197 -
0.372011080
## 125 -0.93548387 -0.5862069  0.079880519 -0.011948492 -0.089887344 -
0.156404040
## 126 -0.93548387 -0.7931035  0.033780191 -0.034990470  0.250846130 -
0.673288960
## 127 -0.93548387 -0.7931035  0.130184780  0.158594710 -0.053909993 -
0.583993860
## 128 -0.80645161 -0.7931035 -0.091790647  0.219972140 -0.081350896
0.306025050
## 129 -0.93548387 -0.7931035 -0.276763870  0.053146257 -0.065220965
0.349337700
## 130 -0.93548387 -0.7931035 -0.230168470 -0.111027370 -0.167334610 -
0.133418840
## 131 -0.93548387 -0.7931035 -0.331724720 -0.056439261 -0.109697180
0.416010060
## 132 -0.93548387 -0.7931035 -0.239386130  0.147405660 -0.042918991
0.454539980
## 133 -0.80645161 -0.7931035 -0.052042087  0.063600481 -0.019507893 -
0.656434160
```

```
## 134 -0.80645161 -0.7931035  0.174630370  0.206860690 -0.128174010 -
0.697295070
## 135 -0.93548387 -0.7931035  0.239652190  0.293642910 -0.131393810 -
0.560473720
## 136 -0.80645161 -0.7931035 -0.037451841  0.044612356 -0.080760434 -
0.568184170
## 137 -0.93548387 -0.7241379 -0.411829640  0.227806930 -0.099426281
0.092942392
## 138 -1.00000000 -0.7241379 -0.235642750 -0.034835653 -0.072141714
0.560246980
## 139 -0.93548387 -0.7931035  0.282613490  0.220216540 -0.011078582
0.197043370
## 140 -1.00000000 -0.7241379 -0.273451660  0.013371946 -0.210913340
0.276268740
## 141 -0.87096774 -0.7241379  0.261214460  0.238497030 -0.135131100 -
0.188902070
## 142 -0.74193548 -0.7241379  0.121126070 -0.001378490 -0.083550440 -
0.537208960
## 143 -0.61290323 -0.7241379  0.066273333 -0.199489280  0.005675634 -
0.633660580
## 144 -0.74193548 -0.7241379  0.199211060 -0.004748372 -0.030940873 -
0.666979060
## 145 -0.93548387 -0.7241379 -0.183790690  0.006072845  0.305178530
0.045814685
## 146 -1.00000000 -0.7241379 -0.271625690  0.139105990 -0.101623150
0.107523060
## 147 -0.93548387 -0.7931035 -0.283779780  0.127093210 -0.055674832
0.147421120
## 148 -0.93548387 -0.7931035 -0.376292360 -0.210272950 -0.165097440
0.109102650
## 149 -0.93548387 -0.7931035  0.103480610 -0.050917516 -0.108252110 -
0.474059610
## 150 -0.93548387 -0.7241379 -0.207610290 -0.196521180 -0.105410400 -
0.541173410
## 151 -0.93548387 -0.9310345 -0.081708175 -0.449037790 -0.265394380 -
0.394455780
## 152 -0.93548387 -0.9310345 -0.160722040 -0.398793500  0.228831990 -
0.338814960
## 153 -0.93548387 -0.9310345 -0.361994930 -0.557266070 -0.389647700
0.126312360
## 154 -0.93548387 -0.9310345 -0.445640730 -0.401318430 -0.090917826
0.586383810
## 155 -0.93548387 -0.9310345 -0.359681170 -0.146380220 -0.185414810
0.175978100
## 156 -0.93548387 -0.8620690 -0.257251110  0.129886670 -0.224752450 -
0.207821030
## 157 -0.93548387 -0.9310345 -0.182984810 -0.426402130 -0.265109030
0.003865457
## 158 -0.93548387 -0.6551724 -0.068768740 -0.412460400 -0.076123229 -
0.474067660
```

```
## 159 -0.93548387 -0.6551724 -0.078118895 -0.479242030 -0.185066840 -
0.573812470
## 160 -0.93548387 -0.6551724 -0.045241325 -0.458119640 -0.077196701 -
0.607548640
## 161 -0.93548387 -0.9310345 -0.367834800 -0.616220770 -0.347019310 -
0.027980704
## 162 -0.93548387 -0.9310345 -0.288989210 -0.413008810 -0.291015890
0.396751900
## 163 -0.93548387 -0.9310345  0.029905730 -0.604607010 -0.236434830
0.642616660
## 164 -0.93548387 -0.9310345 -0.481223460 -0.357879640 -0.227776800
0.388310650
## 165 -0.93548387 -0.9310345  0.073155079 -0.401237550  0.004669988 -
0.334020140
## 166 -0.93548387 -0.9310345 -0.175276650 -0.323709730 -0.096896885 -
0.355392250
## 167 -0.93548387 -0.9310345  0.229802350 -0.558906010 -0.026827856 -
0.346889230
## 168 -0.93548387 -0.5172414 -0.056067139 -0.611287620  0.248818020 -
0.403979320
## 169 -0.93548387 -0.6551724 -0.196422600 -0.588456210 -0.077275176 -
0.620380920
## 170 -0.93548387 -0.9310345 -0.447763570 -0.520396390 -0.340808280 -
0.158850600
## 171 -0.93548387 -0.9310345 -0.391539530 -0.431375670 -0.333985930
0.454821740
## 172 -0.93548387 -0.7931035 -0.254804620 -0.373491400 -0.122794780 -
0.268097360
## 173 -0.93548387 -0.9310345 -0.433653010 -0.213922460 -0.207995930
0.016764501
## 174 -0.93548387 -0.7931035 -0.280707570 -0.614817210 -0.018778622 -
0.098919747
## 175 -0.93548387 -0.7931035 -0.116147160 -0.580930380 -0.064262783 -
0.535465870
## 176 -0.93548387 -0.9310345  0.107519630 -0.611715140  0.083109590 -
0.465874600
## 177 -1.00000000 -1.0000000 -0.249398920 -0.253796280 -0.074027066
0.015900621
##               NA          NA          NA          NA          NA
NA
## 1    0.13409154  0.273371970 -0.091261831 -0.4843465000 -0.782850700 -
0.9998650
## 2   -0.79701355  0.387568890  0.148664830 -0.1569092700 -0.451775890 -
0.9998509
## 3   -0.24469109 -0.429272360 -0.812639050 -0.3919912800 -0.767482400 -
0.9996805
## 4   -0.87361791 -0.135118480 -0.542238400 -0.3793527000 -0.756548330 -
0.9999637
## 5   -0.72262793 -0.265470670 -0.689988250 -0.2679956000 -0.659207810 -
0.9998700
```

```
## 6    -0.32315869 -0.290070130 -0.705384420 -0.2350402800 -0.608142460 -
0.9998650
## 7    -0.75492010 -0.299729310 -0.729331910 -0.3692527400 -0.750154790 -
0.9999199
## 8    -0.55024249  0.045216459 -0.352715920 -0.0606741820 -0.411153760 -
0.9999314
## 9    -0.69363782 -0.290414690 -0.667476570 -0.5143254500 -0.841780340 -
0.9999501
## 10   -0.76129774 -0.485115520 -0.863717730 -0.6239262600 -0.907814440 -
0.9998871
## 11   -0.78539301 -0.484830520 -0.850799440 -0.5836939800 -0.898025170 -
0.9998754
## 12   -0.57607278 -0.046324223 -0.372482900 -0.5532205500 -0.864047260 -
0.9999746
## 13   -0.48919944  0.037388303 -0.342954360 -0.1832115100 -0.533621850 -
0.9999830
## 14   -0.85230583 -0.417607970 -0.751222610 -0.5647264600 -0.849592200 -
0.9999944
## 15   -0.48617319  0.057176573 -0.359487800  0.0191836720 -0.366190910 -
0.9997368
## 16   -0.15728792  0.343220140  0.012541707  0.4488601200  0.212242110 -
0.9999121
## 17    0.50542962  0.018924348 -0.449285890 -0.1426691000 -0.560991080 -
0.9999176
## 18    0.17727387 -0.179650490 -0.634926760 -0.2195001800 -0.608904320 -
0.9999230
## 19   -0.50151768 -0.499101860 -0.860249310 -0.6441104800 -0.889412280 -
0.9999463
## 20   -0.45312049 -0.070108945 -0.398610430  0.1642359900 -0.059484444 -
0.9999852
## 21   -0.53490407 -0.244371690 -0.569563990 -0.8422165800 -0.974487430 -
0.9999934
## 22   -0.90735603 -0.678659030 -0.942177300 -0.7135377300 -0.915549370 -
0.9999953
## 23   -0.94282190 -0.029990680 -0.354406860 -0.1883249400 -0.489986910 -
0.9999961
## 24   -0.84814146 -0.583983680 -0.891478670 -0.4978882200 -0.783645160 -
0.9999965
## 25   -0.73925244 -0.515558950 -0.826533390 -0.2597188200 -0.564891460 -
0.9999879
## 26   -0.74541733 -0.374686310 -0.719531880 -0.5785257400 -0.866645300 -
0.9999689
## 27   -0.88169235 -0.437332190 -0.774434770 -0.7505779800 -0.936653640 -
0.9999792
## 28   -0.69162730 -0.258001100 -0.639422220 -0.2908162500 -0.660349390 -
0.9996278
## 29   -0.27056161  0.302189260 -0.010505714  0.3955027700  0.128625180 -
0.9999723
## 30   -0.32801773  0.300500080 -0.043620087  0.2036475800 -0.123004950 -
0.9999819
```

```
## 31  -0.43378408 -0.003595217 -0.509856030 -0.1031577000 -0.547146260 -
0.9613898
## 32  -0.36540077  0.013279777 -0.486319770  0.2153332800 -0.193187540 -
0.9579419
## 33  -0.68033290 -0.050799307 -0.520895290  0.1337182500 -0.275486160 -
0.9974174
## 34  -0.88026052 -0.382169830 -0.740818740  0.1844983100 -0.100267500 -
0.9999895
## 35  -0.17169604  0.048282987 -0.248123920  0.3369898400  0.067432390 -
0.9999947
## 36  -0.01567836 -0.404495150 -0.762774770 -0.2041190600 -0.598836240 -
0.9999885
## 37  -0.85230602 -0.053967943 -0.347625580 -0.0004057221 -0.309929490 -
0.9999985
## 38  -0.27179080 -0.246416170 -0.627623290 -0.6163938200 -0.865304860 -
0.9999957
## 39   0.18207381  0.350957580  0.004835940  0.2939707900 -0.003681890 -
0.9987873
## 40   0.08783647 -0.193605230 -0.653032200  0.2117110700 -0.115457110 -
0.9983675
## 41   0.06737794 -0.010394094 -0.427787510  0.3472152900  0.057471609 -
0.9991990
## 42  -0.18237819 -0.258405730 -0.637271130  0.2706408100 -0.058975272 -
0.9998225
## 43  -0.48044378 -0.255095200 -0.609487640 -0.0715169820 -0.452781160 -
0.9999755
## 44  -0.85705420 -0.032576340 -0.329745050  0.4777592000  0.289481200 -
0.9999975
## 45  -0.46656905  0.169540570 -0.068719047  0.4037474500  0.201517560 -
0.9999918
## 46  -0.71325738 -0.412783140 -0.794577560  0.1971762500 -0.126513980 -
0.9999969
## 47  -0.84122188 -0.421982340 -0.796976160  0.2821242200 -0.015433377 -
0.9999975
## 48  -0.70488158  0.075388228 -0.241106630 -0.1622439000 -0.463076490 -
0.9999967
## 49  -0.86751683 -0.376318840 -0.782237620  0.2938506100  0.048677831 -
0.9999972
## 50  -0.68793374 -0.189293650 -0.556102050  0.0932096210 -0.183879740 -
0.9999959
## 51  -0.85301834  0.354491010  0.137884120 -0.0259480530 -0.333739760 -
0.9999965
## 52  -0.58868376 -0.604780750 -0.925982010  0.3341057800  0.059866256 -
0.9988759
## 53  -0.07936523  0.134930690 -0.193638670  0.2806077100 -0.023560853 -
0.9997778
## 54  -0.18992228  0.220953270 -0.064349569  0.3691176600  0.110466060 -
0.9999335
## 55  -0.07398114  0.361579370  0.075114765  0.1424721400 -0.126160110 -
0.9999853
```

```
## 56   -0.88736885   0.051888709 -0.308752920 -0.0476062080 -0.438170240 -
0.9999982
## 57   -0.89469684   0.288668280 -0.004175878 -0.5433304600 -0.863024710 -
0.9999984
## 58   -0.84216347   0.133945890 -0.208746470  0.5119784000  0.344831880 -
0.9999988
## 59   -0.91615217   0.260375010 -0.045699805  0.1868561100 -0.042932941 -
0.9999986
## 60   -0.63922936   0.224464940 -0.067703190  0.3682118300  0.173312190 -
0.9999982
## 61   -0.83391790   0.527836520  0.352844150  0.1015468300 -0.134971710 -
0.9999991
## 62   -0.91039289   0.185915150 -0.095081364 -0.1031756800 -0.398511100 -
0.9999987
## 63   -0.85710487   0.145419540 -0.148763220  0.2282568000  0.006672723 -
0.9999981
## 64   -0.57722251   0.221332670 -0.060811050  0.3286615700  0.133915080 -
0.9999985
## 65   -0.61077979  -0.221561910 -0.631434800 -0.2555698600 -0.676095660 -
0.9930396
## 66    0.10846309  -0.305047380 -0.696891520  0.1905682800 -0.158792700 -
0.9983489
## 67   -0.78367260  -0.125606460 -0.550597750 -0.0328084160 -0.371616520 -
0.8386547
## 68   -0.76329350   0.161823650 -0.172287410 -0.2126038100 -0.591176490 -
0.8191107
## 69   -0.68614585   0.024354612 -0.328354310 -0.3809293900 -0.715060300 -
0.9814919
## 70   -0.57146880  -0.225841450 -0.681536270 -0.2029577400 -0.647632520 -
0.9500562
## 71   -0.78454226  -0.468644200 -0.823615900 -0.4352143400 -0.768333000 -
0.5951409
## 72   -0.81848931  -0.661494880 -0.949889320 -0.5557632900 -0.868758220 -
0.6770477
## 73   -0.34546462  -0.487621920 -0.867708150 -0.3440403400 -0.767266740 -
0.9576273
## 74    0.09146227  -0.656135060 -0.934427130  0.1268128200 -0.294542480 -
0.9983771
## 75    0.04608247  -0.602276700 -0.898317160  0.0841528470 -0.319570370 -
0.9986583
## 76    0.48557170  -0.080046144 -0.482082500  0.2145227600 -0.059121165 -
0.9991962
## 77   -0.55871902  -0.521885020 -0.828011910 -0.1935998400 -0.599096060 -
0.9998039
## 78   -0.43384751  -0.522438830 -0.810290920 -0.3970404300 -0.739907180 -
0.9999604
## 79   -0.65006419  -0.090959804 -0.402166690 -0.5630607700 -0.847973350 -
0.8321937
## 80   -0.68937778  -0.032869664 -0.467519660 -0.2843355400 -0.599780860 -
0.9037338
```

```
## 81   -0.67833492 -0.013912385 -0.445386220 -0.2111812400 -0.534792590 -
0.9232566
## 82   -0.85615858 -0.262960660 -0.680334560 -0.1357191400 -0.487255540 -
0.9173092
## 83   -0.61572606 -0.204201850 -0.613400820 -0.1179873700 -0.502523350 -
0.9253808
## 84   -0.45693703 -0.041147748 -0.468811920 -0.1172370600 -0.479118580 -
0.9638410
## 85   -0.69324222 -0.169798580 -0.574746250 -0.1966882300 -0.522920750 -
0.9683018
## 86   -0.67272980 -0.024366106 -0.405792820 -0.3246551400 -0.647027730 -
0.9594894
## 87   -0.68430793  0.039102635 -0.343258790 -0.4106278000 -0.780781790 -
0.9417659
## 88   -0.64970106  0.011952491 -0.425247910 -0.3177056800 -0.653290000 -
0.9673892
## 89   -0.69864536  0.064729281 -0.376190510 -0.1132263200 -0.465938060 -
0.9703201
## 90   -0.38705628 -0.185266700 -0.603556810 -0.1756798300 -0.543400810 -
0.9593211
## 91   -0.13997564 -0.211471160 -0.631316940 -0.2660244200 -0.633746230 -
0.9585487
## 92   -0.39909350 -0.146485030 -0.559193460 -0.2328965200 -0.570423060 -
0.9571197
## 93   -0.60563190 -0.171540640 -0.597394680 -0.2620061400 -0.602426430 -
0.9551160
## 94   -0.78597997 -0.090972000 -0.513586240 -0.2701656400 -0.588583590 -
0.9527147
## 95   -0.60270522 -0.211953650 -0.623751950 -0.1531640200 -0.485261820 -
0.9492945
## 96   -0.70365866 -0.147073860 -0.555995490 -0.1217746300 -0.470419540 -
0.9583049
## 97   -0.49730229 -0.195734380 -0.599551970 -0.5038551200 -0.820697640 -
0.9613926
## 98   -0.60608413 -0.180950420 -0.574613680 -0.4460182700 -0.790246240 -
0.9586125
## 99   -0.71004562 -0.151498930 -0.541867740 -0.1161767500 -0.426309120 -
0.9450223
## 100 -0.29840667 -0.074179914 -0.502371180 -0.3843538100 -0.715238850 -
0.9505117
## 101 -0.23611922 -0.257963970 -0.659616890  0.0077028589 -0.277689790 -
0.9663180
## 102 -0.39563048 -0.305883080 -0.683250560 -0.3558940400 -0.680282150 -
0.9685280
## 103 -0.38505359 -0.180320810 -0.578761470 -0.0268625550 -0.407934700 -
0.9581785
## 104 -0.83041458 -0.055786254 -0.440126980 -0.1363868500 -0.491857010 -
0.9533765
## 105 -0.73460595 -0.037405299 -0.455522940 -0.1984913600 -0.522594620 -
0.9705726
```

```
## 106 -0.55464969 -0.053715246 -0.477924950 -0.2359168700 -0.584662210 -
0.9745188
## 107 -0.77189975 -0.092117130 -0.514205330 -0.2324110800 -0.557767090 -
0.9742612
## 108 -0.22455084 -0.020987115 -0.438595890 -0.2915308500 -0.603253940 -
0.9675572
## 109 -0.43021364 -0.042287923 -0.453316000 -0.1310157600 -0.482751880 -
0.9609604
## 110 -0.58342995 -0.081577577 -0.488517460 -0.3178844200 -0.675302840 -
0.9659358
## 111 -0.67242563 -0.102376380 -0.533759780 -0.2791252400 -0.636308040 -
0.9608712
## 112 -0.69840258 -0.190295840 -0.584597280  0.1306765800 -0.145337260 -
0.9353740
## 113 -0.57748951 -0.076547539 -0.509925470 -0.0582920120 -0.423650280 -
0.9362537
## 114 -0.60753163 -0.064432951 -0.493735180 -0.0231390300 -0.438711550 -
0.9414938
## 115 -0.56307368 -0.107157610 -0.521839870 -0.1189536900 -0.506866580 -
0.9519958
## 116 -0.82871573 -0.056193274 -0.498043770 -0.2415549000 -0.587944250 -
0.9467394
## 117 -0.73920547 -0.130535970 -0.542574440 -0.2362080300 -0.564595870 -
0.9613268
## 118 -0.75691249 -0.127633710 -0.549396410 -0.2972546300 -0.627855220 -
0.9628890
## 119 -0.68198327  0.003360503 -0.389535400 -0.2748668800 -0.648679260 -
0.9501112
## 120 -0.64010793 -0.106461730 -0.523126140 -0.3431117000 -0.691862270 -
0.9672521
## 121 -0.66380246 -0.193868590 -0.606794940 -0.4001476500 -0.728954450 -
0.9691275
## 122 -0.76329478 -0.190045320 -0.568913960 -0.2202049000 -0.625185110 -
0.9549422
## 123 -0.86608788 -0.165505820 -0.550889220 -0.3627172500 -0.752112690 -
0.8940106
## 124 -0.69265903  0.046471743 -0.370008900 -0.3452658900 -0.684347720 -
0.8951252
## 125 -0.51735140 -0.267207070 -0.671162800 -0.4849387900 -0.828268290 -
0.9618654
## 126 -0.91018523 -0.306536820 -0.722833350 -0.2239199800 -0.554912210 -
0.9832330
## 127 -0.87001251 -0.480121290 -0.832026080 -0.0522844710 -0.358023570 -
0.9930607
## 128  0.05864884 -0.649612480 -0.913869210 -0.3006267700 -0.582487920 -
0.8060148
## 129  0.13860774 -0.499214840 -0.845887070 -0.3204005700 -0.643053120 -
0.7511078
## 130 -0.41542247 -0.444147720 -0.816103480 -0.2128366800 -0.561335570 -
0.9258000
```

```
## 131   0.21827158 -0.417362160 -0.774211630 -0.3896166600 -0.698598440 -
0.7248136
## 132   0.23753438 -0.328682660 -0.711777650 -0.3359676800 -0.637624700 -
0.6414546
## 133  -0.91407009 -0.342857650 -0.729711740 -0.0391732150 -0.336259000 -
0.9810455
## 134  -0.92927945 -0.595178170 -0.897502520 -0.3868717800 -0.729610750 -
0.9856216
## 135  -0.85523145 -0.594444190 -0.901214090 -0.3068990100 -0.678901020 -
0.9539852
## 136  -0.84251435 -0.582257010 -0.877670610 -0.3729036400 -0.715468040 -
0.9683250
## 137  -0.26229420 -0.533294530 -0.847820060 -0.4022255900 -0.703316030 -
0.7858340
## 138   0.38384539 -0.556397310 -0.872428450 -0.4221855200 -0.722694730 -
0.5830272
## 139  -0.12852374 -0.434312870 -0.768899450 -0.3444723700 -0.718537950 -
0.8170671
## 140   0.03211036 -0.513687790 -0.845958620 -0.4904876800 -0.827308200 -
0.7596263
## 141  -0.53275884 -0.477835290 -0.805418320 -0.0818236360 -0.391294500 -
0.8286580
## 142  -0.81914488 -0.494502010 -0.855844340  0.1774764300 -0.070706820 -
0.9774341
## 143  -0.90508588 -0.492850270 -0.837419840 -0.3497478600 -0.693308480 -
0.9710066
## 144  -0.91328361 -0.440497970 -0.821166970 -0.2436661600 -0.567914960 -
0.9582896
## 145  -0.24502027 -0.360943020 -0.692022230 -0.2218684100 -0.545961460 -
0.7916444
## 146  -0.20081329 -0.530406030 -0.853969450 -0.3561285000 -0.702750940 -
0.6045699
## 147  -0.13241820 -0.359362310 -0.759024620 -0.3807249900 -0.710583520 -
0.7039219
## 148  -0.17336374 -0.450207640 -0.807845590 -0.2006612800 -0.568161980 -
0.7391632
## 149  -0.80591466 -0.512367190 -0.846802640 -0.3623881400 -0.686139590 -
0.9432521
## 150  -0.83266925 -0.452290990 -0.815414340 -0.3431721100 -0.716239060 -
0.9622890
## 151  -0.75471065  0.426609610  0.215768430 -0.4069701500 -0.760745380 -
0.9637349
## 152  -0.70215256  0.423368940  0.199965890 -0.0843042180 -0.483126550 -
0.9768937
## 153  -0.27528396  0.343880060  0.100712120 -0.2731178400 -0.608201180 -
0.7905716
## 154   0.43182271  0.301912160  0.042403337 -0.3020979600 -0.668202710 -
0.6700909
## 155  -0.11323728  0.549051280  0.380242690 -0.4685616100 -0.791825930 -
0.8991514
```

```
## 156 -0.59423249  0.384067550  0.055119845 -0.3954827600 -0.755171570 -
0.9289097
## 157 -0.36163169  0.334134660  0.108929740 -0.3121812200 -0.687760080 -
0.9110669
## 158 -0.79441773  0.409455060  0.175574350 -0.3712733300 -0.711376250 -
0.9813468
## 159 -0.87856203  0.601389440  0.449490060 -0.6171239500 -0.889275010 -
0.9605606
## 160 -0.88332155  0.496854310  0.301075640 -0.4417866700 -0.785276130 -
0.9659082
## 161 -0.39566793  0.429168430  0.210940520 -0.4002901800 -0.753681890 -
0.8355278
## 162  0.09448958  0.422656020  0.163097360 -0.4166795100 -0.764401820 -
0.7060033
## 163  0.51551265  0.370060360  0.096938247 -0.4017687600 -0.733859920 -
0.8716583
## 164  0.19540500  0.353361870  0.103030000 -0.4003323900 -0.735639970 -
0.8777832
## 165 -0.68415128  0.651560160  0.518791690 -0.4798478100 -0.814975550 -
0.9309211
## 166 -0.68435291  0.720708180  0.609044340 -0.4358523200 -0.781027230 -
0.9787465
## 167 -0.70606553  0.657155290  0.520923380 -0.3611199900 -0.717812980 -
0.9748962
## 168 -0.78612413  0.728174250  0.613234570 -0.4568302000 -0.816352500 -
0.9530396
## 169 -0.89915065  0.638246030  0.484780980 -0.5684241000 -0.871729510 -
0.9743092
## 170 -0.52340502  0.464798450  0.233322600 -0.4281010800 -0.749544270 -
0.8636343
## 171  0.25430124  0.332355920  0.046442259 -0.4485917500 -0.775637730 -
0.6691913
## 172 -0.58602513  0.455004540  0.217475350 -0.4356873400 -0.769494680 -
0.9516354
## 173 -0.27178018  0.295893700  0.023055814 -0.4040024400 -0.767013900 -
0.9013288
## 174 -0.41201053  0.227438240 -0.094830524 -0.4311101300 -0.761266920 -
0.8378727
## 175 -0.83496257  0.707205250  0.578040930 -0.4812060900 -0.794862210 -
0.9903976
## 176 -0.79601855  0.708655370  0.591186880 -0.6715385200 -0.929887520 -
0.9574344
## 177 -0.38726838  0.222522900 -0.146227600  0.4356298700  0.211511560 -
0.9993947
##               NA           NA           NA           NA           NA           NA
## 1    -0.9999318 -0.9999729 -0.9999702 -0.9999301 -0.9999586 -0.9999290
## 2    -0.9997943 -0.9999131 -0.9999182 -0.9998964 -0.9998853 -0.9997842
## 3    -0.9998282 -0.9999151 -0.9999324 -0.9998478 -0.9998415 -0.9998635
## 4    -0.9998907 -0.9999465 -0.9999733 -0.9998773 -0.9999031 -0.9998334
## 5    -0.9999117 -0.9999258 -0.9999409 -0.9999356 -0.9998874 -0.9998999
```

```
## 6   -0.9999123 -0.9999742 -0.9999722 -0.9999759 -0.9999721 -0.9999598
## 7   -0.9998862 -0.9999558 -0.9999815 -0.9999422 -0.9999279 -0.9999832
## 8   -0.9999028 -0.9999416 -0.9999931 -0.9999450 -0.9999165 -0.9999609
## 9   -0.9999336 -0.9999339 -0.9999812 -0.9999579 -0.9999585 -0.9999781
## 10  -0.9997890 -0.9998760 -0.9999511 -0.9998868 -0.9999137 -0.9999572
## 11  -0.9998054 -0.9999434 -0.9999473 -0.9999014 -0.9999298 -0.9999747
## 12  -0.9999752 -0.9999834 -0.9999767 -0.9999481 -0.9999674 -0.9999426
## 13  -0.9999841 -0.9999730 -0.9999892 -0.9999696 -0.9999687 -0.9999837
## 14  -0.9999881 -0.9999844 -0.9999875 -0.9999820 -0.9999740 -0.9999881
## 15  -0.9997286 -0.9998469 -0.9998659 -0.9998833 -0.9997451 -0.9996758
## 16  -0.9999871 -0.9999575 -0.9999798 -0.9999786 -0.9999495 -0.9999850
## 17  -0.9999828 -0.9999658 -0.9999819 -0.9999609 -0.9999630 -0.9999668
## 18  -0.9999620 -0.9999587 -0.9999760 -0.9999687 -0.9999280 -0.9999150
## 19  -0.9999711 -0.9999834 -0.9999861 -0.9999505 -0.9999462 -0.9999301
## 20  -0.9999823 -0.9999931 -0.9999891 -0.9999761 -0.9999670 -0.9999730
## 21  -0.9999910 -0.9999819 -0.9999879 -0.9999862 -0.9999768 -0.9999742
## 22  -0.9999880 -0.9999669 -0.9999872 -0.9999908 -0.9999750 -0.9999703
## 23  -0.9999914 -0.9999769 -0.9999914 -0.9999964 -0.9999776 -0.9999902
## 24  -0.9999926 -0.9999843 -0.9999982 -0.9999776 -0.9999779 -0.9999967
## 25  -0.9999830 -0.9999824 -0.9999896 -0.9999680 -0.9999715 -0.9999930
## 26  -0.9999694 -0.9999905 -0.9999824 -0.9999761 -0.9999901 -0.9999765
## 27  -0.9999623 -0.9999593 -0.9999786 -0.9999640 -0.9999685 -0.9999534
## 28  -0.9997090 -0.9997293 -0.9999181 -0.9997697 -0.9995154 -0.9995630
## 29  -0.9999948 -0.9999708 -0.9999904 -0.9999597 -0.9999584 -0.9999675
## 30  -0.9999940 -0.9999907 -0.9999828 -0.9999685 -0.9999835 -0.9999910
## 31  -0.9950357 -0.9965081 -0.9968098 -0.9929462 -0.9912292 -0.9865780
## 32  -0.9964504 -0.9953756 -0.9990407 -0.9985596 -0.9977834 -0.9984458
## 33  -0.9990468 -0.9968840 -0.9975479 -0.9925106 -0.9925235 -0.9893340
## 34  -0.9999776 -0.9999757 -0.9999887 -0.9999635 -0.9999349 -0.9999205
## 35  -0.9999965 -0.9999889 -0.9999943 -0.9999948 -0.9999896 -0.9999913
## 36  -0.9999933 -0.9999908 -0.9999880 -0.9999885 -0.9999889 -0.9999945
## 37  -0.9999940 -0.9999923 -0.9999929 -0.9999862 -0.9999893 -0.9999782
## 38  -0.9999951 -0.9999917 -0.9999937 -0.9999853 -0.9999893 -0.9999843
## 39  -0.9998935 -0.9998549 -0.9998513 -0.9995587 -0.9995916 -0.9994420
## 40  -0.9996294 -0.9995740 -0.9994718 -0.9989378 -0.9987338 -0.9983191
## 41  -0.9998522 -0.9998225 -0.9998531 -0.9995543 -0.9994412 -0.9992287
## 42  -0.9999407 -0.9999549 -0.9999481 -0.9998832 -0.9998628 -0.9998044
## 43  -0.9999724 -0.9999815 -0.9999830 -0.9999868 -0.9999729 -0.9999809
## 44  -0.9999945 -0.9999978 -0.9999925 -0.9999918 -0.9999907 -0.9999944
## 45  -0.9999948 -0.9999895 -0.9999859 -0.9999843 -0.9999773 -0.9999839
## 46  -0.9999969 -0.9999916 -0.9999733 -0.9999752 -0.9999818 -0.9999815
## 47  -0.9999991 -0.9999868 -0.9999805 -0.9999698 -0.9999895 -0.9999838
## 48  -0.9999902 -0.9999928 -0.9999888 -0.9999846 -0.9999752 -0.9999907
## 49  -0.9999915 -0.9999899 -0.9999950 -0.9999736 -0.9999813 -0.9999740
## 50  -0.9999927 -0.9999927 -0.9999912 -0.9999873 -0.9999685 -0.9999823
## 51  -0.9999903 -0.9999888 -0.9999766 -0.9999698 -0.9999767 -0.9999708
## 52  -0.9998866 -0.9995417 -0.9997256 -0.9994220 -0.9995747 -0.9992502
## 53  -0.9999678 -0.9999650 -0.9999514 -0.9998920 -0.9998328 -0.9998952
## 54  -0.9999755 -0.9999647 -0.9999754 -0.9999072 -0.9999248 -0.9999301
## 55  -0.9999925 -0.9999937 -0.9999834 -0.9999843 -0.9999870 -0.9999834
```

```
## 56    -0.9999972 -0.9999959 -0.9999835 -0.9999919 -0.9999814 -0.9999923
## 57    -0.9999954 -0.9999922 -0.9999902 -0.9999938 -0.9999811 -0.9999889
## 58    -0.9999902 -0.9999905 -0.9999945 -0.9999866 -0.9999775 -0.9999881
## 59    -0.9999940 -0.9999936 -0.9999967 -0.9999806 -0.9999895 -0.9999900
## 60    -0.9999959 -0.9999956 -0.9999970 -0.9999916 -0.9999962 -0.9999948
## 61    -0.9999958 -0.9999982 -0.9999979 -0.9999950 -0.9999876 -0.9999880
## 62    -0.9999893 -0.9999900 -0.9999925 -0.9999768 -0.9999749 -0.9999815
## 63    -0.9999844 -0.9999876 -0.9999938 -0.9999737 -0.9999697 -0.9999859
## 64    -0.9999904 -0.9999945 -0.9999986 -0.9999938 -0.9999878 -0.9999893
## 65    -0.9996566 -0.9995648 -0.9974767 -0.9981960 -0.9985040 -0.9981738
## 66    -0.9996100 -0.9998223 -0.9997875 -0.9996082 -0.9995378 -0.9992256
## 67    -0.8750233 -0.9876270 -0.9907768 -0.9907047 -0.9905196 -0.9947769
## 68    -0.8593879 -0.9867518 -0.9899774 -0.9917189 -0.9927288 -0.9971840
## 69    -0.9917871 -0.9953834 -0.9948723 -0.9909695 -0.9890661 -0.9878607
## 70    -0.9381342 -0.9236894 -0.8966466 -0.7576578 -0.5992282 -0.4942325
## 71    -0.6739110 -0.9674416 -0.9580954 -0.9260886 -0.9432535 -0.9695803
## 72    -0.4681955 -0.8943462 -0.8366532 -0.5728067 -0.6252130 -0.5509355
## 73    -0.9791072 -0.9808368 -0.9901653 -0.9691705 -0.9519951 -0.9407415
## 74    -0.9997269 -0.9997133 -0.9997516 -0.9996978 -0.9996176 -0.9995167
## 75    -0.9996787 -0.9996503 -0.9994685 -0.9989334 -0.9987750 -0.9986788
## 76    -0.9998706 -0.9998364 -0.9997880 -0.9996426 -0.9994012 -0.9993043
## 77    -0.9999126 -0.9999113 -0.9999286 -0.9998994 -0.9997634 -0.9998504
## 78    -0.9999822 -0.9999510 -0.9999831 -0.9999581 -0.9999642 -0.9999794
## 79    -0.5223844 -0.9026690 -0.9612094 -0.9560915 -0.9516971 -0.9657370
## 80    -0.4498935 -0.8229414 -0.9456303 -0.8479073 -0.8187094 -0.7778205
## 81    -0.5117466 -0.7835592 -0.9332055 -0.9650522 -0.9454056 -0.9589293
## 82    -0.2130272 -0.7547019 -0.8977879 -0.9389719 -0.9474577 -0.9693561
## 83    -0.2602845 -0.6701405 -0.9415650 -0.9459119 -0.9433731 -0.9710224
## 84    -0.4940896 -0.8012037 -0.9262765 -0.9123872 -0.9081282 -0.7631971
## 85    -0.4140828 -0.8457842 -0.9496512 -0.9331781 -0.9370456 -0.9510964
## 86    -0.3707698 -0.8279569 -0.9329327 -0.9096555 -0.8697656 -0.9019787
## 87    -0.4332125 -0.8688838 -0.9508871 -0.9654504 -0.9081968 -0.9580691
## 88    -0.2910258 -0.8722167 -0.9271781 -0.9138601 -0.8246329 -0.8290741
## 89    -0.4341472 -0.8237304 -0.9400721 -0.9415914 -0.9346136 -0.9673626
## 90    -0.4719309 -0.7236106 -0.9436362 -0.9598030 -0.9642088 -0.9868991
## 91    -0.2881026 -0.6837312 -0.9364398 -0.9341233 -0.9637751 -0.9761244
## 92    -0.3855661 -0.6841580 -0.9343537 -0.9278199 -0.9582081 -0.9861767
## 93    -0.5649466 -0.7549161 -0.9519375 -0.9321190 -0.9480365 -0.9829521
## 94    -0.4010923 -0.8378962 -0.9479758 -0.9429850 -0.9240457 -0.9930601
## 95    -0.2574292 -0.7314266 -0.9513106 -0.9440866 -0.9573702 -0.9591475
## 96    -0.1977696 -0.7867993 -0.9228888 -0.9089427 -0.9526444 -0.9395811
## 97    -0.3191523 -0.6808400 -0.9388689 -0.9169113 -0.8925964 -0.9731542
## 98    -0.5234288 -0.7327920 -0.9351136 -0.9412270 -0.9563870 -0.8836326
## 99    -0.4060459 -0.8069531 -0.9519502 -0.8981594 -0.8973983 -0.9377983
## 100   -0.4722698 -0.7701031 -0.9766847 -0.9508535 -0.9725734 -0.9815951
## 101   -0.4778799 -0.6693210 -0.9264349 -0.8557806 -0.8760280 -0.9512685
## 102   -0.4422383 -0.4887509 -0.8994233 -0.8257716 -0.8145014 -0.9484543
## 103   -0.4098663 -0.6240274 -0.8070827 -0.7537506 -0.6218962 -0.7524619
## 104   -0.3997653 -0.7159342 -0.8855127 -0.9309790 -0.8266447 -0.8666013
## 105   -0.4447682 -0.8087012 -0.8785648 -0.8583347 -0.8629828 -0.8282195
```

```
## 106 -0.5389095 -0.7989345 -0.9338383 -0.9427441 -0.9359730 -0.8851748
## 107 -0.4158373 -0.7671080 -0.9572072 -0.9239886 -0.9647326 -0.9695411
## 108 -0.3944962 -0.6830176 -0.9762503 -0.9524670 -0.9079368 -0.9741239
## 109 -0.3584887 -0.7305062 -0.9046173 -0.8255305 -0.7757568 -0.7183751
## 110 -0.2949211 -0.6897126 -0.9200248 -0.9253545 -0.9206300 -0.9711719
## 111 -0.4676903 -0.6577292 -0.9057675 -0.8710931 -0.8955616 -0.9087202
## 112 -0.5367710 -0.4029782 -0.9352622 -0.9040200 -0.7836691 -0.8615650
## 113 -0.5096982 -0.6512678 -0.9397851 -0.9420483 -0.9384223 -0.9396134
## 114 -0.5538930 -0.6701447 -0.9174436 -0.9725754 -0.9684572 -0.9405333
## 115 -0.3310561 -0.8120774 -0.9403014 -0.8888982 -0.8706345 -0.9486986
## 116 -0.3639268 -0.7805863 -0.9290068 -0.9625246 -0.8933967 -0.9796769
## 117 -0.4624948 -0.8184829 -0.8955646 -0.8555471 -0.7923731 -0.7911079
## 118 -0.5018879 -0.8352199 -0.9270544 -0.9159835 -0.9461146 -0.9550657
## 119 -0.5585651 -0.8528737 -0.9352759 -0.9199182 -0.9451095 -0.8791330
## 120 -0.5982478 -0.8641628 -0.9775688 -0.9562992 -0.9787566 -0.9477104
## 121 -0.5448072 -0.8432404 -0.9689592 -0.9443194 -0.9306054 -0.9542765
## 122 -0.4446564 -0.7392742 -0.9883852 -0.9363328 -0.9009778 -0.9032329
## 123 -0.5310953 -0.7590729 -0.9547617 -0.9447455 -0.9341403 -0.9188415
## 124 -0.5190641 -0.8073457 -0.9280908 -0.8991250 -0.8934227 -0.8867732
## 125 -0.4940163 -0.8367649 -0.9432309 -0.9074633 -0.9576222 -0.9422009
## 126 -0.8494593 -0.7796102 -0.8965477 -0.9464057 -0.9632964 -0.9862726
## 127 -0.8604209 -0.8147367 -0.9649124 -0.9695946 -0.9667277 -0.9824788
## 128 -0.8334661 -0.8383065 -0.9240227 -0.9312923 -0.8749283 -0.8964878
## 129 -0.7747237 -0.7858101 -0.9503092 -0.9561263 -0.9235520 -0.9494856
## 130 -0.8037486 -0.8652314 -0.9570308 -0.9748346 -0.9510349 -0.9864389
## 131 -0.8197636 -0.8832400 -0.8868052 -0.9430460 -0.9164002 -0.9738115
## 132 -0.8417902 -0.8535896 -0.8933799 -0.9480735 -0.8285381 -0.8955994
## 133 -0.9205539 -0.8967441 -0.9681878 -0.9665704 -0.9706815 -0.9704983
## 134 -0.9074810 -0.9167686 -0.9719583 -0.9444630 -0.9476474 -0.9833596
## 135 -0.8821237 -0.8722044 -0.9527887 -0.8808948 -0.8931958 -0.8577524
## 136 -0.8421835 -0.9328114 -0.9698432 -0.9517909 -0.9460961 -0.9749275
## 137 -0.7951663 -0.9079180 -0.9454855 -0.9444300 -0.9624093 -0.9893668
## 138 -0.8206271 -0.8946138 -0.9325847 -0.8704767 -0.9129578 -0.8466871
## 139 -0.8550085 -0.9209586 -0.8725863 -0.6737662 -0.6443864 -0.4635188
## 140 -0.5543924 -0.8667030 -0.9412236 -0.9464387 -0.9446712 -0.9520102
## 141 -0.4374391 -0.6881891 -0.7237719 -0.5803384 -0.5240434 -0.5244128
## 142 -0.9100135 -0.8920178 -0.9617052 -0.9354023 -0.9472192 -0.9540202
## 143 -0.8436030 -0.7826649 -0.9187693 -0.9442060 -0.9478805 -0.9776949
## 144 -0.8419698 -0.7020300 -0.9261657 -0.9305504 -0.8743215 -0.8799753
## 145 -0.7327909 -0.7616120 -0.9097816 -0.8831834 -0.9360177 -0.9414870
## 146 -0.6357876 -0.7352024 -0.9170246 -0.9326571 -0.8874735 -0.8821906
## 147 -0.8251555 -0.8811931 -0.9373320 -0.9007092 -0.9126642 -0.8925089
## 148 -0.8348097 -0.8285833 -0.9331413 -0.9355817 -0.9511963 -0.9506601
## 149 -0.8707926 -0.8795401 -0.9582723 -0.9031907 -0.9268704 -0.8956995
## 150 -0.9378514 -0.9159169 -0.9746764 -0.9817596 -0.9848548 -0.9834781
## 151 -0.9166580 -0.9356202 -0.9844538 -0.9621191 -0.9680429 -0.9809991
## 152 -0.9230969 -0.9615787 -0.9917995 -0.9881997 -0.9748167 -0.9922206
## 153 -0.9010370 -0.9599356 -0.9552520 -0.9564539 -0.9586576 -0.9632221
## 154 -0.9180912 -0.9440861 -0.9605190 -0.9588117 -0.9801161 -0.9480123
## 155 -0.9134283 -0.9691948 -0.9828860 -0.9825856 -0.9850347 -0.9766456
```

```
## 156  -0.9286154 -0.9658615 -0.9716008 -0.9598730 -0.9835874 -0.9760850
## 157  -0.8624287 -0.9698115 -0.9750225 -0.9608154 -0.9707063 -0.9334674
## 158  -0.8824088 -0.9374716 -0.9865864 -0.9718067 -0.9741715 -0.9857096
## 159  -0.8628514 -0.9420728 -0.9778102 -0.9545800 -0.9585337 -0.9496340
## 160  -0.8428431 -0.9330073 -0.9710137 -0.9509397 -0.9580904 -0.9562926
## 161  -0.8736154 -0.9214167 -0.9652531 -0.9446443 -0.9758952 -0.9796388
## 162  -0.8952459 -0.9581532 -0.9384185 -0.9344212 -0.9277577 -0.9196938
## 163  -0.8610781 -0.9358499 -0.9461232 -0.9386894 -0.9215818 -0.8938473
## 164  -0.8914980 -0.9716050 -0.9848416 -0.9754376 -0.9899540 -0.9932763
## 165  -0.8944840 -0.9375644 -0.9540004 -0.9325599 -0.8851485 -0.8832430
## 166  -0.9437863 -0.9824865 -0.9849198 -0.9858504 -0.9700874 -0.9964646
## 167  -0.8891143 -0.9328353 -0.9805162 -0.9289597 -0.9368134 -0.9240093
## 168  -0.9085232 -0.9600319 -0.9791885 -0.9654160 -0.9690719 -0.9475513
## 169  -0.8570943 -0.9450690 -0.9796536 -0.9677637 -0.9890775 -0.9908908
## 170  -0.8069485 -0.9430038 -0.9809128 -0.9532148 -0.9755694 -0.9866482
## 171  -0.8222315 -0.9483757 -0.9607100 -0.9375098 -0.9410427 -0.9520544
## 172  -0.8522340 -0.9576279 -0.9667663 -0.9776830 -0.9847021 -0.9907610
## 173  -0.8908109 -0.9384364 -0.9796132 -0.9716637 -0.9859905 -0.9889982
## 174  -0.8421675 -0.9521151 -0.9535274 -0.9589260 -0.9457917 -0.9205512
## 175  -0.8825773 -0.9576475 -0.9883498 -0.9927689 -0.9860159 -0.9951800
## 176  -0.9049816 -0.8934064 -0.9637689 -0.9356013 -0.9316231 -0.9139480
## 177  -0.9998558 -0.9999449 -0.9999494 -0.9999068 -0.9997211 -0.9990590
##             NA         NA         NA         NA         NA         NA
## 1    -0.9999847 -0.9998633 -0.9999681 -0.9999361 -0.9999536 -0.9998644
## 2    -0.9997824 -0.9998299 -0.9998988 -0.9998828 -0.9997834 -0.9998283
## 3    -0.9998622 -0.9996744 -0.9999063 -0.9998314 -0.9998629 -0.9996757
## 4    -0.9998929 -0.9999502 -0.9999481 -0.9998769 -0.9998597 -0.9999484
## 5    -0.9999175 -0.9998651 -0.9999183 -0.9999109 -0.9999077 -0.9998636
## 6    -0.9999847 -0.9998604 -0.9999700 -0.9999733 -0.9999708 -0.9998617
## 7    -1.0000000 -0.9999083 -0.9999590 -0.9999320 -0.9999907 -0.9999077
## 8    -0.9999739 -0.9999215 -0.9999523 -0.9999292 -0.9999667 -0.9999200
## 9    -0.9999937 -0.9999436 -0.9999412 -0.9999554 -0.9999851 -0.9999412
## 10   -0.9999993 -0.9998632 -0.9998824 -0.9998878 -0.9999758 -0.9998591
## 11   -0.9999983 -0.9998545 -0.9999351 -0.9999045 -0.9999851 -0.9998542
## 12   -0.9999763 -0.9999727 -0.9999792 -0.9999522 -0.9999575 -0.9999726
## 13   -0.9999981 -0.9999819 -0.9999759 -0.9999676 -0.9999901 -0.9999811
## 14   -0.9999901 -0.9999933 -0.9999844 -0.9999783 -0.9999890 -0.9999928
## 15   -0.9996735 -0.9997129 -0.9998243 -0.9998167 -0.9996748 -0.9997098
## 16   -0.9999974 -0.9999157 -0.9999597 -0.9999660 -0.9999905 -0.9999151
## 17   -0.9999750 -0.9999202 -0.9999672 -0.9999592 -0.9999705 -0.9999200
## 18   -0.9999168 -0.9999222 -0.9999591 -0.9999504 -0.9999158 -0.9999216
## 19   -0.9999458 -0.9999455 -0.9999831 -0.9999451 -0.9999371 -0.9999459
## 20   -0.9999978 -0.9999837 -0.9999921 -0.9999714 -0.9999840 -0.9999839
## 21   -0.9999951 -0.9999927 -0.9999826 -0.9999824 -0.9999835 -0.9999921
## 22   -0.9999988 -0.9999940 -0.9999702 -0.9999848 -0.9999829 -0.9999926
## 23   -0.9999999 -0.9999953 -0.9999799 -0.9999898 -0.9999946 -0.9999945
## 24   -0.9999998 -0.9999959 -0.9999887 -0.9999769 -0.9999981 -0.9999953
## 25   -0.9999976 -0.9999864 -0.9999837 -0.9999676 -0.9999951 -0.9999859
## 26   -0.9999893 -0.9999665 -0.9999873 -0.9999808 -0.9999822 -0.9999669
## 27   -0.9999823 -0.9999752 -0.9999606 -0.9999636 -0.9999662 -0.9999736
```

```
## 28    -0.9995604 -0.9996075 -0.9997509 -0.9996444 -0.9995619 -0.9995997
## 29    -0.9999706 -0.9999734 -0.9999746 -0.9999565 -0.9999689 -0.9999725
## 30    -0.9999872 -0.9999824 -0.9999876 -0.9999729 -0.9999893 -0.9999825
## 31    -0.9875128 -0.9629332 -0.9958917 -0.9915390 -0.9869917 -0.9633787
## 32    -0.9999672 -0.9598945 -0.9958911 -0.9981001 -0.9991190 -0.9603303
## 33    -0.9869638 -0.9974301 -0.9964953 -0.9917641 -0.9882852 -0.9973044
## 34    -0.9999474 -0.9999871 -0.9999779 -0.9999496 -0.9999324 -0.9999863
## 35    -0.9999935 -0.9999948 -0.9999908 -0.9999936 -0.9999923 -0.9999946
## 36    -0.9999951 -0.9999884 -0.9999897 -0.9999889 -0.9999947 -0.9999884
## 37    -0.9999919 -0.9999980 -0.9999930 -0.9999875 -0.9999843 -0.9999979
## 38    -0.9999982 -0.9999955 -0.9999928 -0.9999869 -0.9999904 -0.9999954
## 39    -0.9995549 -0.9988432 -0.9998247 -0.9995291 -0.9994920 -0.9988554
## 40    -0.9979891 -0.9984095 -0.9994439 -0.9987493 -0.9981731 -0.9984138
## 41    -0.9990965 -0.9992247 -0.9997994 -0.9994649 -0.9991703 -0.9992286
## 42    -0.9997956 -0.9998246 -0.9999446 -0.9998645 -0.9998005 -0.9998254
## 43    -0.9999783 -0.9999732 -0.9999803 -0.9999813 -0.9999798 -0.9999729
## 44    -0.9999994 -0.9999971 -0.9999972 -0.9999919 -0.9999966 -0.9999973
## 45    -0.9999990 -0.9999918 -0.9999879 -0.9999813 -0.9999905 -0.9999916
## 46    -0.9999936 -0.9999969 -0.9999844 -0.9999768 -0.9999868 -0.9999968
## 47    -0.9999922 -0.9999978 -0.9999835 -0.9999762 -0.9999875 -0.9999974
## 48    -0.9999928 -0.9999957 -0.9999918 -0.9999807 -0.9999917 -0.9999957
## 49    -0.9999915 -0.9999964 -0.9999919 -0.9999755 -0.9999817 -0.9999962
## 50    -0.9999951 -0.9999953 -0.9999926 -0.9999798 -0.9999880 -0.9999953
## 51    -0.9999704 -0.9999955 -0.9999836 -0.9999710 -0.9999706 -0.9999953
## 52    -0.9994645 -0.9989256 -0.9995215 -0.9994274 -0.9993451 -0.9989193
## 53    -0.9998703 -0.9997864 -0.9999541 -0.9998584 -0.9998842 -0.9997884
## 54    -0.9999197 -0.9999341 -0.9999636 -0.9999064 -0.9999255 -0.9999336
## 55    -0.9999820 -0.9999854 -0.9999902 -0.9999852 -0.9999828 -0.9999856
## 56    -0.9999976 -0.9999982 -0.9999921 -0.9999882 -0.9999947 -0.9999982
## 57    -0.9999994 -0.9999981 -0.9999918 -0.9999894 -0.9999935 -0.9999980
## 58    -0.9999999 -0.9999977 -0.9999922 -0.9999830 -0.9999933 -0.9999975
## 59    -0.9999999 -0.9999980 -0.9999956 -0.9999837 -0.9999944 -0.9999980
## 60    -0.9999983 -0.9999980 -0.9999973 -0.9999940 -0.9999964 -0.9999981
## 61    -0.9999993 -0.9999988 -0.9999998 -0.9999929 -0.9999930 -0.9999990
## 62    -0.9999985 -0.9999975 -0.9999910 -0.9999751 -0.9999890 -0.9999973
## 63    -0.9999995 -0.9999963 -0.9999896 -0.9999708 -0.9999920 -0.9999959
## 64    -0.9999996 -0.9999975 -0.9999971 -0.9999922 -0.9999939 -0.9999975
## 65    -0.9990230 -0.9933987 -0.9986225 -0.9981414 -0.9985496 -0.9934884
## 66    -0.9991937 -0.9983892 -0.9997724 -0.9995416 -0.9992115 -0.9984074
## 67    -0.9949412 -0.8298765 -0.9862868 -0.9896959 -0.9948496 -0.8321192
## 68    -0.9997572 -0.8091965 -0.9852567 -0.9912987 -0.9983226 -0.8117462
## 69    -0.9860467 -0.9813797 -0.9941966 -0.9892876 -0.9870581 -0.9814474
## 70    -0.4316324 -0.9439529 -0.8964525 -0.6687753 -0.4665329 -0.9407492
## 71    -0.9598615 -0.5712891 -0.9567163 -0.9256467 -0.9652799 -0.5768652
## 72    -0.4440564 -0.6183315 -0.8483721 -0.5511874 -0.5036432 -0.6191109
## 73    -0.9346636 -0.9570647 -0.9805757 -0.9590777 -0.9380521 -0.9567554
## 74    -0.9997444 -0.9984328 -0.9996701 -0.9996362 -0.9996175 -0.9984443
## 75    -0.9984674 -0.9986904 -0.9995040 -0.9987631 -0.9985853 -0.9986941
## 76    -0.9992087 -0.9992247 -0.9997840 -0.9995098 -0.9992620 -0.9992294
## 77    -0.9998070 -0.9998029 -0.9999016 -0.9998353 -0.9998312 -0.9998017
```

```
## 78    -0.9999950 -0.9999604 -0.9999558 -0.9999578 -0.9999863 -0.9999587
## 79    -0.9680081 -0.7722790 -0.9058879 -0.9498878 -0.9667419 -0.7708723
## 80    -0.8036046 -0.8290261 -0.8354034 -0.8207241 -0.7892296 -0.8222943
## 81    -0.9998844 -0.8564379 -0.7986573 -0.9535389 -0.9770513 -0.8470864
## 82    -0.9967430 -0.8072008 -0.7609952 -0.9362914 -0.9814744 -0.7971186
## 83    -0.9997243 -0.8217019 -0.7108412 -0.9394401 -0.9837225 -0.8067553
## 84    -0.8801660 -0.8920585 -0.8100222 -0.9018436 -0.8149540 -0.8830592
## 85    -0.9735195 -0.8845693 -0.8554173 -0.9280344 -0.9610183 -0.8781317
## 86    -0.9448728 -0.8699471 -0.8342567 -0.8843282 -0.9209587 -0.8627873
## 87    -0.9599597 -0.8623869 -0.8745014 -0.9386636 -0.9589057 -0.8575907
## 88    -0.8645726 -0.8657332 -0.8675084 -0.8688654 -0.8447816 -0.8610615
## 89    -0.9796538 -0.8894001 -0.8337702 -0.9328776 -0.9728013 -0.8816760
## 90    -0.9904335 -0.8845671 -0.7546943 -0.9575560 -0.9884630 -0.8714609
## 91    -0.9933856 -0.8569850 -0.7196816 -0.9395741 -0.9837622 -0.8421752
## 92    -0.9962193 -0.8698782 -0.7191738 -0.9329367 -0.9906204 -0.8548705
## 93    -0.9994924 -0.8941975 -0.7832616 -0.9317756 -0.9902709 -0.8826349
## 94    -0.9988466 -0.8680001 -0.8483891 -0.9295406 -0.9956206 -0.8614162
## 95    -0.9878540 -0.8437935 -0.7641123 -0.9438741 -0.9718497 -0.8318133
## 96    -0.9777663 -0.8435590 -0.7970540 -0.9175823 -0.9564774 -0.8346053
## 97    -0.9854534 -0.8641978 -0.7183472 -0.8986558 -0.9785964 -0.8491064
## 98    -0.9335943 -0.8914233 -0.7586019 -0.9414911 -0.9057399 -0.8787007
## 99    -0.9311864 -0.8614833 -0.8251221 -0.8876093 -0.9348726 -0.8533222
## 100   -0.9998401 -0.8763247 -0.8055743 -0.9547569 -0.9896683 -0.8658976
## 101   -0.9850328 -0.8920220 -0.7040087 -0.8495234 -0.9662087 -0.8758246
## 102   -0.9790035 -0.8888953 -0.5477483 -0.8036625 -0.9619719 -0.8628955
## 103   -0.7672981 -0.8744247 -0.6188794 -0.6752966 -0.7590267 -0.8560570
## 104   -0.9036980 -0.8684292 -0.7248044 -0.8815543 -0.8830161 -0.8551808
## 105   -0.8482671 -0.8911894 -0.7965854 -0.8459823 -0.8370903 -0.8826142
## 106   -0.9077914 -0.9086566 -0.8112824 -0.9342304 -0.8951823 -0.8992487
## 107   -0.9767348 -0.8904349 -0.7952182 -0.9329370 -0.9727242 -0.8796023
## 108   -0.9997066 -0.8810071 -0.7353511 -0.9295554 -0.9854438 -0.8657463
## 109   -0.7508925 -0.8695376 -0.7443202 -0.7877185 -0.7327636 -0.8570656
## 110   -0.9983924 -0.8649342 -0.7177950 -0.9159254 -0.9832166 -0.8503145
## 111   -0.9241311 -0.8854066 -0.6862523 -0.8680946 -0.9155393 -0.8686900
## 112   -0.9130567 -0.8714991 -0.4933811 -0.8453621 -0.8843493 -0.8411159
## 113   -0.9982012 -0.8683722 -0.6949350 -0.9347453 -0.9655376 -0.8515951
## 114   -0.9991246 -0.8797607 -0.7010027 -0.9681419 -0.9664590 -0.8638187
## 115   -0.9391565 -0.8570921 -0.8244908 -0.8702896 -0.9444764 -0.8492860
## 116   -0.9903696 -0.8569465 -0.7945529 -0.9306083 -0.9844083 -0.8474240
## 117   -0.7905719 -0.8850764 -0.8113895 -0.8152970 -0.7908707 -0.8771400
## 118   -0.9890813 -0.8923017 -0.8377002 -0.9198052 -0.9701171 -0.8851549
## 119   -0.9364598 -0.8885544 -0.8552542 -0.9221241 -0.9044993 -0.8824354
## 120   -0.9997379 -0.9104854 -0.8815908 -0.9610506 -0.9707317 -0.9046065
## 121   -0.9831662 -0.9044437 -0.8612493 -0.9331369 -0.9670597 -0.8975264
## 122   -0.9676349 -0.8764609 -0.7855516 -0.9155349 -0.9317298 -0.8643488
## 123   -0.9874414 -0.8317367 -0.7877574 -0.9348718 -0.9491959 -0.8214723
## 124   -0.9197950 -0.8310282 -0.8157028 -0.8866599 -0.9013849 -0.8234108
## 125   -0.9562544 -0.8901883 -0.8455432 -0.9185835 -0.9484194 -0.8831621
## 126   -0.9981175 -0.9622262 -0.7805239 -0.9478953 -0.9915138 -0.9508448
## 127   -0.9999345 -0.9730779 -0.8366716 -0.9653709 -0.9902027 -0.9634276
```

```
## 128 -0.9048146 -0.7930832 -0.8389458 -0.9014326 -0.9001723 -0.7878066
## 129 -0.9663279 -0.7328204 -0.8074464 -0.9384512 -0.9569381 -0.7257120
## 130 -0.9994870 -0.9014896 -0.8740704 -0.9626140 -0.9922125 -0.8958234
## 131 -0.9910502 -0.7146508 -0.8599020 -0.9264696 -0.9814394 -0.7131720
## 132 -0.9199852 -0.6394069 -0.8387357 -0.8941779 -0.9063897 -0.6376002
## 133 -0.9995689 -0.9705533 -0.9039695 -0.9648840 -0.9833616 -0.9654225
## 134 -0.9665530 -0.9729507 -0.9216145 -0.9401761 -0.9759229 -0.9688719
## 135 -0.8656949 -0.9394686 -0.8779482 -0.8739274 -0.8612668 -0.9335316
## 136 -0.9764012 -0.9471312 -0.9336552 -0.9446252 -0.9755796 -0.9443709
## 137 -0.9961395 -0.7684928 -0.9036941 -0.9461642 -0.9923636 -0.7674376
## 138 -0.8616041 -0.5813204 -0.8877293 -0.8747510 -0.8532876 -0.5827492
## 139 -0.4283423 -0.8066332 -0.8844389 -0.6289964 -0.4479537 -0.8056356
## 140 -0.9569285 -0.7086509 -0.8688045 -0.9403340 -0.9541865 -0.7063724
## 141 -0.4251602 -0.7565416 -0.6364946 -0.5152132 -0.4804951 -0.7436978
## 142 -0.9707289 -0.9656142 -0.8975229 -0.9337193 -0.9614136 -0.9603102
## 143 -0.9802442 -0.9498626 -0.7920477 -0.9400927 -0.9788230 -0.9388599
## 144 -0.8988713 -0.9376541 -0.7302079 -0.9006711 -0.8883365 -0.9224595
## 145 -0.9376533 -0.7648497 -0.7714469 -0.8929514 -0.9397907 -0.7558710
## 146 -0.8686261 -0.5745948 -0.7531600 -0.9074874 -0.8761885 -0.5674377
## 147 -0.9182014 -0.6957742 -0.8788715 -0.8955935 -0.9038775 -0.6945074
## 148 -0.9860556 -0.7303554 -0.8348457 -0.9354632 -0.9663221 -0.7256239
## 149 -0.8753654 -0.9277107 -0.8860860 -0.9030989 -0.8867020 -0.9223758
## 150 -0.9959979 -0.9554256 -0.9220384 -0.9811870 -0.9890180 -0.9516009
## 151 -0.9872006 -0.9536905 -0.9418759 -0.9607232 -0.9837432 -0.9509710
## 152 -0.9952855 -0.9670169 -0.9657525 -0.9815648 -0.9935768 -0.9654857
## 153 -0.9612674 -0.7884185 -0.9495187 -0.9529735 -0.9623572 -0.7898608
## 154 -0.9613855 -0.6775074 -0.9389195 -0.9633462 -0.9539298 -0.6799869
## 155 -0.9889569 -0.8924295 -0.9682415 -0.9818330 -0.9820932 -0.8925933
## 156 -0.9781543 -0.9226581 -0.9609558 -0.9654956 -0.9770007 -0.9221215
## 157 -0.9657280 -0.8961945 -0.9655291 -0.9609038 -0.9477423 -0.8963274
## 158 -0.9971529 -0.9652644 -0.9442352 -0.9699358 -0.9907731 -0.9624475
## 159 -0.9743441 -0.9428423 -0.9443552 -0.9516237 -0.9605678 -0.9406610
## 160 -0.9745370 -0.9449528 -0.9342904 -0.9489191 -0.9643655 -0.9422405
## 161 -0.9851619 -0.8267277 -0.9226172 -0.9518043 -0.9820827 -0.8254104
## 162 -0.9274583 -0.7079726 -0.9412167 -0.9251143 -0.9231294 -0.7106974
## 163 -0.8939540 -0.8589039 -0.9264210 -0.9255588 -0.8938945 -0.8578226
## 164 -0.9994216 -0.8691129 -0.9709780 -0.9788800 -0.9959955 -0.8698082
## 165 -0.8555262 -0.9195652 -0.9310141 -0.9064732 -0.8709787 -0.9175371
## 166 -0.9968051 -0.9717833 -0.9797623 -0.9780101 -0.9966153 -0.9713116
## 167 -0.9160004 -0.9601723 -0.9380293 -0.9250150 -0.9204655 -0.9571896
## 168 -0.9571676 -0.9424352 -0.9593627 -0.9634281 -0.9518064 -0.9412412
## 169 -0.9996241 -0.9549421 -0.9475173 -0.9732023 -0.9947552 -0.9527169
## 170 -0.9976394 -0.8434436 -0.9463700 -0.9576140 -0.9915116 -0.8430180
## 171 -0.9464366 -0.6626568 -0.9424477 -0.9326655 -0.9495686 -0.6656251
## 172 -0.9964757 -0.9328903 -0.9523607 -0.9782983 -0.9932896 -0.9317288
## 173 -0.9996387 -0.8911749 -0.9421660 -0.9746494 -0.9937065 -0.8896813
## 174 -0.9154374 -0.8243406 -0.9425247 -0.9494485 -0.9182884 -0.8247399
## 175 -0.9998565 -0.9738080 -0.9611829 -0.9892933 -0.9972493 -0.9719458
## 176 -0.9055428 -0.9460545 -0.8994819 -0.9275066 -0.9102288 -0.9411617
## 177 -0.9996025 -0.9994095 -0.9999371 -0.9998232 -0.9992995 -0.9994169
```

```
##            NA          NA          NA          NA          NA          NA
## 1  -0.9999610 -0.99945373 -0.9999781 -0.9999915 -0.9999901 -0.9999686
## 2  -0.9999080 -0.99985638 -0.9999885 -0.9999957 -0.9999942 -0.9999861
## 3  -0.9999035 -0.99995441 -0.9999876 -0.9999901 -0.9999943 -0.9999730
## 4  -0.9999461 -0.99993054 -0.9999892 -0.9999924 -0.9999925 -0.9999859
## 5  -0.9999326 -0.99992595 -0.9999927 -0.9999964 -0.9999884 -0.9999666
## 6  -0.9999732 -0.99992626 -0.9999897 -0.9999942 -0.9999842 -0.9999678
## 7  -0.9999679 -0.99988161 -0.9999699 -0.9999928 -0.9999917 -0.9999896
## 8  -0.9999756 -0.99982425 -0.9999846 -0.9999927 -0.9999873 -0.9999753
## 9  -0.9999745 -0.99995121 -0.9999804 -0.9999925 -0.9999865 -0.9999741
## 10 -0.9999332 -0.99987183 -0.9999330 -0.9999899 -0.9999885 -0.9999853
## 11 -0.9999353 -0.99988310 -0.9999461 -0.9999917 -0.9999934 -0.9999769
## 12 -0.9999703 -0.99997547 -0.9999886 -0.9999954 -0.9999958 -0.9999913
## 13 -0.9999838 -0.99998157 -0.9999976 -0.9999974 -0.9999978 -0.9999955
## 14 -0.9999857 -0.99998896 -0.9999958 -0.9999972 -0.9999961 -0.9999960
## 15 -0.9998512 -0.99710402 -0.9997422 -0.9999207 -0.9999109 -0.9997919
## 16 -0.9999765 -0.99895934 -0.9999619 -0.9999838 -0.9999559 -0.9999458
## 17 -0.9999761 -0.99966275 -0.9999829 -0.9999939 -0.9999789 -0.9999744
## 18 -0.9999693 -0.99988146 -0.9999824 -0.9999945 -0.9999908 -0.9999832
## 19 -0.9999751 -0.99999420 -0.9999895 -0.9999983 -0.9999980 -0.9999931
## 20 -0.9999848 -0.99998480 -0.9999964 -0.9999995 -0.9999992 -0.9999961
## 21 -0.9999871 -0.99999100 -0.9999982 -0.9999976 -0.9999969 -0.9999956
## 22 -0.9999873 -0.99999643 -0.9999967 -0.9999967 -0.9999960 -0.9999982
## 23 -0.9999918 -0.99998926 -0.9999945 -0.9999976 -0.9999974 -0.9999949
## 24 -0.9999930 -0.99999392 -0.9999965 -0.9999965 -0.9999955 -0.9999940
## 25 -0.9999841 -0.99998950 -0.9999971 -0.9999966 -0.9999926 -0.9999930
## 26 -0.9999827 -0.99998798 -0.9999959 -0.9999971 -0.9999939 -0.9999934
## 27 -0.9999750 -0.99999014 -0.9999962 -0.9999950 -0.9999946 -0.9999871
## 28 -0.9998392 -0.99943892 -0.9998946 -0.9998879 -0.9998435 -0.9998137
## 29 -0.9999815 -0.99942331 -0.9999469 -0.9999807 -0.9999785 -0.9999560
## 30 -0.9999807 -0.99951495 -0.9999787 -0.9999888 -0.9999806 -0.9999682
## 31 -0.9952544 -0.78221186 -0.9951950 -0.9963849 -0.9992820 -0.9986348
## 32 -0.9987596 -0.77380072 -0.9946096 -0.9955829 -0.9989830 -0.9984730
## 33 -0.9958525 -0.99099150 -0.9997812 -0.9993608 -0.9995670 -0.9994849
## 34 -0.9999782 -0.99968925 -0.9999103 -0.9999198 -0.9998601 -0.9998851
## 35 -0.9999950 -0.99990954 -0.9999906 -0.9999794 -0.9999673 -0.9999821
## 36 -0.9999891 -0.99997391 -0.9999851 -0.9999896 -0.9999765 -0.9999561
## 37 -0.9999922 -0.99994991 -0.9999862 -0.9999896 -0.9999775 -0.9999684
## 38 -0.9999927 -0.99997121 -0.9999889 -0.9999824 -0.9999825 -0.9999806
## 39 -0.9997576 -0.99930017 -0.9999749 -0.9999761 -0.9999304 -0.9998716
## 40 -0.9992584 -0.99986881 -0.9999853 -0.9999900 -0.9999628 -0.9999505
## 41 -0.9997404 -0.99985420 -0.9999883 -0.9999899 -0.9999863 -0.9999872
## 42 -0.9999244 -0.99995590 -0.9999878 -0.9999905 -0.9999781 -0.9999860
## 43 -0.9999832 -0.99996645 -0.9999930 -0.9999925 -0.9999842 -0.9999850
## 44 -0.9999932 -0.99997482 -0.9999963 -0.9999927 -0.9999852 -0.9999738
## 45 -0.9999854 -0.99996403 -0.9999940 -0.9999918 -0.9999885 -0.9999854
## 46 -0.9999750 -0.99995997 -0.9999919 -0.9999901 -0.9999904 -0.9999896
## 47 -0.9999800 -0.99996412 -0.9999966 -0.9999948 -0.9999894 -0.9999851
## 48 -0.9999873 -0.99996229 -0.9999945 -0.9999975 -0.9999877 -0.9999837
## 49 -0.9999903 -0.99997347 -0.9999967 -0.9999939 -0.9999874 -0.9999887
```

```
## 50    -0.9999888 -0.99996680 -0.9999953 -0.9999945 -0.9999897 -0.9999738
## 51    -0.9999757 -0.99994424 -0.9999892 -0.9999976 -0.9999793 -0.9999688
## 52    -0.9996375 -0.99799632 -0.9980930 -0.9997044 -0.9994206 -0.9997612
## 53    -0.9999250 -0.99993207 -0.9999890 -0.9999982 -0.9999905 -0.9999894
## 54    -0.9999562 -0.99997595 -0.9999935 -0.9999991 -0.9999930 -0.9999933
## 55    -0.9999847 -0.99996443 -0.9999903 -0.9999990 -0.9999946 -0.9999967
## 56    -0.9999857 -0.99997122 -0.9999898 -0.9999977 -0.9999949 -0.9999976
## 57    -0.9999908 -0.99996484 -0.9999882 -0.9999974 -0.9999972 -0.9999954
## 58    -0.9999921 -0.99996238 -0.9999857 -0.9999977 -0.9999944 -0.9999856
## 59    -0.9999939 -0.99994877 -0.9999911 -0.9999989 -0.9999948 -0.9999908
## 60    -0.9999971 -0.99996768 -0.9999953 -0.9999993 -0.9999969 -0.9999971
## 61    -0.9999974 -0.99997057 -0.9999958 -0.9999987 -0.9999947 -0.9999945
## 62    -0.9999883 -0.99996344 -0.9999941 -0.9999977 -0.9999960 -0.9999911
## 63    -0.9999881 -0.99996100 -0.9999927 -0.9999973 -0.9999990 -0.9999920
## 64    -0.9999977 -0.99995565 -0.9999902 -0.9999982 -0.9999915 -0.9999925
## 65    -0.9976419 -0.99499613 -0.9996516 -0.9995164 -0.9968396 -0.9988008
## 66    -0.9997151 -0.99964649 -0.9999116 -0.9999791 -0.9998895 -0.9999322
## 67    -0.9903650 -0.96740376 -0.9951714 -0.9965745 -0.9961029 -0.9990808
## 68    -0.9902503 -0.94960278 -0.9951661 -0.9963848 -0.9949608 -0.9990887
## 69    -0.9932051 -0.99558058 -0.9995399 -0.9996673 -0.9993891 -0.9991876
## 70    -0.8297395 -0.96371097 -0.9984038 -0.9970235 -0.9916487 -0.9946581
## 71    -0.9482718 -0.94714672 -0.9906161 -0.9614970 -0.9771342 -0.9921648
## 72    -0.7524651 -0.96638817 -0.9890720 -0.9612849 -0.9856796 -0.9918895
## 73    -0.9810848 -0.98574109 -0.9975438 -0.9979113 -0.9993217 -0.9990908
## 74    -0.9997165 -0.99986284 -0.9999388 -0.9998710 -0.9998714 -0.9999317
## 75    -0.9992600 -0.99995692 -0.9999661 -0.9998873 -0.9999347 -0.9999632
## 76    -0.9997063 -0.99994248 -0.9999961 -0.9999885 -0.9999812 -0.9999820
## 77    -0.9999018 -0.99997505 -0.9999912 -0.9999891 -0.9999833 -0.9999784
## 78    -0.9999766 -0.99999692 -0.9999934 -0.9999853 -0.9999896 -0.9999819
## 79    -0.9575185 -0.56723575 -0.9040146 -0.8480308 -0.9440041 -0.9754414
## 80    -0.9089810 -0.40268988 -0.9492592 -0.9080250 -0.9046179 -0.9659196
## 81    -0.9383465 -0.38062199 -0.9380522 -0.9111973 -0.8732956 -0.9458115
## 82    -0.9077872 -0.39795092 -0.8486603 -0.7873402 -0.8358725 -0.8816221
## 83    -0.9403143 -0.21267441 -0.8541070 -0.7867083 -0.8163953 -0.9228555
## 84    -0.9184192 -0.29733418 -0.9205004 -0.8744873 -0.7932344 -0.8766749
## 85    -0.9428621 -0.48294968 -0.9322568 -0.8871056 -0.8207871 -0.9340782
## 86    -0.9181706 -0.43182564 -0.9215899 -0.8804193 -0.8379211 -0.9372561
## 87    -0.9468230 -0.51041580 -0.9489754 -0.9299509 -0.9165254 -0.9308861
## 88    -0.9095506 -0.40097707 -0.9421527 -0.9382323 -0.8755567 -0.9166893
## 89    -0.9373417 -0.40182805 -0.9626222 -0.9294258 -0.8949722 -0.9106142
## 90    -0.9470397 -0.46664955 -0.9168878 -0.8782200 -0.7707603 -0.8891000
## 91    -0.9366513 -0.27146196 -0.9336979 -0.8674313 -0.7982397 -0.8740045
## 92    -0.9332286 -0.28799703 -0.9150154 -0.8771740 -0.7840533 -0.8594286
## 93    -0.9455934 -0.42106055 -0.9295868 -0.8816726 -0.7820803 -0.8298065
## 94    -0.9420868 -0.38240893 -0.9425065 -0.8335084 -0.8531089 -0.9211106
## 95    -0.9486330 -0.41600134 -0.9086033 -0.7840634 -0.8864329 -0.9429848
## 96    -0.9205157 -0.44336369 -0.9069333 -0.8076192 -0.7735078 -0.8517602
## 97    -0.9265939 -0.39939433 -0.8735508 -0.7340395 -0.8556155 -0.7897894
## 98    -0.9362468 -0.35606189 -0.9254693 -0.7876019 -0.8769333 -0.8866679
## 99    -0.9328532 -0.30868300 -0.9121864 -0.8236140 -0.8794336 -0.9756434
```

```
## 100 -0.9701011 -0.32924594 -0.9286966 -0.8876268 -0.9052830 -0.9722095
## 101 -0.9034304 -0.49856055 -0.8935735 -0.8904087 -0.7714551 -0.9135118
## 102 -0.8706826 -0.39228946 -0.9303468 -0.7934625 -0.6586893 -0.6779188
## 103 -0.7669341 -0.32888847 -0.9117741 -0.8247447 -0.6749133 -0.7638953
## 104 -0.8831205 -0.29104870 -0.8802372 -0.8220861 -0.8017302 -0.8946780
## 105 -0.8678338 -0.34147605 -0.9031844 -0.8782995 -0.7992927 -0.8911307
## 106 -0.9332297 -0.40935749 -0.9304139 -0.9176262 -0.8532646 -0.8890152
## 107 -0.9497347 -0.33705777 -0.9176304 -0.9077425 -0.8035317 -0.9023647
## 108 -0.9625125 -0.29244102 -0.9238631 -0.8715142 -0.8858292 -0.9263615
## 109 -0.8698315 -0.31013913 -0.9019810 -0.8793892 -0.8752869 -0.9168930
## 110 -0.9179689 -0.30864155 -0.9003728 -0.8354227 -0.8209587 -0.9074812
## 111 -0.8938642 -0.39330119 -0.9372145 -0.7438685 -0.8333317 -0.9338281
## 112 -0.9086048 -0.37705819 -0.9267915 -0.8681254 -0.7197609 -0.8980428
## 113 -0.9376735 -0.36959368 -0.9498036 -0.9216203 -0.8428019 -0.9050591
## 114 -0.9311778 -0.42099507 -0.9320676 -0.8998021 -0.7724463 -0.8622540
## 115 -0.9194402 -0.35983549 -0.9051559 -0.8558726 -0.8441653 -0.8917273
## 116 -0.9286946 -0.39560353 -0.9277032 -0.8390078 -0.8548239 -0.8666346
## 117 -0.8712542 -0.44725886 -0.9414869 -0.8729119 -0.8105021 -0.9126120
## 118 -0.9241660 -0.47522869 -0.9335014 -0.9277209 -0.8141278 -0.9094930
## 119 -0.9307734 -0.47012306 -0.9468047 -0.8983581 -0.8804939 -0.9066206
## 120 -0.9725565 -0.46710874 -0.9375285 -0.8645284 -0.9043522 -0.9517130
## 121 -0.9582804 -0.49044613 -0.9469320 -0.8905752 -0.9047039 -0.9544570
## 122 -0.9672297 -0.49003490 -0.9283357 -0.8923848 -0.8749610 -0.9389226
## 123 -0.9485270 -0.44263914 -0.8942920 -0.8791716 -0.8663475 -0.9556244
## 124 -0.9153466 -0.36400030 -0.9488573 -0.8533540 -0.9055171 -0.9456620
## 125 -0.9354969 -0.48041216 -0.9003226 -0.8304973 -0.8998461 -0.9563219
## 126 -0.9102411 -0.72814446 -0.9646618 -0.9217521 -0.8986369 -0.9344744
## 127 -0.9646625 -0.65511299 -0.9201844 -0.8449233 -0.7968878 -0.5827816
## 128 -0.9166728 -0.62596403 -0.9603390 -0.7928354 -0.6781387 -0.5962090
## 129 -0.9463444 -0.62378848 -0.9422087 -0.8568280 -0.8053497 -0.8711516
## 130 -0.9581741 -0.64789955 -0.9365811 -0.8679287 -0.8558496 -0.9443850
## 131 -0.8970196 -0.57971028 -0.9142550 -0.7756300 -0.7597961 -0.9292629
## 132 -0.8924467 -0.51570477 -0.9315636 -0.7981125 -0.7858151 -0.9200557
## 133 -0.9668875 -0.67448668 -0.9466843 -0.8955136 -0.8578547 -0.9045031
## 134 -0.9624785 -0.72178926 -0.9496189 -0.8664499 -0.7632710 -0.8922095
## 135 -0.9295092 -0.65585738 -0.7995041 -0.7541681 -0.5347190 -0.7809685
## 136 -0.9622351 -0.60787167 -0.7927450 -0.8317601 -0.6466042 -0.7529254
## 137 -0.9450870 -0.52270407 -0.8347905 -0.7712529 -0.6079445 -0.5983056
## 138 -0.9151546 -0.44349800 -0.8278945 -0.8286259 -0.5837296 -0.7362549
## 139 -0.8008789 -0.42924656 -0.8628904 -0.8706060 -0.3147532 -0.6598695
## 140 -0.9403258 -0.44066897 -0.8498652 -0.7588781 -0.7919568 -0.7774400
## 141 -0.6605515 -0.60518872 -0.8872861 -0.8554202 -0.7934541 -0.7455901
## 142 -0.9532092 -0.64744371 -0.8362345 -0.8749888 -0.8300546 -0.8868089
## 143 -0.9240384 -0.61348151 -0.8434065 -0.9049599 -0.9000048 -0.9242829
## 144 -0.9180007 -0.62499337 -0.8296200 -0.9019078 -0.8906163 -0.8852161
## 145 -0.9039388 -0.57674842 -0.8697898 -0.8374123 -0.7825785 -0.7888103
## 146 -0.9133661 -0.39968222 -0.9185786 -0.8248800 -0.6323752 -0.4551095
## 147 -0.9245999 -0.53081676 -0.9143590 -0.9013554 -0.7756752 -0.6499949
## 148 -0.9330823 -0.57244162 -0.9424251 -0.7862747 -0.8890801 -0.9247587
## 149 -0.9418907 -0.63437301 -0.9122969 -0.7767608 -0.8234609 -0.9212272
```

```
## 150 -0.9762802 -0.65672477 -0.8950774 -0.8909236 -0.8905594 -0.9617624
## 151 -0.9774347 -0.27992525 -0.9253474 -0.8762405 -0.9833173 -0.9851689
## 152 -0.9887564 -0.30611387 -0.8974240 -0.9280210 -0.9695822 -0.9811853
## 153 -0.9541065 -0.28257830 -0.8981430 -0.9663887 -0.9770754 -0.9817966
## 154 -0.9609048 -0.23359899 -0.9061529 -0.9531832 -0.9604448 -0.9725460
## 155 -0.9823960 -0.25477496 -0.9279760 -0.8953933 -0.9637152 -0.9558701
## 156 -0.9695291 -0.31604858 -0.9516891 -0.9363981 -0.9012452 -0.8973937
## 157 -0.9706750 -0.31358401 -0.8964859 -0.9234451 -0.9450713 -0.9819905
## 158 -0.9816344 -0.25746278 -0.9176036 -0.8852462 -0.9726687 -0.9925526
## 159 -0.9700096 -0.24016970 -0.9618918 -0.9271455 -0.9679691 -0.9916879
## 160 -0.9643200 -0.27151732 -0.9267876 -0.9279882 -0.9833227 -0.9906059
## 161 -0.9609923 -0.09549240 -0.9250953 -0.9238474 -0.9702089 -0.9857079
## 162 -0.9339063 -0.07700692 -0.9424579 -0.9208970 -0.9719617 -0.9687635
## 163 -0.9395994 -0.37562489 -0.9682130 -0.9518852 -0.9744807 -0.9857223
## 164 -0.9829561 -0.47237767 -0.9422919 -0.9610591 -0.9681988 -0.9704458
## 165 -0.9397794 -0.36478785 -0.9527573 -0.9693888 -0.9769794 -0.9651160
## 166 -0.9827614 -0.30506153 -0.9603944 -0.9580030 -0.9869078 -0.9671008
## 167 -0.9642829 -0.34119040 -0.9440588 -0.9563522 -0.9924071 -0.9900801
## 168 -0.9744126 -0.22453187 -0.9674198 -0.9713054 -0.9823337 -0.9941001
## 169 -0.9775700 -0.23056192 -0.9585753 -0.9570194 -0.9764274 -0.9883863
## 170 -0.9739797 -0.14154326 -0.9485667 -0.9533440 -0.9843704 -0.9775278
## 171 -0.9521863 -0.15036944 -0.9698107 -0.9518922 -0.9710001 -0.9840610
## 172 -0.9697332 -0.40077873 -0.9689822 -0.9643448 -0.9685633 -0.9786748
## 173 -0.9779585 -0.59086302 -0.9256576 -0.9769899 -0.9684763 -0.9711268
## 174 -0.9518433 -0.38559310 -0.9537140 -0.9638370 -0.9737492 -0.9853422
## 175 -0.9884958 -0.26097843 -0.9471017 -0.9709389 -0.9863790 -0.9897838
## 176 -0.9529063 -0.26431907 -0.9640817 -0.9604267 -0.9846180 -0.9960760
## 177 -0.9999134 -0.99665055 -0.9998655 -0.9999331 -0.9998741 -0.9997407
##              NA          NA          NA          NA          NA          NA
## 1   -0.9998066 -0.9983460 -0.9989612 -0.9996187 -0.9999893 -0.9999354
## 2   -0.9999845 -0.9999800 -0.9999900 -0.9998966 -0.9999945 -0.9999860
## 3   -0.9999428 -0.9999866 -0.9999933 -0.9999620 -0.9999893 -0.9999670
## 4   -0.9999541 -0.9999898 -0.9999883 -0.9999470 -0.9999908 -0.9999796
## 5   -0.9999737 -0.9999740 -0.9999720 -0.9999462 -0.9999934 -0.9999681
## 6   -0.9999921 -0.9999660 -0.9999886 -0.9999445 -0.9999900 -0.9999729
## 7   -0.9999453 -0.9999663 -0.9999877 -0.9999016 -0.9999910 -0.9999809
## 8   -0.9999351 -0.9999556 -0.9999421 -0.9998725 -0.9999896 -0.9999672
## 9   -0.9999442 -0.9999097 -0.9999023 -0.9999552 -0.9999892 -0.9999681
## 10  -0.9999540 -0.9999570 -0.9999759 -0.9998709 -0.9999874 -0.9999791
## 11  -0.9999217 -0.9998782 -0.9998851 -0.9998871 -0.9999905 -0.9999657
## 12  -0.9999887 -0.9999851 -1.0000000 -0.9999769 -0.9999947 -0.9999911
## 13  -0.9999968 -0.9999794 -0.9999995 -0.9999868 -0.9999972 -0.9999961
## 14  -0.9999821 -0.9999821 -0.9999914 -0.9999906 -0.9999964 -0.9999935
## 15  -0.9993666 -0.9975847 -0.9971434 -0.9978832 -0.9998991 -0.9997028
## 16  -0.9999207 -0.9995783 -0.9995160 -0.9992753 -0.9999717 -0.9999405
## 17  -0.9999217 -0.9998357 -0.9997942 -0.9997626 -0.9999882 -0.9999637
## 18  -0.9999853 -0.9999628 -0.9999569 -0.9999095 -0.9999923 -0.9999838
## 19  -0.9999983 -0.9999937 -0.9999991 -0.9999901 -0.9999980 -0.9999946
## 20  -0.9999962 -0.9999938 -0.9999990 -0.9999882 -0.9999995 -0.9999965
## 21  -0.9999917 -0.9999912 -0.9999999 -0.9999936 -0.9999971 -0.9999952
```

```
## 22    -0.9999853 -0.9999876 -0.9999999 -0.9999963 -0.9999959 -0.9999960
## 23    -0.9999886 -0.9999860 -0.9999946 -0.9999900 -0.9999972 -0.9999940
## 24    -0.9999929 -0.9999765 -0.9999998 -0.9999944 -0.9999956 -0.9999941
## 25    -0.9999930 -0.9999841 -0.9999999 -0.9999918 -0.9999949 -0.9999933
## 26    -0.9999820 -0.9999901 -0.9999954 -0.9999900 -0.9999957 -0.9999914
## 27    -0.9999784 -0.9999805 -0.9999999 -0.9999917 -0.9999940 -0.9999856
## 28    -0.9995424 -0.9994214 -0.9988530 -0.9995545 -0.9998481 -0.9997565
## 29    -0.9998570 -0.9996729 -0.9995285 -0.9995780 -0.9999756 -0.9999356
## 30    -0.9998772 -0.9997658 -0.9996561 -0.9996604 -0.9999839 -0.9999496
## 31    -0.9977298 -0.9972579 -0.9973146 -0.8502311 -0.9964007 -0.9984354
## 32    -0.9976879 -0.9963502 -0.9987632 -0.8441869 -0.9955598 -0.9982966
## 33    -0.9981039 -0.9962338 -0.9969440 -0.9937927 -0.9992712 -0.9991964
## 34    -0.9995819 -0.9985282 -0.9986480 -0.9997333 -0.9998829 -0.9998220
## 35    -0.9999294 -0.9999607 -0.9999693 -0.9999338 -0.9999711 -0.9999715
## 36    -0.9999602 -0.9999415 -0.9999559 -0.9999735 -0.9999834 -0.9999569
## 37    -0.9999639 -0.9999569 -0.9999922 -0.9999581 -0.9999837 -0.9999676
## 38    -0.9999725 -0.9999922 -0.9999964 -0.9999742 -0.9999785 -0.9999792
## 39    -0.9997176 -0.9995954 -0.9996330 -0.9995133 -0.9999569 -0.9998391
## 40    -0.9999179 -0.9998943 -0.9998874 -0.9999029 -0.9999796 -0.9999437
## 41    -0.9999696 -0.9999830 -0.9999968 -0.9998950 -0.9999867 -0.9999839
## 42    -0.9999514 -0.9999643 -0.9999965 -0.9999632 -0.9999848 -0.9999792
## 43    -0.9999593 -0.9999686 -0.9999982 -0.9999736 -0.9999885 -0.9999800
## 44    -0.9999870 -0.9999677 -0.9999781 -0.9999815 -0.9999889 -0.9999766
## 45    -0.9999837 -0.9999706 -0.9999953 -0.9999727 -0.9999891 -0.9999853
## 46    -0.9999676 -0.9999407 -0.9999718 -0.9999686 -0.9999881 -0.9999853
## 47    -0.9999705 -0.9999741 -0.9999932 -0.9999745 -0.9999922 -0.9999824
## 48    -0.9999846 -0.9999862 -0.9999978 -0.9999718 -0.9999942 -0.9999841
## 49    -0.9999776 -0.9999889 -0.9999884 -0.9999808 -0.9999908 -0.9999867
## 50    -0.9999584 -0.9999709 -0.9999697 -0.9999754 -0.9999920 -0.9999708
## 51    -0.9999718 -0.9999558 -0.9999401 -0.9999562 -0.9999918 -0.9999695
## 52    -0.9996734 -0.9998916 -0.9999278 -0.9974114 -0.9995483 -0.9997411
## 53    -0.9999743 -0.9999540 -0.9999675 -0.9999479 -0.9999957 -0.9999866
## 54    -0.9999766 -0.9999674 -0.9999862 -0.9999804 -0.9999973 -0.9999902
## 55    -0.9999877 -0.9999906 -0.9999999 -0.9999706 -0.9999977 -0.9999953
## 56    -0.9999878 -0.9999928 -0.9999995 -0.9999748 -0.9999966 -0.9999959
## 57    -0.9999876 -0.9999753 -0.9999983 -0.9999695 -0.9999969 -0.9999942
## 58    -0.9999887 -0.9999699 -0.9999912 -0.9999662 -0.9999964 -0.9999866
## 59    -0.9999768 -0.9999910 -0.9999943 -0.9999605 -0.9999977 -0.9999883
## 60    -0.9999873 -0.9999904 -0.9999977 -0.9999760 -0.9999987 -0.9999955
## 61    -0.9999894 -0.9999933 -0.9999976 -0.9999783 -0.9999974 -0.9999938
## 62    -0.9999834 -0.9999993 -0.9999990 -0.9999724 -0.9999969 -0.9999899
## 63    -0.9999750 -0.9999830 -0.9999889 -0.9999698 -0.9999974 -0.9999889
## 64    -0.9999896 -0.9999844 -0.9999986 -0.9999646 -0.9999959 -0.9999923
## 65    -0.9959687 -0.9991904 -0.9995381 -0.9964049 -0.9985914 -0.9982073
## 66    -0.9998853 -0.9998978 -0.9999554 -0.9997053 -0.9999472 -0.9999223
## 67    -0.9969661 -0.9973531 -0.9980481 -0.9749123 -0.9956159 -0.9986376
## 68    -0.9964954 -0.9978216 -0.9983487 -0.9629228 -0.9950928 -0.9985472
## 69    -0.9986226 -0.9987923 -0.9979458 -0.9967258 -0.9995041 -0.9990637
## 70    -0.9935911 -0.9776573 -0.9846957 -0.9745280 -0.9946881 -0.9943848
## 71    -0.9799323 -0.9736462 -0.9916103 -0.9583099 -0.9570565 -0.9895730
```

```
## 72   -0.9751646 -0.9742741 -0.9866525 -0.9702617 -0.9594441 -0.9883722
## 73   -0.9972503 -0.9957909 -0.9944107 -0.9888024 -0.9978408 -0.9987039
## 74   -0.9998353 -0.9997854 -0.9997358 -0.9998687 -0.9998406 -0.9999116
## 75   -0.9999453 -0.9998272 -0.9999298 -0.9999497 -0.9998750 -0.9999595
## 76   -0.9999554 -0.9999768 -0.9999839 -0.9999596 -0.9999839 -0.9999768
## 77   -0.9999537 -0.9999748 -0.9999903 -0.9999782 -0.9999850 -0.9999735
## 78   -0.9999699 -0.9999730 -0.9999916 -0.9999944 -0.9999833 -0.9999797
## 79   -0.9425768 -0.9178933 -0.8987908 -0.6461809 -0.8408698 -0.9684413
## 80   -0.9335242 -0.9687417 -0.9910100 -0.5648108 -0.8850822 -0.9589186
## 81   -0.8641118 -0.8929910 -0.9998735 -0.5426633 -0.8785715 -0.9284792
## 82   -0.6597892 -0.6204644 -0.6731501 -0.4961958 -0.7513637 -0.8348542
## 83   -0.7113733 -0.8723954 -0.9732509 -0.3749846 -0.7448782 -0.8786345
## 84   -0.8506517 -0.6697234 -0.7382913 -0.4751678 -0.8199966 -0.8700708
## 85   -0.8542356 -0.8820685 -0.9811635 -0.6077953 -0.8401406 -0.9170074
## 86   -0.6763200 -0.8021146 -0.9704230 -0.5664344 -0.8390699 -0.8830257
## 87   -0.9278666 -0.8880934 -0.8800862 -0.6371621 -0.9091999 -0.9295602
## 88   -0.8845502 -0.8129426 -0.8280181 -0.5590359 -0.9045500 -0.9092380
## 89   -0.7817720 -0.7474157 -0.8640064 -0.5729212 -0.9021861 -0.8832404
## 90   -0.7757628 -0.4949443 -0.5332762 -0.5868246 -0.8166878 -0.8646907
## 91   -0.8702624 -0.9618982 -0.9970570 -0.4663301 -0.8149096 -0.8719491
## 92   -0.8351541 -0.8009621 -0.8419521 -0.4653136 -0.8197319 -0.8530074
## 93   -0.9142777 -0.9298950 -0.9311530 -0.5643867 -0.8233437 -0.8454163
## 94   -0.8705098 -0.9531801 -0.9753006 -0.5467633 -0.7997755 -0.9099129
## 95   -0.8813743 -0.9062537 -0.9989796 -0.5473335 -0.7635986 -0.9297495
## 96   -0.7331888 -0.6508353 -0.5783917 -0.5646715 -0.7514641 -0.8258944
## 97   -0.7345387 -0.6549814 -0.6031929 -0.5133551 -0.7074694 -0.7762950
## 98   -0.8714403 -0.6990644 -0.8467410 -0.5179429 -0.7640345 -0.8823830
## 99   -0.7877910 -0.6854054 -0.8444750 -0.4774024 -0.7984846 -0.9368148
## 100  -0.8060983 -0.8956297 -0.8648932 -0.5019856 -0.8661986 -0.9378108
## 101  -0.8488444 -0.7270676 -0.8139481 -0.5931491 -0.8283020 -0.8993475
## 102  -0.6379109 -0.7496250 -0.8767864 -0.5455082 -0.7034720 -0.6664119
## 103  -0.7310158 -0.7330126 -0.9783981 -0.4907394 -0.7376500 -0.7547308
## 104  -0.8112101 -0.7478820 -0.9320188 -0.4447505 -0.7735403 -0.8764601
## 105  -0.7121619 -0.7487817 -0.8758103 -0.4936287 -0.8253967 -0.8532631
## 106  -0.8734803 -0.8758651 -0.9870476 -0.5570444 -0.8785246 -0.8846912
## 107  -0.7816597 -0.8023833 -0.8986338 -0.5000486 -0.8542269 -0.8765777
## 108  -0.7520486 -0.7926572 -0.9975681 -0.4740600 -0.8452362 -0.8898101
## 109  -0.8799726 -0.8806226 -0.9943673 -0.4717458 -0.8494139 -0.9084618
## 110  -0.8045207 -0.8311501 -0.8615884 -0.4696916 -0.7918371 -0.8853908
## 111  -0.8906573 -0.8138580 -0.7968672 -0.5506559 -0.7099220 -0.9242862
## 112  -0.7403445 -0.8869384 -0.9743133 -0.5329403 -0.7918095 -0.8646143
## 113  -0.8354039 -0.9025403 -0.9994515 -0.5428800 -0.8790952 -0.8897841
## 114  -0.6543757 -0.6177872 -0.5235234 -0.5659559 -0.8373905 -0.8181541
## 115  -0.8103030 -0.8157039 -0.9516007 -0.5072730 -0.8179932 -0.8738990
## 116  -0.6935109 -0.5227234 -0.5893109 -0.5460205 -0.8054398 -0.8297172
## 117  -0.8305474 -0.8766056 -0.9671812 -0.5897661 -0.8237482 -0.8948655
## 118  -0.8791046 -0.9170994 -0.9389930 -0.6034059 -0.8761256 -0.9023277
## 119  -0.7078233 -0.9172156 -0.9326275 -0.6086198 -0.8687372 -0.8648389
## 120  -0.8731440 -0.8238744 -0.8580756 -0.6005574 -0.8443057 -0.9350839
## 121  -0.9011748 -0.9306758 -0.9999649 -0.6223869 -0.8687819 -0.9430492
```

```
## 122 -0.8713783 -0.8344982 -0.8396744 -0.6100160 -0.8614742 -0.9244271
## 123 -0.7954311 -0.8424602 -0.7374403 -0.5559624 -0.8465050 -0.9222718
## 124 -0.7943069 -0.7359285 -0.8140483 -0.5384984 -0.8342033 -0.9140227
## 125 -0.7333702 -0.7568056 -0.7235310 -0.5853184 -0.8111020 -0.9100873
## 126 -0.7781954 -0.9202006 -0.9999142 -0.7939684 -0.8961155 -0.9017095
## 127 -0.7139568 -0.8596119 -0.9986451 -0.7158679 -0.7934417 -0.6054594
## 128 -0.2535981 -0.7987805 -0.9968503 -0.7223552 -0.7087712 -0.5217202
## 129 -0.6316778 -0.6483171 -0.9311486 -0.7090994 -0.8071406 -0.8206536
## 130 -0.8569376 -0.9010644 -0.9730506 -0.7216744 -0.8328091 -0.9258577
## 131 -0.7865576 -0.8937393 -0.9892437 -0.6612403 -0.7173850 -0.8992325
## 132 -0.6558532 -0.5317991 -0.7035582 -0.6293997 -0.7462939 -0.8649787
## 133 -0.6749072 -0.7673167 -0.9804134 -0.7461470 -0.8592247 -0.8563745
## 134 -0.7722171 -0.5299029 -0.8379350 -0.7799061 -0.8034091 -0.8664652
## 135 -0.5323953 -0.2870149 -0.5740253 -0.6378850 -0.6291913 -0.7276803
## 136 -0.7060392 -0.8011338 -0.9949571 -0.6011787 -0.7356466 -0.7407723
## 137 -0.5556833 -0.5487393 -0.5105263 -0.5711764 -0.6673359 -0.5854484
## 138 -0.7252574 -0.8689386 -0.9548976 -0.5133593 -0.7136870 -0.7313021
## 139 -0.5357027 -0.6438564 -0.5821292 -0.5265228 -0.6715657 -0.6308941
## 140 -0.6274470 -0.5419106 -0.9117822 -0.5257430 -0.7114442 -0.7443617
## 141 -0.3911906 -0.3312185 -0.3670563 -0.6608568 -0.8022236 -0.6702064
## 142 -0.8836912 -0.6376508 -0.8869542 -0.6561073 -0.8316085 -0.8850126
## 143 -0.8495302 -0.8367986 -0.9952592 -0.6379036 -0.8808184 -0.9081574
## 144 -0.7967032 -0.7650763 -0.9369069 -0.6366890 -0.8751217 -0.8658655
## 145 -0.6902012 -0.8841785 -0.9775558 -0.6303282 -0.7820839 -0.7664011
## 146 -0.4196999 -0.7215217 -0.7484231 -0.5428327 -0.7249035 -0.4422706
## 147 -0.6092427 -0.8032056 -0.8827694 -0.6283861 -0.8398210 -0.6380499
## 148 -0.9101399 -0.9675689 -0.9961882 -0.6746664 -0.7664686 -0.9209881
## 149 -0.8809356 -0.8954840 -0.9405966 -0.6967733 -0.7377094 -0.9121479
## 150 -0.9414800 -0.7624329 -0.9600257 -0.7006249 -0.8648275 -0.9572067
## 151 -0.9494747 -0.9713848 -0.9987254 -0.4665980 -0.8791604 -0.9776871
## 152 -0.9262925 -0.9420808 -0.9975069 -0.4660718 -0.9234505 -0.9697199
## 153 -0.9609164 -0.9610384 -0.9834381 -0.4506921 -0.9616155 -0.9773228
## 154 -0.9274934 -0.8927583 -0.8621837 -0.4229217 -0.9442274 -0.9630132
## 155 -0.8941641 -0.7532237 -0.7008494 -0.4513729 -0.8911480 -0.9427468
## 156 -0.8620870 -0.4976739 -0.3692976 -0.5080524 -0.9106078 -0.8890947
## 157 -0.9670757 -0.9506732 -0.9726789 -0.4704916 -0.9117517 -0.9787438
## 158 -0.9594277 -0.9240196 -0.9894627 -0.4464370 -0.8843637 -0.9856739
## 159 -0.9417375 -0.9674270 -0.9999620 -0.4635956 -0.9221432 -0.9813448
## 160 -0.9574160 -0.9655348 -0.9928758 -0.4618733 -0.9275779 -0.9836940
## 161 -0.9746124 -0.9812721 -0.9997714 -0.3422486 -0.9197352 -0.9832836
## 162 -0.9292444 -0.8850004 -0.8774557 -0.3410934 -0.9175052 -0.9603285
## 163 -0.9841165 -0.9654645 -0.9962552 -0.5589136 -0.9472606 -0.9852470
## 164 -0.9538478 -0.9286463 -0.9544051 -0.6072030 -0.9539428 -0.9667355
## 165 -0.9634434 -0.9272802 -0.9653152 -0.5415650 -0.9643934 -0.9644165
## 166 -0.9619563 -0.8960167 -0.8938861 -0.5063159 -0.9567452 -0.9657085
## 167 -0.9706047 -0.9703305 -0.9933483 -0.5200189 -0.9568650 -0.9859794
## 168 -0.9805951 -0.9885988 -0.9929800 -0.4566612 -0.9678070 -0.9912667
## 169 -0.9855795 -0.9869904 -0.9983911 -0.4549695 -0.9526533 -0.9876916
## 170 -0.9746823 -0.9380600 -0.9502624 -0.3885209 -0.9516183 -0.9767142
## 171 -0.9346920 -0.8810364 -0.8416190 -0.4082798 -0.9462138 -0.9737594
```

```
## 172 -0.9454859 -0.9027505 -0.9049087 -0.5763508 -0.9571272 -0.9716412
## 173 -0.9242812 -0.8662305 -0.8145654 -0.6761655 -0.9689318 -0.9612113
## 174 -0.9730775 -0.9829368 -0.9985478 -0.5561961 -0.9582215 -0.9826740
## 175 -0.9874074 -0.9826425 -0.9935070 -0.4679882 -0.9686882 -0.9891918
## 176 -0.9908187 -0.9724350 -0.9941734 -0.4812805 -0.9583199 -0.9949566
## 177 -0.9988893 -0.9986027 -0.9990396 -0.9976580 -0.9998996 -0.9995636
##               NA         NA         NA         NA         NA         NA
## 1   -0.9983875 -0.9996426 -0.9999727 -0.9999554 -0.9999763 -0.9999058
## 2   -0.9999817 -0.9999026 -0.9999917 -0.9999089 -0.9999594 -0.9999281
## 3   -0.9999877 -0.9999606 -0.9999858 -0.9998701 -0.9999346 -0.9999347
## 4   -0.9999878 -0.9999478 -0.9999884 -0.9998773 -0.9999685 -0.9999566
## 5   -0.9999696 -0.9999490 -0.9999816 -0.9998711 -0.9999554 -0.9999962
## 6   -0.9999712 -0.9999463 -0.9999799 -0.9998227 -0.9998868 -0.9999526
## 7   -0.9999710 -0.9999058 -0.9999882 -0.9997418 -0.9998353 -0.9999501
## 8   -0.9999437 -0.9998787 -0.9999805 -0.9996948 -0.9999082 -0.9999746
## 9   -0.9998942 -0.9999555 -0.9999801 -0.9998883 -0.9999321 -0.9999462
## 10  -0.9999594 -0.9998760 -0.9999851 -0.9998285 -0.9997467 -0.9998552
## 11  -0.9998646 -0.9998918 -0.9999847 -0.9998117 -0.9998026 -0.9998603
## 12  -0.9999896 -0.9999770 -0.9999945 -0.9999820 -0.9999706 -0.9999775
## 13  -0.9999853 -0.9999872 -0.9999976 -0.9999729 -0.9999924 -0.9999890
## 14  -0.9999837 -0.9999906 -0.9999954 -0.9999807 -0.9999854 -0.9999727
## 15  -0.9970647 -0.9979974 -0.9998392 -0.9958472 -0.9995052 -0.9993938
## 16  -0.9994939 -0.9993201 -0.9999481 -0.9975065 -0.9998118 -0.9998741
## 17  -0.9997954 -0.9997774 -0.9999730 -0.9995782 -0.9999266 -0.9999313
## 18  -0.9999552 -0.9999140 -0.9999884 -0.9997679 -0.9999531 -0.9999550
## 19  -0.9999952 -0.9999906 -0.9999972 -0.9999756 -0.9999761 -0.9999807
## 20  -0.9999952 -0.9999895 -0.9999988 -0.9999688 -0.9999825 -0.9999857
## 21  -0.9999938 -0.9999935 -0.9999966 -0.9999965 -0.9999830 -0.9999879
## 22  -0.9999912 -0.9999956 -0.9999962 -0.9999933 -0.9999841 -0.9999859
## 23  -0.9999879 -0.9999902 -0.9999966 -0.9999712 -0.9999728 -0.9999886
## 24  -0.9999834 -0.9999938 -0.9999952 -0.9999794 -0.9999806 -0.9999868
## 25  -0.9999888 -0.9999914 -0.9999928 -0.9999640 -0.9999778 -0.9999774
## 26  -0.9999911 -0.9999900 -0.9999931 -0.9999730 -0.9999825 -0.9999820
## 27  -0.9999863 -0.9999905 -0.9999918 -0.9999871 -0.9999886 -0.9999745
## 28  -0.9990964 -0.9995332 -0.9998046 -0.9967857 -0.9985389 -0.9991324
## 29  -0.9995658 -0.9995996 -0.9999638 -0.9993680 -0.9999489 -0.9999506
## 30  -0.9996864 -0.9996800 -0.9999699 -0.9992994 -0.9999403 -0.9999328
## 31  -0.9969093 -0.8592287 -0.9989613 -0.9045624 -0.9908980 -0.9942520
## 32  -0.9968991 -0.8532321 -0.9986894 -0.8738427 -0.9941635 -0.9951640
## 33  -0.9960290 -0.9939310 -0.9994176 -0.9589706 -0.9974524 -0.9987555
## 34  -0.9983798 -0.9997145 -0.9998378 -0.9996516 -0.9999555 -0.9999887
## 35  -0.9999591 -0.9999292 -0.9999666 -0.9996326 -0.9999649 -0.9999754
## 36  -0.9999398 -0.9999711 -0.9999690 -0.9998599 -0.9999764 -0.9999454
## 37  -0.9999664 -0.9999567 -0.9999731 -0.9999265 -0.9999849 -0.9999623
## 38  -0.9999930 -0.9999682 -0.9999806 -0.9999857 -0.9999745 -0.9999762
## 39  -0.9995567 -0.9995373 -0.9998969 -0.9870564 -0.9983238 -0.9986913
## 40  -0.9998770 -0.9999057 -0.9999544 -0.9864356 -0.9981406 -0.9982933
## 41  -0.9999867 -0.9998983 -0.9999850 -0.9947160 -0.9995012 -0.9995635
## 42  -0.9999735 -0.9999619 -0.9999772 -0.9995892 -0.9999567 -0.9999553
## 43  -0.9999772 -0.9999726 -0.9999822 -0.9997537 -0.9999595 -0.9999594
```

```
## 44    -0.9999678 -0.9999799 -0.9999819 -0.9998595 -0.9999676 -0.9999842
## 45    -0.9999774 -0.9999713 -0.9999871 -0.9998177 -0.9999727 -0.9999577
## 46    -0.9999462 -0.9999667 -0.9999885 -0.9998902 -0.9999781 -0.9999655
## 47    -0.9999789 -0.9999744 -0.9999869 -0.9998832 -0.9999817 -0.9999819
## 48    -0.9999894 -0.9999733 -0.9999861 -0.9999442 -0.9999765 -0.9999535
## 49    -0.9999872 -0.9999799 -0.9999867 -0.9998997 -0.9999845 -0.9999429
## 50    -0.9999664 -0.9999752 -0.9999835 -0.9998955 -0.9999728 -0.9999721
## 51    -0.9999430 -0.9999588 -0.9999752 -0.9998908 -0.9999664 -0.9999753
## 52    -0.9998926 -0.9974555 -0.9994767 -0.9814205 -0.9991140 -0.9980101
## 53    -0.9999536 -0.9999514 -0.9999890 -0.9938730 -0.9993036 -0.9992842
## 54    -0.9999711 -0.9999820 -0.9999921 -0.9984212 -0.9997796 -0.9997735
## 55    -0.9999934 -0.9999728 -0.9999949 -0.9999140 -0.9999282 -0.9999756
## 56    -0.9999948 -0.9999762 -0.9999953 -0.9999668 -0.9999676 -0.9999910
## 57    -0.9999819 -0.9999710 -0.9999965 -0.9999740 -0.9999643 -0.9999707
## 58    -0.9999751 -0.9999681 -0.9999920 -0.9998483 -0.9999604 -0.9999756
## 59    -0.9999913 -0.9999635 -0.9999929 -0.9999695 -0.9999778 -0.9999847
## 60    -0.9999923 -0.9999781 -0.9999967 -0.9999595 -0.9999802 -0.9999821
## 61    -0.9999942 -0.9999798 -0.9999945 -0.9999658 -0.9999821 -0.9999754
## 62    -0.9999991 -0.9999739 -0.9999943 -0.9999719 -0.9999781 -0.9999833
## 63    -0.9999832 -0.9999713 -0.9999962 -0.9999649 -0.9999776 -0.9999761
## 64    -0.9999885 -0.9999669 -0.9999915 -0.9999533 -0.9999806 -0.9999812
## 65    -0.9992309 -0.9964308 -0.9970240 -0.9914952 -0.9992975 -0.9984294
## 66    -0.9999089 -0.9997170 -0.9998917 -0.9898676 -0.9992213 -0.9988343
## 67    -0.9972940 -0.9750644 -0.9965962 -0.9059924 -0.9844223 -0.9896388
## 68    -0.9977536 -0.9638431 -0.9956954 -0.9202147 -0.9831989 -0.9897549
## 69    -0.9982611 -0.9968012 -0.9992402 -0.9978337 -0.9985704 -0.9980598
## 70    -0.9776665 -0.9749234 -0.9918597 -0.9291911 -0.9953257 -0.9868371
## 71    -0.9778440 -0.9427891 -0.9792629 -0.9231037 -0.9534232 -0.9764061
## 72    -0.9761368 -0.9537823 -0.9854141 -0.9819100 -0.9513770 -0.9775489
## 73    -0.9946200 -0.9886015 -0.9990758 -0.9920494 -0.9992639 -0.9995044
## 74    -0.9997348 -0.9998167 -0.9998745 -0.9992084 -0.9999451 -0.9999490
## 75    -0.9998481 -0.9998998 -0.9999379 -0.9994001 -0.9999599 -0.9998953
## 76    -0.9999767 -0.9999576 -0.9999788 -0.9997449 -0.9999673 -0.9999763
## 77    -0.9999782 -0.9999752 -0.9999794 -0.9999203 -0.9999895 -0.9999819
## 78    -0.9999774 -0.9999884 -0.9999862 -0.9999704 -0.9999783 -0.9999845
## 79    -0.8984405 -0.5984854 -0.9473267 -0.8987673 -0.9296205 -0.8603515
## 80    -0.9741372 -0.5517886 -0.9142529 -0.8719274 -0.9183863 -0.8655033
## 81    -0.9247436 -0.5327536 -0.8807784 -0.8363359 -0.9182979 -0.8698131
## 82    -0.5916396 -0.4300746 -0.8228249 -0.8014931 -0.9036841 -0.7909472
## 83    -0.8987332 -0.3172475 -0.8216783 -0.7947344 -0.9510694 -0.8388775
## 84    -0.6544853 -0.4524482 -0.8012996 -0.8274204 -0.9543397 -0.8923152
## 85    -0.9089599 -0.5816356 -0.8370690 -0.8069344 -0.9227778 -0.9137674
## 86    -0.8481172 -0.5400249 -0.8394991 -0.8098256 -0.8983524 -0.8664715
## 87    -0.8693928 -0.6294946 -0.9141406 -0.8697284 -0.9129746 -0.9564242
## 88    -0.7940164 -0.5609492 -0.8764705 -0.8432783 -0.9341017 -0.8863253
## 89    -0.7635621 -0.5696057 -0.8831477 -0.8282326 -0.9335595 -0.8723920
## 90    -0.4428157 -0.5578964 -0.7824442 -0.8112027 -0.9305792 -0.8221308
## 91    -0.9719483 -0.4408519 -0.8057123 -0.8041375 -0.9252862 -0.8269362
## 92    -0.7916352 -0.4445919 -0.7889342 -0.8325002 -0.9080307 -0.7843385
## 93    -0.9208987 -0.5387264 -0.7850460 -0.8221487 -0.8516857 -0.7888799
```

```
## 94  -0.9563935 -0.4992122 -0.8595343 -0.8033670 -0.8546394 -0.8148767
## 95  -0.9336767 -0.4759717 -0.8912123 -0.8101940 -0.9191271 -0.8267859
## 96  -0.5719200 -0.5033911 -0.7723743 -0.8223894 -0.8380501 -0.9073584
## 97  -0.5855812 -0.4203807 -0.8195392 -0.8192559 -0.7979080 -0.8348455
## 98  -0.7221009 -0.4503888 -0.8690989 -0.8388013 -0.7981270 -0.8848049
## 99  -0.7115200 -0.4300662 -0.8880817 -0.7889804 -0.9060783 -0.7863269
## 100 -0.8681052 -0.4836603 -0.9081404 -0.8245128 -0.9141604 -0.7600080
## 101 -0.7275698 -0.5696270 -0.7938453 -0.8363244 -0.9739617 -0.7873862
## 102 -0.7706528 -0.4787957 -0.6346421 -0.8137160 -0.9476948 -0.7335848
## 103 -0.8030110 -0.4429908 -0.6747374 -0.7851556 -0.9640975 -0.8561019
## 104 -0.7933625 -0.3990202 -0.8097937 -0.8221976 -0.9141455 -0.9093458
## 105 -0.7696372 -0.4714186 -0.8006557 -0.8431969 -0.8935829 -0.9120795
## 106 -0.9071502 -0.5491945 -0.8517423 -0.8474078 -0.9199196 -0.9111392
## 107 -0.8171966 -0.4915325 -0.8112067 -0.8316063 -0.9008622 -0.9029955
## 108 -0.8532340 -0.4499906 -0.8782240 -0.8303016 -0.9043654 -0.7850100
## 109 -0.9136655 -0.4516280 -0.8760209 -0.8276139 -0.8982040 -0.8115051
## 110 -0.8213594 -0.4285849 -0.8272834 -0.8186287 -0.8703875 -0.8617219
## 111 -0.7811607 -0.4597330 -0.8489349 -0.8185398 -0.8413913 -0.9292187
## 112 -0.9094138 -0.5030214 -0.7434620 -0.7980077 -0.9311613 -0.8798795
## 113 -0.9312716 -0.5379654 -0.8453474 -0.7923581 -0.9579349 -0.9054206
## 114 -0.5249184 -0.5488987 -0.7691357 -0.7525149 -0.9510468 -0.9162255
## 115 -0.8495106 -0.4733036 -0.8414064 -0.7902759 -0.9382464 -0.9493656
## 116 -0.4866200 -0.5011663 -0.8356906 -0.8232958 -0.9189211 -0.9165242
## 117 -0.8990616 -0.5580752 -0.8222674 -0.8088802 -0.8812948 -0.8801681
## 118 -0.9153039 -0.5970858 -0.8273776 -0.8212451 -0.8844224 -0.9211192
## 119 -0.9126271 -0.5878104 -0.8663160 -0.8146667 -0.9241194 -0.9608893
## 120 -0.8147241 -0.5640629 -0.9065741 -0.8299560 -0.8984761 -0.9339591
## 121 -0.9512665 -0.5968492 -0.9093411 -0.8364860 -0.9082450 -0.9191562
## 122 -0.8142160 -0.5862350 -0.8807796 -0.7670581 -0.9309332 -0.9382575
## 123 -0.7755090 -0.5297037 -0.8735237 -0.7533782 -0.8415301 -0.9119953
## 124 -0.7338403 -0.5010801 -0.9008579 -0.8038880 -0.8657341 -0.9019362
## 125 -0.7092868 -0.5335563 -0.8952915 -0.8326041 -0.8526061 -0.9080879
## 126 -0.9438830 -0.7711203 -0.8917401 -0.8304181 -0.9211648 -0.8642936
## 127 -0.9007538 -0.6616836 -0.7210937 -0.8044815 -0.9182812 -0.8172076
## 128 -0.8572262 -0.6426657 -0.6041162 -0.7888708 -0.8888866 -0.7603439
## 129 -0.7230152 -0.6611232 -0.7950545 -0.7679050 -0.9010803 -0.7988732
## 130 -0.9187937 -0.6781333 -0.8666291 -0.7139895 -0.9033119 -0.7482110
## 131 -0.9206631 -0.5776600 -0.7849029 -0.6703234 -0.7719321 -0.6059528
## 132 -0.5425063 -0.5589096 -0.7940349 -0.7023198 -0.8058021 -0.6544631
## 133 -0.8279919 -0.7141128 -0.8463671 -0.7232973 -0.8936464 -0.8052847
## 134 -0.5994050 -0.7314804 -0.7772797 -0.7810310 -0.8593858 -0.7628795
## 135 -0.3143496 -0.5456613 -0.5591587 -0.7532766 -0.5921823 -0.6623640
## 136 -0.8580596 -0.5488869 -0.6487339 -0.7665952 -0.6239378 -0.6181404
## 137 -0.4707621 -0.4919473 -0.5704837 -0.7111321 -0.6830277 -0.5713302
## 138 -0.8883506 -0.4658553 -0.5977338 -0.5566092 -0.5954847 -0.5388815
## 139 -0.5686352 -0.4982565 -0.3607697 -0.6147949 -0.4264310 -0.6555648
## 140 -0.6398447 -0.4438214 -0.7608943 -0.7346130 -0.7281596 -0.8214809
## 141 -0.2557255 -0.6156617 -0.7387789 -0.7429399 -0.7572717 -0.8244682
## 142 -0.6963680 -0.6206599 -0.8341131 -0.6845249 -0.7077489 -0.7924174
## 143 -0.8832543 -0.6181690 -0.8948074 -0.7325922 -0.8350253 -0.7088058
```

```
## 144 -0.8075642 -0.6155742 -0.8743705 -0.7386018 -0.8453766 -0.6798554
## 145 -0.9088793 -0.5786642 -0.7606431 -0.6730641 -0.7895414 -0.6789102
## 146 -0.6952775 -0.4914154 -0.5442377 -0.6661942 -0.8397144 -0.6796397
## 147 -0.8108998 -0.6076009 -0.7151116 -0.7126708 -0.7883658 -0.8599087
## 148 -0.9755570 -0.5952411 -0.8904865 -0.7111477 -0.8837456 -0.8575037
## 149 -0.9008084 -0.6111897 -0.8375873 -0.7910973 -0.8941813 -0.7438734
## 150 -0.8157249 -0.6696470 -0.9029767 -0.7619489 -0.8696143 -0.6903410
## 151 -0.9793381 -0.4453355 -0.9802581 -0.9151178 -0.9649525 -0.9599388
## 152 -0.9582164 -0.4697396 -0.9672669 -0.9177052 -0.9741967 -0.9530106
## 153 -0.9654424 -0.4739067 -0.9753756 -0.8488502 -0.9351822 -0.9675907
## 154 -0.8649131 -0.4417785 -0.9581833 -0.8369752 -0.8898615 -0.9340972
## 155 -0.6969407 -0.4404090 -0.9543248 -0.8934430 -0.9082033 -0.9028540
## 156 -0.3736749 -0.5127382 -0.8897758 -0.8802950 -0.9285397 -0.9450962
## 157 -0.9534957 -0.4716428 -0.9513734 -0.9044080 -0.9384502 -0.9842213
## 158 -0.9420378 -0.4309489 -0.9746287 -0.9278000 -0.9581346 -0.9484730
## 159 -0.9770926 -0.4670200 -0.9696808 -0.9520101 -0.9393172 -0.9439459
## 160 -0.9726921 -0.4658261 -0.9821463 -0.9452015 -0.9485583 -0.9337235
## 161 -0.9867397 -0.3527851 -0.9720000 -0.8028773 -0.8752802 -0.9304403
## 162 -0.8660792 -0.3502943 -0.9661389 -0.8192224 -0.8979397 -0.9267033
## 163 -0.9741071 -0.5673991 -0.9758790 -0.9115821 -0.9647448 -0.9586392
## 164 -0.9300973 -0.6166375 -0.9652740 -0.9096399 -0.9388316 -0.9354725
## 165 -0.9338650 -0.5597085 -0.9712542 -0.9467588 -0.9586673 -0.9164703
## 166 -0.8809410 -0.5215124 -0.9792437 -0.9392658 -0.9575517 -0.9368134
## 167 -0.9762670 -0.5334397 -0.9898026 -0.9541369 -0.9730039 -0.9717223
## 168 -0.9889457 -0.4818117 -0.9837660 -0.9544220 -0.9318069 -0.9532730
## 169 -0.9901602 -0.4733734 -0.9781329 -0.9492895 -0.9395698 -0.9078037
## 170 -0.9349176 -0.4099207 -0.9807574 -0.8630344 -0.9213111 -0.8986984
## 171 -0.8477639 -0.4275655 -0.9696170 -0.8640507 -0.9026769 -0.9225403
## 172 -0.8904498 -0.5895762 -0.9670911 -0.9233687 -0.9337137 -0.9519359
## 173 -0.8256354 -0.6883155 -0.9637533 -0.9158187 -0.9376204 -0.9551270
## 174 -0.9873794 -0.5706220 -0.9745132 -0.9424853 -0.8838666 -0.9435438
## 175 -0.9849882 -0.4921506 -0.9862054 -0.9480931 -0.9022827 -0.9374665
## 176 -0.9781035 -0.4994366 -0.9866683 -0.9520745 -0.9305616 -0.8987011
## 177 -0.9986019 -0.9977944 -0.9997674 -0.9949033 -0.9995382 -0.9995193
##              NA         NA         NA         NA         NA         NA
## 1   -0.9999855 -0.9999372 -0.9997512 -0.9990723 -0.9999275 -0.9999516
## 2   -0.9999663 -0.9999855 -0.9999264 -0.9999615 -0.9999831 -0.9999017
## 3   -0.9999570 -0.9999522 -0.9999093 -0.9998890 -0.9999885 -0.9998565
## 4   -0.9999556 -0.9999493 -0.9998805 -0.9998793 -0.9999495 -0.9998747
## 5   -0.9999864 -0.9999397 -0.9999068 -0.9999211 -0.9999812 -0.9998645
## 6   -0.9999220 -0.9998569 -0.9998545 -0.9995571 -0.9996430 -0.9997954
## 7   -0.9999311 -0.9999049 -0.9998243 -0.9997857 -0.9998267 -0.9997012
## 8   -0.9999433 -0.9999132 -0.9998742 -0.9995791 -0.9997728 -0.9996808
## 9   -0.9999470 -0.9999231 -0.9998765 -0.9997481 -0.9996586 -0.9998730
## 10  -0.9999432 -0.9998840 -0.9998995 -0.9998725 -0.9999487 -0.9997540
## 11  -0.9999612 -0.9998063 -0.9998157 -0.9997258 -0.9998247 -0.9997567
## 12  -0.9999775 -0.9999724 -0.9999425 -0.9999491 -0.9999902 -0.9999751
## 13  -0.9999735 -0.9999900 -0.9999732 -0.9999698 -0.9999988 -0.9999737
## 14  -0.9999739 -0.9999815 -0.9999655 -0.9999817 -0.9999994 -0.9999787
## 15  -0.9994278 -0.9986894 -0.9977241 -0.9940424 -0.9932327 -0.9958853
```

```
## 16   -0.9998085 -0.9997601 -0.9993358 -0.9987990 -0.9983045 -0.9975666
## 17   -0.9999222 -0.9998676 -0.9996894 -0.9991931 -0.9992538 -0.9995761
## 18   -0.9999652 -0.9998955 -0.9998451 -0.9998570 -0.9998632 -0.9997655
## 19   -0.9999662 -0.9999889 -0.9999426 -0.9999751 -1.0000000 -0.9999708
## 20   -0.9999821 -0.9999701 -0.9999753 -0.9999824 -0.9999994 -0.9999665
## 21   -0.9999581 -0.9999638 -0.9999621 -0.9998835 -0.9999978 -0.9999930
## 22   -0.9999553 -0.9999799 -0.9999442 -0.9998593 -0.9999959 -0.9999903
## 23   -0.9999670 -0.9999875 -0.9999460 -0.9999135 -0.9999925 -0.9999655
## 24   -0.9999875 -0.9999788 -0.9999085 -0.9996879 -0.9999299 -0.9999759
## 25   -0.9999805 -0.9999465 -0.9998779 -0.9996629 -0.9999988 -0.9999603
## 26   -0.9999576 -0.9999666 -0.9998576 -0.9997979 -0.9999801 -0.9999704
## 27   -0.9999492 -0.9999743 -0.9999362 -0.9998971 -0.9999956 -0.9999859
## 28   -0.9994370 -0.9980935 -0.9967894 -0.9930294 -0.9913766 -0.9964545
## 29   -0.9999792 -0.9999168 -0.9998153 -0.9998594 -0.9998097 -0.9993835
## 30   -0.9999244 -0.9998365 -0.9995486 -0.9990954 -0.9989413 -0.9993155
## 31   -0.9977746 -0.9977335 -0.9925615 -0.9874508 -0.9856532 -0.9061542
## 32   -0.9986413 -0.9988830 -0.9983910 -0.9972619 -0.9995975 -0.8780215
## 33   -0.9992158 -0.9957683 -0.9899752 -0.9854215 -0.9839443 -0.9601134
## 34   -0.9999653 -0.9999190 -0.9998169 -0.9998772 -0.9998436 -0.9996556
## 35   -0.9999627 -0.9998916 -0.9997759 -0.9996733 -0.9996295 -0.9996407
## 36   -0.9999613 -0.9999662 -0.9999132 -0.9997269 -0.9997705 -0.9998608
## 37   -0.9999345 -0.9999284 -0.9999240 -0.9999322 -0.9999182 -0.9999270
## 38   -0.9999504 -0.9999389 -0.9999352 -0.9999719 -0.9999991 -0.9999798
## 39   -0.9981099 -0.9969545 -0.9937156 -0.9840317 -0.9820855 -0.9871261
## 40   -0.9982136 -0.9965451 -0.9925029 -0.9829583 -0.9792000 -0.9864741
## 41   -0.9994613 -0.9989421 -0.9977553 -0.9945139 -0.9936458 -0.9948077
## 42   -0.9999703 -0.9999483 -0.9998020 -0.9996771 -0.9996839 -0.9995966
## 43   -0.9999827 -0.9999567 -0.9999191 -0.9998651 -0.9998253 -0.9997541
## 44   -0.9999820 -0.9999687 -0.9999327 -0.9999038 -0.9999935 -0.9998575
## 45   -0.9999519 -0.9999434 -0.9998754 -0.9998450 -0.9998802 -0.9998194
## 46   -0.9999883 -0.9999655 -0.9999076 -0.9999305 -0.9999939 -0.9998901
## 47   -0.9999647 -0.9999837 -0.9998623 -0.9999195 -0.9999408 -0.9998847
## 48   -0.9999564 -0.9999833 -0.9999140 -0.9999570 -0.9999629 -0.9999411
## 49   -0.9999551 -0.9999449 -0.9998718 -0.9997893 -0.9998514 -0.9999014
## 50   -0.9999653 -0.9999478 -0.9998905 -0.9999365 -0.9999913 -0.9998935
## 51   -0.9999851 -0.9999524 -0.9999492 -0.9999540 -0.9999974 -0.9998868
## 52   -0.9983556 -0.9969264 -0.9930005 -0.9832801 -0.9806387 -0.9820288
## 53   -0.9992557 -0.9985656 -0.9971985 -0.9932589 -0.9916475 -0.9939395
## 54   -0.9997854 -0.9995390 -0.9990275 -0.9982025 -0.9977233 -0.9984261
## 55   -0.9999438 -0.9999607 -0.9999196 -0.9999238 -0.9999472 -0.9998961
## 56   -0.9999754 -0.9999651 -0.9999227 -0.9998081 -0.9998984 -0.9999596
## 57   -0.9999728 -0.9999506 -0.9998897 -0.9998398 -0.9998546 -0.9999653
## 58   -0.9999754 -0.9999811 -0.9999808 -0.9999046 -0.9999623 -0.9998444
## 59   -0.9999715 -0.9999749 -0.9999438 -0.9998974 -0.9999642 -0.9999655
## 60   -0.9999546 -0.9999536 -0.9999393 -0.9999203 -0.9999965 -0.9999569
## 61   -0.9999680 -0.9999341 -0.9999425 -0.9998910 -0.9999714 -0.9999634
## 62   -0.9999818 -0.9999649 -0.9999630 -0.9999208 -0.9999984 -0.9999679
## 63   -0.9999871 -0.9999678 -0.9999796 -0.9999398 -0.9999733 -0.9999611
## 64   -0.9999710 -0.9999541 -0.9999502 -0.9999330 -0.9999974 -0.9999511
## 65   -0.9975022 -0.9988457 -0.9982529 -0.9994662 -0.9997352 -0.9916752
```

```
## 66    -0.9989735 -0.9981442 -0.9964309 -0.9918386 -0.9895284 -0.9901013
## 67    -0.9928722 -0.9989335 -0.9934206 -0.9944138 -0.9999579 -0.9053455
## 68    -0.9919209 -0.9988255 -0.9925266 -0.9950767 -0.9999983 -0.9184668
## 69    -0.9978639 -0.9980628 -0.9951325 -0.9894936 -0.9897493 -0.9974622
## 70    -0.9884136 -0.9889518 -0.9798353 -0.9584193 -0.9442768 -0.9310690
## 71    -0.9797410 -0.9923487 -0.9835738 -0.9831953 -0.9948778 -0.9112413
## 72    -0.9791829 -0.9770977 -0.9711959 -0.9423013 -0.9496752 -0.9665038
## 73    -0.9991357 -0.9993788 -0.9996731 -0.9988617 -0.9994260 -0.9921912
## 74    -0.9999393 -0.9998751 -0.9998342 -0.9996715 -0.9996835 -0.9992304
## 75    -0.9999299 -0.9998860 -0.9997877 -0.9995937 -0.9996310 -0.9994178
## 76    -0.9999497 -0.9999347 -0.9998646 -0.9998809 -0.9998661 -0.9997484
## 77    -0.9999792 -0.9999655 -0.9999473 -0.9998323 -0.9999112 -0.9999226
## 78    -0.9999931 -0.9999825 -0.9999562 -0.9998972 -0.9999846 -0.9999666
## 79    -0.9035637 -0.8100800 -0.9367914 -0.9539771 -0.9996840 -0.8801145
## 80    -0.8522365 -0.8769156 -0.8423601 -0.9668481 -0.9996914 -0.8508160
## 81    -0.8659585 -0.8262175 -0.7872550 -0.7961475 -0.8774772 -0.8169248
## 82    -0.8574828 -0.8094675 -0.8192789 -0.8356197 -0.9041124 -0.7788803
## 83    -0.9108887 -0.9237774 -0.8761658 -0.8879012 -0.9240587 -0.7883230
## 84    -0.9432036 -0.9555801 -0.9146418 -0.9293313 -0.9087041 -0.8205157
## 85    -0.8585586 -0.9324118 -0.9490413 -0.9608041 -0.9995661 -0.7904530
## 86    -0.8136289 -0.8763064 -0.8992244 -0.9227083 -0.9940987 -0.7850218
## 87    -0.9569519 -0.9458685 -0.9122920 -0.8959637 -0.9084416 -0.8469110
## 88    -0.9062551 -0.8829211 -0.9124228 -0.9623903 -0.9942131 -0.8288236
## 89    -0.9046870 -0.8443278 -0.8475240 -0.8049663 -0.9458470 -0.8143276
## 90    -0.9138958 -0.8801819 -0.8640413 -0.8440334 -0.9049453 -0.7971271
## 91    -0.9527309 -0.8682182 -0.9001814 -0.9143902 -0.9988153 -0.7886323
## 92    -0.9461383 -0.8383778 -0.7340769 -0.6310618 -0.6971106 -0.8098363
## 93    -0.8715446 -0.8500034 -0.9141558 -0.8576904 -0.9996868 -0.7811139
## 94    -0.8658505 -0.8335324 -0.8329712 -0.9099471 -0.9754404 -0.7642345
## 95    -0.8907444 -0.8579478 -0.9062585 -0.8707158 -0.9854750 -0.7923313
## 96    -0.8370119 -0.8460297 -0.7958507 -0.6902344 -0.6623374 -0.7767753
## 97    -0.9093574 -0.9392481 -0.8991368 -0.8665044 -0.9166219 -0.7603476
## 98    -0.8874466 -0.9258035 -0.8846226 -0.6779709 -0.7125519 -0.7790163
## 99    -0.8779710 -0.9010497 -0.8692013 -0.9276937 -0.9785708 -0.7677778
## 100  -0.8802359 -0.8766181 -0.8228294 -0.8868099 -0.9158643 -0.8042904
## 101  -0.8648504 -0.8931027 -0.8731587 -0.9261371 -0.9777674 -0.8355597
## 102  -0.8704032 -0.7603681 -0.7800712 -0.8813495 -0.9628947 -0.8052515
## 103  -0.9042777 -0.8393427 -0.8464145 -0.9216733 -0.9977318 -0.7835737
## 104  -0.9436233 -0.9691581 -0.9597251 -0.9749874 -0.9958879 -0.8020827
## 105  -0.9436057 -0.9512048 -0.9238825 -0.9351672 -0.9278714 -0.8151735
## 106  -0.9368019 -0.9198761 -0.9317594 -0.8740216 -0.9943792 -0.8280018
## 107  -0.8962996 -0.7405147 -0.8563580 -0.9150820 -0.9936477 -0.8065846
## 108  -0.9012680 -0.7050558 -0.8308018 -0.9434507 -0.9940157 -0.8065168
## 109  -0.9347344 -0.8416268 -0.8334205 -0.8891307 -0.9779750 -0.8018958
## 110  -0.9279097 -0.9503833 -0.8858763 -0.7854782 -0.8742232 -0.7840296
## 111  -0.9151577 -0.9143397 -0.9270165 -0.9313770 -0.9309458 -0.7742320
## 112  -0.8860127 -0.9186696 -0.8940348 -0.8569838 -0.9688403 -0.7847684
## 113  -0.9640227 -0.9784277 -0.8342668 -0.8288512 -0.9363757 -0.7883619
## 114  -0.9638608 -0.9610016 -0.9154845 -0.9121678 -0.9387193 -0.7481479
## 115  -0.9564742 -0.9479927 -0.9563272 -0.9251202 -0.9991426 -0.7797857
```

```
## 116  -0.9171497 -0.9198635 -0.8708400 -0.8889514 -0.9769329 -0.8047273
## 117  -0.8842182 -0.8901472 -0.8528781 -0.9038832 -0.9848804 -0.7784085
## 118  -0.8845377 -0.8847077 -0.9153448 -0.9408214 -0.9996035 -0.7912201
## 119  -0.9342936 -0.9425015 -0.9342668 -0.7783539 -0.9269220 -0.7982589
## 120  -0.9178556 -0.9630530 -0.9410096 -0.9153441 -0.9768439 -0.8042152
## 121  -0.9004081 -0.9470817 -0.8819470 -0.6886932 -0.7468174 -0.8137002
## 122  -0.8710524 -0.8781323 -0.8231627 -0.7487516 -0.7882095 -0.7552468
## 123  -0.8871358 -0.8830978 -0.8565307 -0.8081030 -0.7661048 -0.7122841
## 124  -0.9518988 -0.9299132 -0.8995081 -0.8369968 -0.8011450 -0.7684465
## 125  -0.9571478 -0.9512104 -0.9419346 -0.9179426 -0.9280095 -0.7913694
## 126  -0.7972466 -0.7418103 -0.7058462 -0.8912422 -0.9662732 -0.8122550
## 127  -0.9562418 -0.9568050 -0.9089670 -0.8995871 -0.9674856 -0.7866131
## 128  -0.8977399 -0.9260487 -0.8825392 -0.9443111 -0.9965162 -0.7619148
## 129  -0.8928109 -0.8659049 -0.8679189 -0.9068007 -0.9954925 -0.7460525
## 130  -0.8939572 -0.9012975 -0.9319231 -0.9457365 -0.9998983 -0.6955051
## 131  -0.8901076 -0.9568645 -0.8211208 -0.8450039 -0.9787321 -0.6099527
## 132  -0.8059615 -0.9235164 -0.8360140 -0.8465550 -0.9919352 -0.6517395
## 133  -0.8139587 -0.8621486 -0.8860695 -0.9529123 -0.9962891 -0.7011228
## 134  -0.9551979 -0.9274223 -0.8486789 -0.9099089 -0.9806319 -0.7445740
## 135  -0.9022021 -0.9581310 -0.9188103 -0.8685014 -0.9857624 -0.6286626
## 136  -0.8833369 -0.9154362 -0.9108686 -0.9137283 -0.9736455 -0.6519711
## 137  -0.9094460 -0.8580291 -0.8492557 -0.9604191 -0.9843803 -0.6189973
## 138  -0.7732788 -0.8187721 -0.7931315 -0.8809514 -0.9521028 -0.4426605
## 139  -0.7502261 -0.6799860 -0.8163482 -0.7755628 -0.8491776 -0.4413896
## 140  -0.9320783 -0.9415844 -0.8926674 -0.9486116 -0.9920907 -0.6564549
## 141  -0.9452674 -0.9166354 -0.9170625 -0.9456064 -0.9792183 -0.6741289
## 142  -0.9280225 -0.9552422 -0.8521696 -0.9195557 -0.9590898 -0.6019643
## 143  -0.9032887 -0.9370403 -0.8713633 -0.7793491 -0.8006153 -0.6903295
## 144  -0.9263881 -0.9262683 -0.8329059 -0.8093901 -0.8648980 -0.6995144
## 145  -0.6948603 -0.6658295 -0.5670678 -0.5277129 -0.3776366 -0.6184589
## 146  -0.8561201 -0.8697211 -0.8786172 -0.9134602 -0.9959831 -0.6287295
## 147  -0.9350377 -0.9074638 -0.7223493 -0.8369767 -0.7975214 -0.6557466
## 148  -0.9497844 -0.9633507 -0.8964991 -0.9116628 -0.9007293 -0.6862473
## 149  -0.8900306 -0.9448208 -0.9257617 -0.9463097 -0.9897859 -0.7658066
## 150  -0.8661360 -0.9322685 -0.8799845 -0.9230429 -0.9998848 -0.7298457
## 151  -0.9678544 -0.9919823 -0.9791463 -0.9976038 -0.9986559 -0.9075055
## 152  -0.9683119 -0.9448571 -0.9108933 -0.8723472 -0.8779430 -0.9130637
## 153  -0.9899012 -0.9837059 -0.9717255 -0.9652650 -0.9884371 -0.8344866
## 154  -0.9742003 -0.9540071 -0.9233141 -0.8696001 -0.8646637 -0.8080076
## 155  -0.9762457 -0.9819462 -0.9727460 -0.9750221 -0.9855668 -0.8678748
## 156  -0.9796743 -0.9902173 -0.9738699 -0.9556218 -0.9656640 -0.8621780
## 157  -0.9622525 -0.9798085 -0.9790399 -0.9791408 -0.9995322 -0.8884387
## 158  -0.9705560 -0.9791281 -0.9716762 -0.9597145 -0.9834324 -0.9172875
## 159  -0.9853141 -0.9846831 -0.9817481 -0.9897838 -0.9999255 -0.9340175
## 160  -0.9723482 -0.9858092 -0.9787332 -0.9693179 -0.9838707 -0.9306353
## 161  -0.9628813 -0.9790403 -0.9703531 -0.9874163 -0.9982410 -0.7706827
## 162  -0.9650690 -0.9865233 -0.9611505 -0.9489384 -0.9753931 -0.7938236
## 163  -0.9704858 -0.9829602 -0.9680705 -0.9677064 -0.9911527 -0.9040721
## 164  -0.9869562 -0.9804965 -0.9710992 -0.9656133 -0.9898524 -0.8935441
## 165  -0.9680398 -0.9716638 -0.9674655 -0.9913597 -0.9927265 -0.9355032
```

```
## 166  -0.9687920 -0.9860600 -0.9889319 -0.9672145 -0.9826949 -0.9280007
## 167  -0.9841191 -0.9885003 -0.9695900 -0.9717823 -0.9751035 -0.9473251
## 168  -0.9773796 -0.9638668 -0.9625768 -0.9296650 -0.9151020 -0.9337964
## 169  -0.9815924 -0.9828421 -0.9803009 -0.9702710 -0.9999929 -0.9315138
## 170  -0.9807184 -0.9864957 -0.9705304 -0.9616431 -0.9997374 -0.8433350
## 171  -0.9876274 -0.9903304 -0.9783839 -0.9496284 -0.9855943 -0.8380599
## 172  -0.9748707 -0.9852204 -0.9738174 -0.9483208 -0.9680061 -0.9048912
## 173  -0.9846469 -0.9893204 -0.9809095 -0.9680459 -0.9737955 -0.8990169
## 174  -0.9586314 -0.9704909 -0.9795130 -0.9612316 -0.9627809 -0.9063812
## 175  -0.9640079 -0.9879518 -0.9582248 -0.9894806 -0.9956209 -0.9178854
## 176  -0.9744927 -0.9738389 -0.9469124 -0.9501023 -0.9629182 -0.9311459
## 177  -0.9995110 -0.9988634 -0.9980951 -0.9962913 -0.9958030 -0.9949983
##              NA         NA         NA         NA         NA           NA
## 1     -0.9999058 -0.9998927 -0.9994443 -0.9999410 -0.9999586 -0.952154660
## 2     -0.9999178 -0.9999754 -0.9999711 -0.9998943 -0.9999710 -0.980856620
## 3     -0.9999196 -0.9999464 -0.9999325 -0.9998502 -0.9999556 -0.987794770
## 4     -0.9999398 -0.9999364 -0.9999101 -0.9998713 -0.9999516 -0.987518660
## 5     -0.9999925 -0.9999366 -0.9999474 -0.9998664 -0.9999728 -0.993590850
## 6     -0.9999197 -0.9998617 -0.9995947 -0.9997918 -0.9999052 -0.994835990
## 7     -0.9999217 -0.9998887 -0.9998037 -0.9996977 -0.9999198 -0.982134710
## 8     -0.9999510 -0.9999082 -0.9996636 -0.9996808 -0.9999343 -0.982184130
## 9     -0.9999257 -0.9999162 -0.9997094 -0.9998682 -0.9999394 -0.983130800
## 10    -0.9998370 -0.9998937 -0.9999058 -0.9997375 -0.9999297 -0.984994030
## 11    -0.9998506 -0.9998140 -0.9997690 -0.9997409 -0.9999174 -0.985696560
## 12    -0.9999703 -0.9999701 -0.9999672 -0.9999740 -0.9999771 -0.995137800
## 13    -0.9999794 -0.9999913 -0.9999826 -0.9999742 -0.9999809 -0.995953670
## 14    -0.9999640 -0.9999830 -0.9999896 -0.9999770 -0.9999786 -0.997757260
## 15    -0.9991476 -0.9984304 -0.9936906 -0.9958250 -0.9991202 -0.903838530
## 16    -0.9997900 -0.9996507 -0.9985842 -0.9975630 -0.9997615 -0.991367650
## 17    -0.9998995 -0.9998250 -0.9992197 -0.9995707 -0.9998940 -0.992731570
## 18    -0.9999429 -0.9998875 -0.9998599 -0.9997624 -0.9999430 -0.993433490
## 19    -0.9999679 -0.9999823 -0.9999861 -0.9999702 -0.9999731 -0.997043860
## 20    -0.9999804 -0.9999773 -0.9999900 -0.9999666 -0.9999825 -0.999892780
## 21    -0.9999708 -0.9999691 -0.9999334 -0.9999932 -0.9999634 -0.997252530
## 22    -0.9999676 -0.9999761 -0.9999189 -0.9999903 -0.9999637 -0.996710690
## 23    -0.9999758 -0.9999822 -0.9999481 -0.9999659 -0.9999737 -0.995962980
## 24    -0.9999840 -0.9999657 -0.9997933 -0.9999761 -0.9999826 -0.995084210
## 25    -0.9999716 -0.9999337 -0.9998092 -0.9999593 -0.9999679 -0.994278630
## 26    -0.9999650 -0.9999430 -0.9998773 -0.9999700 -0.9999550 -0.993639190
## 27    -0.9999538 -0.9999698 -0.9999401 -0.9999844 -0.9999575 -0.996386090
## 28    -0.9989027 -0.9977411 -0.9923110 -0.9963564 -0.9989127 -0.446629920
## 29    -0.9999455 -0.9998951 -0.9998380 -0.9993817 -0.9999550 -0.953626580
## 30    -0.9999020 -0.9997642 -0.9990286 -0.9993115 -0.9998766 -0.976706950
## 31    -0.9934442 -0.9963372 -0.9866695 -0.9058251 -0.9973305 -0.612648510
## 32    -0.9947334 -0.9987523 -0.9982776 -0.8779472 -0.9986776 -0.682193670
## 33    -0.9984363 -0.9941976 -0.9847795 -0.9601356 -0.9976607 -0.691858520
## 34    -0.9999751 -0.9998971 -0.9998628 -0.9996575 -0.9999460 -0.905495940
## 35    -0.9999612 -0.9998659 -0.9996545 -0.9996409 -0.9999346 -0.968615660
## 36    -0.9999318 -0.9999577 -0.9997461 -0.9998559 -0.9999621 -0.996838060
## 37    -0.9999350 -0.9999329 -0.9999263 -0.9999241 -0.9999359 -0.998355020
```

```
## 38   -0.9999559 -0.9999435 -0.9999839 -0.9999786 -0.9999502 -0.996426270
## 39   -0.9978398 -0.9960765 -0.9831858 -0.9870126 -0.9974809 -0.945263100
## 40   -0.9975105 -0.9954491 -0.9813245 -0.9863102 -0.9973578 -0.968581750
## 41   -0.9993257 -0.9986243 -0.9941367 -0.9947753 -0.9992035 -0.995971660
## 42   -0.9999457 -0.9999146 -0.9996803 -0.9995943 -0.9999549 -0.993620200
## 43   -0.9999555 -0.9999523 -0.9998480 -0.9997516 -0.9999752 -0.993139050
## 44   -0.9999789 -0.9999648 -0.9999430 -0.9998579 -0.9999786 -0.993342200
## 45   -0.9999390 -0.9999307 -0.9998605 -0.9998164 -0.9999472 -0.994725150
## 46   -0.9999641 -0.9999556 -0.9999583 -0.9998879 -0.9999801 -0.998129250
## 47   -0.9999683 -0.9999568 -0.9999290 -0.9998847 -0.9999642 -0.997601470
## 48   -0.9999372 -0.9999704 -0.9999598 -0.9999369 -0.9999627 -0.995517660
## 49   -0.9999265 -0.9999309 -0.9998165 -0.9998960 -0.9999495 -0.994909020
## 50   -0.9999593 -0.9999381 -0.9999606 -0.9998921 -0.9999588 -0.996348850
## 51   -0.9999719 -0.9999573 -0.9999731 -0.9998859 -0.9999784 -0.995933910
## 52   -0.9973091 -0.9958632 -0.9821319 -0.9818478 -0.9975842 -0.875109570
## 53   -0.9989598 -0.9981979 -0.9925585 -0.9938737 -0.9989294 -0.982180970
## 54   -0.9996828 -0.9994053 -0.9979944 -0.9984049 -0.9996694 -0.995060570
## 55   -0.9999522 -0.9999554 -0.9999342 -0.9998952 -0.9999493 -0.998390810
## 56   -0.9999822 -0.9999595 -0.9998476 -0.9999604 -0.9999723 -0.997733220
## 57   -0.9999615 -0.9999399 -0.9998465 -0.9999634 -0.9999645 -0.994853360
## 58   -0.9999675 -0.9999868 -0.9999299 -0.9998437 -0.9999809 -0.996036830
## 59   -0.9999743 -0.9999723 -0.9999267 -0.9999655 -0.9999736 -0.993903790
## 60   -0.9999636 -0.9999554 -0.9999536 -0.9999565 -0.9999567 -0.993347050
## 61   -0.9999637 -0.9999420 -0.9999261 -0.9999621 -0.9999618 -0.993806930
## 62   -0.9999779 -0.9999701 -0.9999547 -0.9999677 -0.9999800 -0.996296520
## 63   -0.9999737 -0.9999768 -0.9999546 -0.9999599 -0.9999858 -0.998112900
## 64   -0.9999707 -0.9999588 -0.9999613 -0.9999506 -0.9999691 -0.998310410
## 65   -0.9972958 -0.9986877 -0.9995834 -0.9915051 -0.9978719 -0.477863510
## 66   -0.9983941 -0.9976817 -0.9908344 -0.9899931 -0.9985746 -0.967409350
## 67   -0.9866719 -0.9974495 -0.9968244 -0.9044003 -0.9942943 -0.405261740
## 68   -0.9863222 -0.9971293 -0.9972167 -0.9174755 -0.9935389 -0.502021820
## 69   -0.9971185 -0.9972719 -0.9896050 -0.9972152 -0.9976821 -0.792322730
## 70   -0.9818420 -0.9864612 -0.9522708 -0.9296264 -0.9878097 -0.716397470
## 71   -0.9676970 -0.9899621 -0.9882747 -0.9084903 -0.9829143 -0.091821255
## 72   -0.9685166 -0.9754318 -0.9455075 -0.9636465 -0.9780209 -0.220785000
## 73   -0.9991117 -0.9994618 -0.9991072 -0.9921632 -0.9992387 -0.498567770
## 74   -0.9999247 -0.9998696 -0.9996769 -0.9992291 -0.9999196 -0.781428950
## 75   -0.9998689 -0.9998650 -0.9996101 -0.9994083 -0.9999117 -0.945372250
## 76   -0.9999557 -0.9999215 -0.9998747 -0.9997482 -0.9999429 -0.991861080
## 77   -0.9999754 -0.9999664 -0.9998669 -0.9999224 -0.9999771 -0.993300240
## 78   -0.9999845 -0.9999812 -0.9999354 -0.9999665 -0.9999913 -0.994454290
## 79   -0.8201533 -0.8435720 -0.9738491 -0.8619159 -0.8849515 -0.166810830
## 80   -0.8002198 -0.8671719 -0.9811275 -0.8334474 -0.8568723 -0.079277624
## 81   -0.8109721 -0.8151067 -0.8315071 -0.8002947 -0.8501821 -0.156312580
## 82   -0.7316636 -0.8114453 -0.8653982 -0.7518321 -0.8432002 -0.104376890
## 83   -0.8032218 -0.9106797 -0.9036214 -0.7676707 -0.9108257 -0.123195320
## 84   -0.8698221 -0.9443936 -0.9203635 -0.8068923 -0.9435747 -0.200025010
## 85   -0.8493042 -0.9366617 -0.9776568 -0.7798535 -0.8827939 -0.148472210
## 86   -0.7824542 -0.8820533 -0.9537466 -0.7680928 -0.8348611 -0.110826940
## 87   -0.9376109 -0.9366322 -0.9013889 -0.8417777 -0.9506490 -0.258717170
```

```
## 88   -0.8462245 -0.8904661 -0.9762260 -0.8143563 -0.9013579 -0.163223910
## 89   -0.8321787 -0.8446455 -0.8662167 -0.7980562 -0.8860593 -0.222277430
## 90   -0.7887080 -0.8754137 -0.8705160 -0.7741832 -0.9019575 -0.151677090
## 91   -0.8120894 -0.8763748 -0.9510956 -0.7663740 -0.9290412 -0.150975810
## 92   -0.7682774 -0.8096970 -0.6597778 -0.7817545 -0.9038056 -0.075130477
## 93   -0.7364993 -0.8667727 -0.9194259 -0.7537774 -0.8700658 -0.059139200
## 94   -0.7585331 -0.8327991 -0.9384216 -0.7404705 -0.8555972 -0.129876570
## 95   -0.7819400 -0.8704749 -0.9206094 -0.7700354 -0.8844570 -0.115335250
## 96   -0.8327625 -0.8319654 -0.6781059 -0.7653790 -0.8354478 -0.114925390
## 97   -0.7986357 -0.9282269 -0.8882940 -0.7392851 -0.9152140 -0.143827470
## 98   -0.8356699 -0.9144465 -0.6930057 -0.7645790 -0.8958258 -0.197115930
## 99   -0.7371756 -0.8921210 -0.9498136 -0.7401610 -0.8823632 -0.022933620
## 100  -0.7131746 -0.8616887 -0.8994420 -0.7729655 -0.8744829 -0.039440660
## 101  -0.7318344 -0.8873548 -0.9485844 -0.8077665 -0.8718347 -0.141775400
## 102  -0.6832180 -0.7648390 -0.9168028 -0.7703716 -0.8376509 -0.046588109
## 103  -0.8164465 -0.8406875 -0.9547412 -0.7652582 -0.8845490 -0.065555728
## 104  -0.8862654 -0.9665122 -0.9840744 -0.7908344 -0.9507271 -0.002528951
## 105  -0.8888637 -0.9436732 -0.9319954 -0.8042309 -0.9436285 -0.055347995
## 106  -0.8846735 -0.9228023 -0.9263492 -0.8168726 -0.9324600 -0.166751880
## 107  -0.8573017 -0.7708313 -0.9492399 -0.7944619 -0.8573715 -0.052787972
## 108  -0.7471973 -0.7379166 -0.9654349 -0.7785408 -0.8505857 -0.068781145
## 109  -0.7886629 -0.8388612 -0.9277574 -0.7775017 -0.9049891 -0.204357890
## 110  -0.8332453 -0.9328251 -0.8240617 -0.7664671 -0.9294367 -0.171835170
## 111  -0.8914366 -0.9174603 -0.9311898 -0.7657850 -0.9158740 -0.205962820
## 112  -0.8302790 -0.9117476 -0.9056154 -0.7696422 -0.8939994  0.011039192
## 113  -0.8923973 -0.9394968 -0.8755994 -0.7766507 -0.9564148 -0.116977740
## 114  -0.9026222 -0.9485999 -0.9237117 -0.7380777 -0.9591275 -0.192950400
## 115  -0.9306486 -0.9500616 -0.9573028 -0.7740197 -0.9544864 -0.157198150
## 116  -0.8802955 -0.9063714 -0.9272030 -0.7944311 -0.9138073 -0.085015447
## 117  -0.8296855 -0.8797187 -0.9390983 -0.7633510 -0.8828239 -0.180156890
## 118  -0.8688907 -0.8925650 -0.9663781 -0.7816049 -0.8870302 -0.191083060
## 119  -0.9309004 -0.9400846 -0.8429465 -0.7939544 -0.9360922 -0.239260920
## 120  -0.8972629 -0.9569863 -0.9420824 -0.7962641 -0.9299987 -0.240662070
## 121  -0.8747012 -0.9293427 -0.7139638 -0.8037154 -0.9093876 -0.211265650
## 122  -0.8787056 -0.8628899 -0.7659067 -0.7481036 -0.8685215 -0.221001860
## 123  -0.8614479 -0.8755293 -0.7898438 -0.7018142 -0.8835363 -0.200861080
## 124  -0.8832058 -0.9214754 -0.8214099 -0.7563608 -0.9424610 -0.187761340
## 125  -0.8916128 -0.9485436 -0.9223196 -0.7800024 -0.9544800 -0.249378480
## 126  -0.7724471 -0.7312096 -0.9238633 -0.7949052 -0.7767586 -0.147077630
## 127  -0.8045119 -0.9437629 -0.9291073 -0.7630571 -0.9523718 -0.053807078
## 128  -0.7219681 -0.9140648 -0.9670083 -0.7308343 -0.9028069 -0.026763659
## 129  -0.7563231 -0.8659801 -0.9453611 -0.7202238 -0.8844877  0.138577620
## 130  -0.7085673 -0.9092104 -0.9692844 -0.6631067 -0.8986917  0.248447290
## 131  -0.5710481 -0.9201264 -0.9031446 -0.5588418 -0.8994235  0.268610360
## 132  -0.5765740 -0.8996646 -0.9097616 -0.6069501 -0.8350371  0.157865580
## 133  -0.7242668 -0.8681158 -0.9717713 -0.6763669 -0.8307641  0.010734004
## 134  -0.7521999 -0.9059455 -0.9406571 -0.7139158 -0.9399179 -0.054364745
## 135  -0.6306957 -0.9473896 -0.9194827 -0.5850435 -0.9162245  0.377432290
## 136  -0.5793925 -0.9139122 -0.9397785 -0.6023001 -0.8928255  0.275855100
## 137  -0.5473936 -0.8551686 -0.9708368 -0.5631916 -0.8926068  0.274567190
```

```
## 138 -0.4505360 -0.8112262 -0.9118858 -0.3833241 -0.7850547  0.271324150
## 139 -0.5506445 -0.7156201 -0.8075682 -0.3977377 -0.7394903  0.007817413
## 140 -0.7968899 -0.9281977 -0.9675150 -0.6340853 -0.9308761  0.156690040
## 141 -0.8061230 -0.9164620 -0.9602199 -0.6520776 -0.9363316  0.191988340
## 142 -0.7672120 -0.9273053 -0.9367440 -0.5759458 -0.9278018  0.113188000
## 143 -0.6755080 -0.9191197 -0.7885951 -0.6526606 -0.9082025  0.048161100
## 144 -0.6590831 -0.9008466 -0.8335233 -0.6579123 -0.9184650  0.053860651
## 145 -0.5461053 -0.6380325 -0.4624649 -0.5771110 -0.6772296 -0.005300971
## 146 -0.6248626 -0.8716650 -0.9493386 -0.5874314 -0.8609451  0.083741909
## 147 -0.8349668 -0.8572426 -0.8198230 -0.6385439 -0.9109016  0.076517098
## 148 -0.8398119 -0.9452064 -0.9069095 -0.6685779 -0.9483658  0.001876667
## 149 -0.7025302 -0.9394942 -0.9652119 -0.7324947 -0.9053798 -0.039549145
## 150 -0.6399155 -0.9179413 -0.9564514 -0.6895099 -0.8822117 -0.098982247
## 151 -0.9462400 -0.9884998 -0.9980614 -0.9025595 -0.9742621 -0.363590190
## 152 -0.9398548 -0.9355128 -0.8747803 -0.9071606 -0.9581370 -0.430649140
## 153 -0.9642090 -0.9804247 -0.9753397 -0.8309122 -0.9869627 -0.402604350
## 154 -0.9246695 -0.9455768 -0.8674541 -0.8000573 -0.9653209 -0.273771580
## 155 -0.8958666 -0.9794083 -0.9796068 -0.8554448 -0.9772289 -0.289538560
## 156 -0.9378079 -0.9857820 -0.9599880 -0.8554508 -0.9815713 -0.370702250
## 157 -0.9666838 -0.9795359 -0.9880065 -0.8868451 -0.9676170 -0.383524270
## 158 -0.9366141 -0.9770515 -0.9700264 -0.9107548 -0.9725733 -0.433192690
## 159 -0.9394411 -0.9838437 -0.9941933 -0.9267978 -0.9848598 -0.257361650
## 160 -0.9234167 -0.9838575 -0.9756452 -0.9220580 -0.9759212 -0.398023630
## 161 -0.9157032 -0.9766304 -0.9921227 -0.7624165 -0.9671492 -0.429526600
## 162 -0.9131987 -0.9796420 -0.9604402 -0.7849465 -0.9695925 -0.444260290
## 163 -0.9462745 -0.9788922 -0.9779003 -0.8989676 -0.9730960 -0.413056060
## 164 -0.9321559 -0.9779004 -0.9761518 -0.8853762 -0.9841482 -0.369798670
## 165 -0.9048786 -0.9704379 -0.9919542 -0.9245847 -0.9687858 -0.426934230
## 166 -0.9246417 -0.9867908 -0.9739451 -0.9198509 -0.9743785 -0.475321680
## 167 -0.9653499 -0.9833681 -0.9732265 -0.9437751 -0.9838879 -0.451614040
## 168 -0.9444944 -0.9633973 -0.9233337 -0.9278310 -0.9730431 -0.481493370
## 169 -0.9031748 -0.9821024 -0.9831933 -0.9194495 -0.9817525 -0.346311900
## 170 -0.8940689 -0.9821502 -0.9782054 -0.8304619 -0.9811645 -0.279501840
## 171 -0.9201488 -0.9870817 -0.9652654 -0.8284153 -0.9874600 -0.387876890
## 172 -0.9420049 -0.9821003 -0.9568795 -0.8988821 -0.9771157 -0.410504280
## 173 -0.9497802 -0.9870213 -0.9705459 -0.8934642 -0.9853855 -0.375203050
## 174 -0.9261413 -0.9728246 -0.9619054 -0.8992375 -0.9630371 -0.258850170
## 175 -0.9229486 -0.9799018 -0.9921504 -0.9098709 -0.9689413 -0.355874840
## 176 -0.8910579 -0.9664940 -0.9556744 -0.9178603 -0.9720128 -0.214629690
## 177 -0.9993075 -0.9986582 -0.9960792 -0.9949591 -0.9992483 -0.933129920
##              NA          NA          NA          NA          NA
NA
## 1   -0.95613397 -0.94887014 -0.97432057 -0.92572179 -0.952154660 -
0.9982852
## 2    -0.97586576 -0.97577688 -0.97822635 -0.98691082 -0.980856620 -
0.9994719
## 3    -0.98901548 -0.98559356 -0.99306187 -0.98983636 -0.987794770 -
0.9998067
## 4    -0.98674196 -0.98352367 -0.99022991 -0.99818503 -0.987518660 -
0.9997702
```

```
## 5    -0.99006346 -0.99232413 -0.99050589 -0.98780516 -0.993590850 -
0.9998731
## 6    -0.99528330 -0.99385116 -0.99536504 -0.98947223 -0.994835990 -
0.9999390
## 7    -0.98477295 -0.98249004 -0.98862486 -0.97467067 -0.982134710 -
0.9996765
## 8    -0.97511950 -0.97682912 -0.97516477 -0.99802530 -0.982184130 -
0.9994699
## 9    -0.97668290 -0.97926401 -0.97792751 -0.98402192 -0.983130800 -
0.9995203
## 10   -0.98902313 -0.98782548 -0.99091377 -0.99613613 -0.984994030 -
0.9997768
## 11   -0.98718871 -0.98676484 -0.98862772 -0.98558026 -0.985696560 -
0.9997578
## 12   -0.99671395 -0.99471911 -0.99737079 -0.99297937 -0.995137800 -
0.9999527
## 13   -0.99678792 -0.99623576 -0.99675935 -0.99465355 -0.995953670 -
0.9999591
## 14   -0.99848118 -0.99773575 -0.99907760 -0.99473083 -0.997757260 -
0.9999822
## 15   -0.83625317 -0.88354181 -0.83321168 -0.92258320 -0.903838530 -
0.9856803
## 16   -0.98608288 -0.98524141 -0.99026567 -0.99427255 -0.991367650 -
0.9997963
## 17   -0.99011174 -0.98799344 -0.99415680 -0.99648651 -0.992731570 -
0.9998668
## 18   -0.99230619 -0.99048642 -0.99402032 -0.99738066 -0.993433490 -
0.9998989
## 19   -0.99731449 -0.99561960 -0.99797123 -0.98951841 -0.997043860 -
0.9999702
## 20   -0.99727464 -0.99710355 -0.99809984 -0.99348258 -0.999892780 -
0.9999869
## 21   -0.99819256 -0.99724765 -0.99911997 -0.98863413 -0.997252530 -
0.9999773
## 22   -0.99781715 -0.99640334 -0.99825313 -0.99159559 -0.996710690 -
0.9999714
## 23   -0.99819100 -0.99671293 -0.99896053 -0.99090310 -0.995962980 -
0.9999687
## 24   -0.99755630 -0.99635247 -0.99798807 -0.98529155 -0.995084210 -
0.9999583
## 25   -0.99537148 -0.99439497 -0.99529685 -0.98481203 -0.994278630 -
0.9999356
## 26   -0.99500518 -0.99333740 -0.99603375 -0.98308983 -0.993639190 -
0.9999275
## 27   -0.99864097 -0.99825222 -0.99883873 -0.99187635 -0.996386090 -
0.9999743
## 28   -0.19941645 -0.35864225 -0.22448761 -0.19531749 -0.446629920 -
0.6647223
## 29   -0.93096339 -0.95062368 -0.92572474 -0.93996083 -0.953626580 -
0.9970138
```

```
## 30   -0.97121390 -0.97145278 -0.97763989 -0.98552478 -0.976706950 -
0.9992902
## 31   -0.53386872 -0.56971946 -0.57988960 -0.79963571 -0.612648510 -
0.8752346
## 32   -0.48814760 -0.56621364 -0.53689258 -0.89882189 -0.682193670 -
0.8663695
## 33   -0.47811404 -0.65907776 -0.45642666 -0.65463618 -0.691858520 -
0.8632297
## 34   -0.90262603 -0.90132679 -0.93386759 -0.87521346 -0.905495940 -
0.9933124
## 35   -0.95600866 -0.95723704 -0.96183827 -0.97054833 -0.968615660 -
0.9986255
## 36   -0.99428267 -0.99471872 -0.99373926 -0.99231342 -0.996838060 -
0.9999440
## 37   -0.99914369 -0.99879910 -0.99916311 -0.99265319 -0.998355020 -
0.9999897
## 38   -0.99473344 -0.99294616 -0.99741915 -0.99623476 -0.996426270 -
0.9999454
## 39   -0.95362659 -0.94319124 -0.97106976 -0.94809061 -0.945263100 -
0.9980024
## 40   -0.94488385 -0.95852790 -0.94482835 -0.98368912 -0.968581750 -
0.9981116
## 41   -0.99538682 -0.99399387 -0.99722930 -0.99154646 -0.995971660 -
0.9999481
## 42   -0.99409828 -0.99251046 -0.99552426 -0.99382020 -0.993620200 -
0.9999190
## 43   -0.99271444 -0.99185734 -0.99325503 -0.99295917 -0.993139050 -
0.9999010
## 44   -0.99326591 -0.99118565 -0.99602189 -0.99985060 -0.993342200 -
0.9999085
## 45   -0.99349154 -0.99145924 -0.99653177 -0.99489533 -0.994725150 -
0.9999214
## 46   -0.99681386 -0.99602734 -0.99769117 -0.99111720 -0.998129250 -
0.9999735
## 47   -0.99838757 -0.99810681 -0.99815158 -0.99142756 -0.997601470 -
0.9999807
## 48   -0.99715980 -0.99568965 -0.99868349 -0.99068345 -0.995517660 -
0.9999587
## 49   -0.99478688 -0.99354818 -0.99576677 -0.98793960 -0.994909020 -
0.9999352
## 50   -0.99365615 -0.99400280 -0.99269322 -0.99633078 -0.996348850 -
0.9999346
## 51   -0.99473486 -0.99329207 -0.99666357 -0.99046271 -0.995933910 -
0.9999421
## 52   -0.83619631 -0.84740112 -0.84980062 -0.99799715 -0.875109570 -
0.9842649
## 53   -0.97848445 -0.97996146 -0.98166050 -0.99627999 -0.982180970 -
0.9995510
## 54   -0.99677722 -0.99632787 -0.99617555 -0.99275771 -0.995060570 -
0.9999526
```

```
## 55   -0.99844942 -0.99906870 -0.99798188 -0.99316466 -0.998390810 -
0.9999859
## 56   -0.99828295 -0.99775192 -0.99883147 -0.99202255 -0.997733220 -
0.9999809
## 57   -0.99650887 -0.99500852 -0.99776620 -0.98504742 -0.994853360 -
0.9999491
## 58   -0.99629933 -0.99516517 -0.99758733 -0.99927753 -0.996036830 -
0.9999560
## 59   -0.99533504 -0.99279930 -0.99711040 -0.99986552 -0.993903790 -
0.9999324
## 60   -0.99435238 -0.99178736 -0.99691633 -0.99450868 -0.993347050 -
0.9999192
## 61   -0.99745177 -0.99506529 -0.99917919 -0.98632793 -0.993806930 -
0.9999480
## 62   -0.99729675 -0.99666019 -0.99727577 -0.99252589 -0.996296520 -
0.9999651
## 63   -0.99865220 -0.99804386 -0.99894613 -0.99887903 -0.998112900 -
0.9999854
## 64   -0.99863947 -0.99823885 -0.99935941 -0.99137088 -0.998310410 -
0.9999866
## 65   -0.47576196 -0.46247720 -0.57542402 -0.44825807 -0.477863510 -
0.8259663
## 66   -0.91479967 -0.94552287 -0.91043131 -0.99719426 -0.967409350 -
0.9961838
## 67    0.08567896 -0.22544394  0.07533267 -0.84105201 -0.405261740 -
0.4288307
## 68   -0.11108042 -0.32305095 -0.13676288 -0.92630462 -0.502021820 -
0.6136707
## 69   -0.80375155 -0.80047739 -0.85336242 -0.71267847 -0.792322730 -
0.9733478
## 70   -0.73690231 -0.70248776 -0.79700769 -0.96734549 -0.716397470 -
0.9524191
## 71    0.28069657  0.11447239  0.21520352 -0.83680756 -0.091821255 -
0.1401873
## 72   -0.10278022 -0.04305793 -0.27849902 -0.82489875 -0.220785000 -
0.5350098
## 73   -0.02681239 -0.29136896 -0.03563692 -0.80128563 -0.498567770 -
0.5469348
## 74   -0.77156888 -0.77148933 -0.82613308 -0.63064720 -0.781428950 -
0.9665048
## 75   -0.91127373 -0.93144618 -0.91080905 -0.95951051 -0.945372250 -
0.9954135
## 76   -0.98949070 -0.98811402 -0.99295051 -0.99353922 -0.991861080 -
0.9998513
## 77   -0.99151132 -0.99207497 -0.99282692 -0.98715224 -0.993300240 -
0.9998887
## 78   -0.99567097 -0.99486691 -0.99665622 -0.99017094 -0.994454290 -
0.9999395
## 79   -0.39958295 -0.23747109 -0.63674840 -0.82832016 -0.166810830 -
0.7048736
```

```
## 80   -0.42303003 -0.19937051 -0.66391303 -0.84986604 -0.079277624 -
0.6857528
## 81   -0.43685834 -0.24624970 -0.63334482 -0.84202162 -0.156312580 -
0.7196598
## 82   -0.37621527 -0.18784769 -0.67156044 -0.89017598 -0.104376890 -
0.6711534
## 83   -0.38785963 -0.22737599 -0.61853937 -0.86660389 -0.123195320 -
0.6839141
## 84   -0.37817216 -0.24195139 -0.59118420 -0.77881568 -0.200025010 -
0.7047134
## 85   -0.40610227 -0.20791903 -0.65368391 -0.77718692 -0.148472210 -
0.7019635
## 86   -0.42757093 -0.23658768 -0.64720321 -0.84812811 -0.110826940 -
0.6993996
## 87   -0.46375538 -0.26177004 -0.66204365 -0.91953181 -0.258717170 -
0.7647481
## 88   -0.40834585 -0.21169119 -0.67432396 -0.91009352 -0.163223910 -
0.7080826
## 89   -0.39548541 -0.28103780 -0.55917162 -0.88480608 -0.222277430 -
0.7207266
## 90   -0.43246540 -0.26351646 -0.69826151 -0.29874435 -0.151677090 -
0.7159882
## 91   -0.37214606 -0.21200014 -0.60800676 -0.88035996 -0.150975810 -
0.6853039
## 92   -0.31689723 -0.10659188 -0.57871410 -0.93973147 -0.075130477 -
0.6277783
## 93   -0.34641000 -0.14025196 -0.64306092 -0.81553558 -0.059139200 -
0.6384431
## 94   -0.40451684 -0.26149451 -0.61984314 -0.89421736 -0.129876570 -
0.6947469
## 95   -0.38831632 -0.27516616 -0.56543598 -0.83291880 -0.115335250 -
0.6813745
## 96   -0.38895614 -0.19857323 -0.67465230 -0.80382077 -0.114925390 -
0.6815593
## 97   -0.41830027 -0.32315594 -0.62341220 -0.61620328 -0.143827470 -
0.7064284
## 98   -0.42225968 -0.25935342 -0.64689921 -0.97119075 -0.197115930 -
0.7261070
## 99   -0.45130248 -0.22349939 -0.73117461 -0.69741544 -0.022933620 -
0.6777859
## 100 -0.40432436 -0.22903125 -0.63549518 -0.60443395 -0.039440660 -
0.6614798
## 101 -0.42086558 -0.26239780 -0.63541139 -0.80469096 -0.141775400 -
0.7069806
## 102 -0.36757695 -0.20002766 -0.63153053 -0.96933967 -0.046588109 -
0.6451682
## 103 -0.31192581 -0.15431834 -0.62862869 -0.73086752 -0.065555728 -
0.6213375
## 104 -0.33226361 -0.14452073 -0.64564695 -0.57464247 -0.002528951 -
0.6085907
```

```
## 105 -0.35198053 -0.19129845 -0.61598466 -0.56359519 -0.055347995 -
0.6400707
## 106 -0.38048312 -0.23433524 -0.61222381 -0.91647828 -0.166751880 -
0.6950174
## 107 -0.35713929 -0.17919034 -0.63964231 -0.57879339 -0.052787972 -
0.6419107
## 108 -0.38767610 -0.20296133 -0.62472927 -0.72426131 -0.068781145 -
0.6641044
## 109 -0.40762296 -0.22681743 -0.62364878 -0.66245975 -0.204357890 -
0.7211983
## 110 -0.41305487 -0.27538364 -0.65267423 -0.69007193 -0.171835170 -
0.7133031
## 111 -0.39688383 -0.25987459 -0.64269526 -0.54321029 -0.205962820 -
0.7162897
## 112 -0.27529782 -0.05626320 -0.59274676 -0.32974257  0.011039192 -
0.5696893
## 113 -0.43790994 -0.34143117 -0.58020015 -0.60354207 -0.116977740 -
0.7065399
## 114 -0.44548666 -0.33560256 -0.64176805 -0.71074565 -0.192950400 -
0.7358708
## 115 -0.39052727 -0.20403065 -0.63354414 -0.77446160 -0.157198150 -
0.6970158
## 116 -0.39987027 -0.16675048 -0.70852718 -0.64840821 -0.085015447 -
0.6763505
## 117 -0.40652713 -0.24712237 -0.66215693 -0.78862582 -0.180156890 -
0.7128013
## 118 -0.45611943 -0.28972489 -0.69796347 -0.89652684 -0.191083060 -
0.7402004
## 119 -0.46963574 -0.33497358 -0.69386739 -0.65614909 -0.239260920 -
0.7615256
## 120 -0.45541626 -0.31338779 -0.64794870 -0.79200535 -0.240662070 -
0.7554929
## 121 -0.46186526 -0.31075763 -0.60679385 -0.74511553 -0.211265650 -
0.7493021
## 122 -0.47647705 -0.38364150 -0.60133995 -0.76163840 -0.221001860 -
0.7589255
## 123 -0.41643307 -0.21985655 -0.67722512 -0.80139719 -0.200861080 -
0.7244537
## 124 -0.40865994 -0.27212217 -0.62238105 -0.59752137 -0.187761340 -
0.7163594
## 125 -0.44519626 -0.28873301 -0.63882508 -0.79164395 -0.249378480 -
0.7533900
## 126 -0.33831993 -0.23332092 -0.56714890 -0.78418855 -0.147077630 -
0.6655677
## 127 -0.29207170 -0.14892143 -0.50264797 -0.59110853 -0.053807078 -
0.6052251
## 128 -0.20700112 -0.08032467 -0.43421489 -0.75444348 -0.026763659 -
0.5410206
## 129 -0.22251210  0.09270235 -0.52382836 -0.58984108  0.138577620 -
0.4814619
```

```
## 130 -0.03830473  0.22134381 -0.40912730 -0.56063939  0.248447290 -
0.2942153
## 131 -0.03403942  0.26255105 -0.37673492 -0.87856409  0.268610360 -
0.2806281
## 132 -0.18617267  0.08045982 -0.46336333 -0.74260635  0.157865580 -
0.4482532
## 133 -0.30703554 -0.11307360 -0.51086433 -0.65222305  0.010734004 -
0.5887831
## 134 -0.32405894 -0.11303173 -0.59620105 -0.94522695 -0.054364745 -
0.6241036
## 135 -0.03296628  0.15986074 -0.26154387  0.01695744  0.377432290 -
0.2223232
## 136 -0.10633862  0.14118059 -0.37106071 -0.64772400  0.275855100 -
0.3335313
## 137 -0.14492281  0.06559708 -0.38061389 -0.88492958  0.274567190 -
0.3625930
## 138 -0.17078319  0.07723679 -0.53550399 -0.70372433  0.271324150 -
0.3825821
## 139 -0.14201012  0.04672519 -0.36494050 -0.61875708  0.007817413 -
0.4821203
## 140 -0.32634636 -0.04927885 -0.65879304 -0.56997914  0.156690040 -
0.5366753
## 141 -0.16778508  0.07560507 -0.48394398 -0.39289295  0.191988340 -
0.4194926
## 142 -0.02773711  0.08666481 -0.21007461 -0.76726608  0.113188000 -
0.3494061
## 143 -0.22215207 -0.04032926 -0.38550059 -0.61370302  0.048161100 -
0.5207453
## 144 -0.27974165 -0.09317206 -0.42662768 -0.69691564  0.053860651 -
0.5547099
## 145 -0.32157475 -0.17219581 -0.53230968 -0.42830029 -0.005300971 -
0.6036266
## 146 -0.13070057  0.10606529 -0.50724730 -0.68071113  0.083741909 -
0.4421372
## 147  0.01736798  0.13261574 -0.19225908 -0.62662791  0.076517098 -
0.3277034
## 148 -0.24093073 -0.04322927 -0.44556131 -0.27555441  0.001876667 -
0.5518873
## 149 -0.39046852 -0.14141798 -0.59636874 -0.66798826 -0.039549145 -
0.6544710
## 150 -0.21122453 -0.11974317 -0.32197320 -0.80784096 -0.098982247 -
0.5709448
## 151 -0.42210080 -0.31780032 -0.59098263 -0.94264399 -0.363590190 -
0.7742254
## 152 -0.45970951 -0.42349724 -0.55905631 -0.89564090 -0.430649140 -
0.8083158
## 153 -0.53649165 -0.37819319 -0.77071220 -0.81834475 -0.402604350 -
0.8343068
## 154 -0.44179793 -0.31233251 -0.61938446 -0.80230828 -0.273771580 -
0.7590348
```

```
## 155 -0.40295390 -0.26970502 -0.59437033 -0.85266724 -0.289538560 -
0.7446375
## 156 -0.52382816 -0.43821383 -0.62952894 -0.76491226 -0.370702250 -
0.8213727
## 157 -0.48873370 -0.37562560 -0.62348043 -0.82912853 -0.383524270 -
0.8099343
## 158 -0.45599537 -0.39828021 -0.58495259 -0.96452779 -0.433192690 -
0.8071979
## 159 -0.33008445 -0.19878828 -0.52971343 -0.93846616 -0.257361650 -
0.6962725
## 160 -0.38779068 -0.32067291 -0.54902647 -0.96127217 -0.398023630 -
0.7655866
## 161 -0.48039948 -0.38051597 -0.62810448 -0.89391618 -0.429526600 -
0.8173275
## 162 -0.50732136 -0.42958278 -0.60638946 -0.92681150 -0.444260290 -
0.8322087
## 163 -0.54416815 -0.47306556 -0.61821637 -0.78770879 -0.413056060 -
0.8397947
## 164 -0.49256875 -0.37466784 -0.63611173 -0.77847168 -0.369798670 -
0.8081348
## 165 -0.37076367 -0.38233295 -0.45172304 -0.98955032 -0.426934230 -
0.7635259
## 166 -0.37800451 -0.33116330 -0.48260854 -0.98734019 -0.475321680 -
0.7780956
## 167 -0.43161213 -0.30937051 -0.56648233 -0.87768719 -0.451614040 -
0.7998918
## 168 -0.36809851 -0.36902996 -0.47428478 -0.95777495 -0.481493370 -
0.7741573
## 169 -0.36217836 -0.33495694 -0.45263421 -0.98187045 -0.346311900 -
0.7389773
## 170 -0.44796859 -0.28742925 -0.61317421 -0.97618227 -0.279501840 -
0.7635969
## 171 -0.45531018 -0.30264384 -0.59888452 -0.91682257 -0.387876890 -
0.7960927
## 172 -0.51907096 -0.35926551 -0.68705491 -0.87827104 -0.410504280 -
0.8292361
## 173 -0.46716453 -0.35106829 -0.61579258 -0.65230805 -0.375203050 -
0.7983288
## 174 -0.38286010 -0.24027966 -0.60394665 -0.61442558 -0.258850170 -
0.7253782
## 175 -0.37182784 -0.32081949 -0.50741971 -0.68383387 -0.355874840 -
0.7466342
## 176 -0.41755600 -0.26130679 -0.62419777 -0.91515962 -0.214629690 -
0.7293876
## 177 -0.93372024 -0.92724115 -0.95565743 -0.99508846 -0.933129920 -
0.9966149
##              NA          NA          NA          NA          NA
NA
## 1   -0.97327320 -0.64637645 -0.79310345 -0.08843612 -0.436471040 -
0.79684048
```

```
## 2     -0.98447923 -0.81667357 -1.00000000 -0.04414989 -0.122040370 -
0.44952188
## 3     -0.98923709 -0.90701426 -0.86206897  0.25789914 -0.618725140 -
0.87968464
## 4     -0.98321531 -0.90701426 -1.00000000  0.07358150 -0.468422260 -
0.75649363
## 5     -0.99734330 -0.90701426 -1.00000000  0.39431033 -0.112662940 -
0.48180520
## 6     -0.99216668 -1.00000000 -1.00000000  0.43796212 -0.594643900 -
0.80918636
## 7     -0.98956356 -0.84367061 -1.00000000  0.21996177 -0.472765670 -
0.78376997
## 8     -0.98676714 -0.85353087 -1.00000000 -0.10976272  0.080451123 -
0.18372772
## 9     -0.98876537 -0.90701426 -1.00000000  0.08376704  0.037509800 -
0.29479210
## 10   -0.99274406 -0.90701426 -1.00000000  0.42582119 -0.477766680 -
0.76929939
## 11   -0.99158183 -0.90701426 -1.00000000  0.38084257 -0.321315820 -
0.65022749
## 12   -0.99277243 -1.00000000 -0.93103448  0.51963263 -0.765526900 -
0.93057052
## 13   -0.99598175 -1.00000000 -1.00000000  0.49124359 -0.616811340 -
0.82255146
## 14   -0.99656495 -1.00000000  0.10344828  0.64707833 -0.794792130 -
0.95306546
## 15   -0.97055810 -0.53829907 -1.00000000 -0.32224521  0.599074230
0.43153537
## 16   -0.99209322 -0.87348170 -0.93103448 -0.07678501 -0.340054940 -
0.70672940
## 17   -0.99110205 -0.94618223 -1.00000000  0.01521530 -0.542040850 -
0.84788016
## 18   -0.99324286 -0.94618223 -1.00000000  0.19494092 -0.573115760 -
0.83731008
## 19   -0.99527720 -1.00000000  0.44827586  0.53206601 -0.793060130 -
0.94461524
## 20   -0.99860496 -1.00000000  0.44827586  0.66003688 -0.577484110 -
0.86062861
## 21   -0.99818826 -1.00000000 -0.24137931  0.66457149 -0.832925950 -
0.96462618
## 22   -0.99411708 -1.00000000 -0.86206897  0.68400956 -0.851733990 -
0.94714017
## 23   -0.99446943 -1.00000000 -0.17241379  0.63675107 -0.910951630 -
0.97754830
## 24   -0.99489082 -1.00000000 -0.93103448  0.60871588 -0.795201590 -
0.94007582
## 25   -0.99479742 -1.00000000 -0.44827586  0.48284287 -0.556203920 -
0.77936756
## 26   -0.99146693 -1.00000000 -0.72413793  0.49427509 -0.616192330 -
0.84953690
```

```
## 27  -0.99717918 -1.00000000  0.17241379  0.82097848 -0.864172300 -
0.94072021
## 28  -0.86361006 -0.10336335 -1.00000000 -0.33811215  0.428324750
0.19482511
## 29  -0.97881218 -0.69565438 -1.00000000 -0.08778160  0.656063810
0.54392943
## 30  -0.98715496 -0.81667357 -0.93103448 -0.10127908 -0.152840470 -
0.53087960
## 31  -0.83466503 -0.06245853 -1.00000000 -0.24293782  0.143314070 -
0.16925951
## 32  -0.85946451 -0.06323488 -1.00000000 -0.59724662  0.233579110 -
0.07411487
## 33  -0.88540448 -0.30537751 -1.00000000 -0.26523161  0.755115870
0.66127785
## 34  -0.95980706 -0.43649868 -0.93103448 -0.11713330 -0.203997350 -
0.61168847
## 35  -0.98689358 -0.75205571 -1.00000000 -0.21394221 -0.031712595 -
0.38416172
## 36  -0.99537342 -0.94618223 -1.00000000  0.38033394 -0.280536880 -
0.57325269
## 37  -0.99856571 -1.00000000  0.31034483  0.66066759 -0.786112560 -
0.94149513
## 38  -0.99771865 -1.00000000 -0.72413793  0.38033190 -0.687158350 -
0.93188083
## 39  -0.95876592 -0.57273386 -1.00000000 -0.02853605 -0.455449650 -
0.78507994
## 40  -0.98234642 -0.79053264 -1.00000000 -0.33615197  0.378061980
0.14053468
## 41  -0.99386779 -1.00000000 -0.86206897  0.32707443 -0.657757040 -
0.88829053
## 42  -0.99326839 -1.00000000 -0.79310345  0.27378135 -0.677049100 -
0.87871209
## 43  -0.99598460 -0.94618223 -1.00000000  0.24510134 -0.467295290 -
0.73202916
## 44  -0.99302873 -1.00000000 -1.00000000  0.18659809 -0.671334840 -
0.91484930
## 45  -0.99389088 -1.00000000 -1.00000000  0.19939188 -0.642956230 -
0.89832106
## 46  -0.99576901 -1.00000000 -0.86206897  0.35387450 -0.655847560 -
0.88928745
## 47  -0.99818734 -1.00000000 -0.86206897  0.52914200 -0.695601100 -
0.88314744
## 48  -0.99423739 -1.00000000  0.03448276  0.52384488 -0.802740820 -
0.95864923
## 49  -0.99421481 -1.00000000 -1.00000000  0.37447518 -0.557812230 -
0.81016026
## 50  -0.99342558 -0.94618223 -0.93103448  0.22505426 -0.207824400 -
0.46745805
## 51  -0.99519546 -1.00000000 -0.86206897  0.35759981 -0.603719460 -
0.86536477
```

```
## 52   -0.92999357 -0.36928054 -1.00000000 -0.24178745  0.157663920 -
0.13623738
## 53   -0.98898619 -0.87348170 -1.00000000  0.04290389 -0.131752830 -
0.49813681
## 54   -0.99691819 -1.00000000 -0.86206897  0.62369619 -0.587336840 -
0.78440328
## 55   -0.99961783 -1.00000000 -0.79310345  0.67738736 -0.585473940 -
0.83196640
## 56   -0.99828104 -1.00000000 -0.72413793  0.63957723 -0.761530670 -
0.93704919
## 57   -0.99491940 -1.00000000 -0.72413793  0.62589709 -0.741629680 -
0.92785309
## 58   -0.99609635 -1.00000000  0.17241379  0.60636694 -0.706110580 -
0.91978597
## 59   -0.98935076 -1.00000000 -0.86206897  0.43802823 -0.799184190 -
0.95376160
## 60   -0.99113198 -1.00000000  0.58620690  0.43934678 -0.791277510 -
0.95455156
## 61   -0.99342351 -1.00000000  0.17241379  0.63632658 -0.970821340 -
1.00000000
## 62   -0.99611271 -1.00000000 -0.31034483  0.67084064 -0.699876150 -
0.87492482
## 63   -0.99709687 -1.00000000 -0.37931034  0.76526070 -0.834581670 -
0.95307737
## 64   -0.99822091 -1.00000000 -0.58620690  0.80376417 -0.822096930 -
0.95927869
## 65   -0.78916800 -0.01808333 -1.00000000 -0.18196765 -0.102158570 -
0.46889333
## 66   -0.98407543 -0.79053264 -1.00000000 -0.59342129  0.725647990
0.61775949
## 67   -0.75509446  0.17207902 -1.00000000 -0.55561013  0.590537630
0.40207181
## 68   -0.62110584  0.13131830 -1.00000000 -0.69377653  0.507087810
0.28819371
## 69   -0.90959631 -0.15238405 -0.79310345  0.01374710 -0.120995880 -
0.51175831
## 70   -0.77097119  0.05952328 -1.00000000 -0.10590565 -0.271220480 -
0.61157207
## 71   -0.57300630  0.36499810 -1.00000000 -0.45908559  0.318115390
0.07977069
## 72   -0.56440966  0.44020127 -0.93103448 -0.44328399 -0.155628240 -
0.49771999
## 73   -0.81377965  0.03777883 -1.00000000 -0.65511382  0.584547070
0.40856170
## 74   -0.91745940 -0.13604918 -0.93103448 -0.17072521 -0.131988700 -
0.53642674
## 75   -0.97019898 -0.64343351 -1.00000000 -0.28774651  0.459313780
0.24983558
## 76   -0.99292636 -0.90701426 -1.00000000  0.10835916 -0.479509590 -
0.80862484
```

```
## 77   -0.99668441 -0.90701426 -0.93103448  0.22413213 -0.297387880 -
0.63948034
## 78   -0.99540201 -1.00000000 -1.00000000  0.53676120 -0.616510750 -
0.86674384
## 79   -0.34913911  0.62905856 -0.79310345  0.07110806 -0.571984600 -
0.84768117
## 80   -0.20267141  0.63849215 -0.24137931  0.17065849 -0.696293840 -
0.90625240
## 81   -0.28770556  0.58095666 -0.93103448  0.18660117 -0.630874520 -
0.86823403
## 82   -0.40029661  0.52733810 -0.58620690  0.23412230 -0.622728900 -
0.89663944
## 83   -0.30803588  0.60380805 -0.24137931  0.11900594 -0.536320200 -
0.82382515
## 84   -0.46893496  0.43978974 -0.24137931  0.10760313 -0.468570760 -
0.79506852
## 85   -0.19404811  0.57500847 -0.93103448  0.06811333 -0.599511360 -
0.85897786
## 86   -0.32825372  0.60637395 -0.93103448  0.23456530 -0.657619080 -
0.89540083
## 87   -0.39973615  0.44493725 -0.93103448  0.02410699 -0.642315850 -
0.88387513
## 88   -0.40023087  0.59231940 -0.58620690  0.11517420 -0.651058350 -
0.90199463
## 89   -0.55463371  0.41744465 -0.93103448  0.19335164 -0.403242440 -
0.72869485
## 90   -0.55779945  0.45820788 -0.72413793  0.22311455 -0.611167380 -
0.89803025
## 91   -0.44082885  0.55141271 -0.24137931  0.14900811 -0.529470780 -
0.83952509
## 92   -0.27556153  0.53430147 -0.24137931  0.08716439 -0.566410290 -
0.85368860
## 93   -0.27768032  0.62671402 -0.24137931  0.10483151 -0.622151630 -
0.88369760
## 94   -0.43997771  0.50963674 -0.93103448  0.20484213 -0.535399600 -
0.83370214
## 95   -0.42968164  0.51676963 -0.93103448  0.23273867 -0.438093070 -
0.74756288
## 96   -0.36153473  0.63009743 -0.58620690  0.09728851 -0.648540010 -
0.89761303
## 97   -0.48393676  0.58109249 -0.79310345  0.19886732 -0.478901190 -
0.79151706
## 98   -0.34053021  0.55114217 -0.79310345  0.14104401 -0.563408000 -
0.84252561
## 99   -0.29577488  0.57511343 -0.44827586  0.27239568 -0.765437980 -
0.95876290
## 100 -0.36899264  0.56980608 -0.86206897  0.29383242 -0.565223880 -
0.84410809
## 101 -0.32742460  0.58412283 -0.93103448  0.18912512 -0.557173980 -
0.83410666
```

```
## 102 -0.31672675  0.58305301 -0.37931034  0.23806792 -0.601689740 -
0.87244547
## 103 -0.42568046  0.62496454 -0.72413793  0.15382066 -0.580507420 -
0.87386443
## 104 -0.43899485  0.62157046 -0.58620690  0.18231100 -0.631444460 -
0.90355183
## 105 -0.47090164  0.54539833 -0.93103448  0.11628870 -0.591665610 -
0.87816741
## 106 -0.44691982  0.51366937 -0.93103448  0.06892717 -0.512401010 -
0.82736173
## 107 -0.48475119  0.59860559 -0.58620690  0.14648531 -0.584329840 -
0.87246506
## 108 -0.45352660  0.57083233 -0.93103448  0.20411071 -0.589299720 -
0.86731926
## 109 -0.41277369  0.45117740 -0.93103448  0.17112329 -0.571660430 -
0.85354876
## 110 -0.46372863  0.50280831 -0.93103448  0.20346721 -0.534907140 -
0.83714532
## 111 -0.38675500  0.49493229 -0.58620690  0.13352542 -0.501527170 -
0.81477659
## 112 -0.23542093  0.58272601 -0.86206897  0.12782888 -0.586073680 -
0.87264584
## 113 -0.46703352  0.49837020 -0.93103448  0.39305031 -0.441770320 -
0.73398829
## 114 -0.57286034  0.50637202 -0.58620690  0.30960288 -0.471167080 -
0.79067127
## 115 -0.50086889  0.55041008 -0.58620690  0.14356188 -0.574465770 -
0.86210214
## 116 -0.29509211  0.53497098 -0.58620690  0.17712363 -0.705389770 -
0.93676493
## 117 -0.49652582  0.49734275 -0.93103448  0.13299184 -0.568875850 -
0.86314445
## 118 -0.49573549  0.51247502 -0.58620690  0.19268140 -0.607585280 -
0.88164243
## 119 -0.58803294  0.44415059 -0.31034483  0.23542235 -0.571491600 -
0.87175164
## 120 -0.46045602  0.50299891 -0.93103448  0.12687780 -0.552457240 -
0.83744101
## 121 -0.35925276  0.55887113 -0.93103448  0.09882861 -0.524159060 -
0.77698525
## 122 -0.59875095  0.51703411 -0.93103448  0.23259576 -0.393287850 -
0.70158999
## 123 -0.34286292  0.47295249 -0.31034483  0.04219364 -0.609092810 -
0.88309426
## 124 -0.47762304  0.43367809 -0.58620690  0.11223761 -0.509875780 -
0.81634753
## 125 -0.44621272  0.45746096 -0.31034483  0.13628773 -0.529114710 -
0.82992209
## 126 -0.34635446  0.56114166 -0.79310345  0.09767177 -0.369169590 -
0.70958139
```

```
## 127 -0.24014058  0.59149009 -0.51724138  0.19721762 -0.398362170 -
0.71516057
## 128 -0.19689225  0.55546784 -0.51724138  0.18168733 -0.277543020 -
0.61516860
## 129 -0.01744838  0.54758310 -0.79310345  0.04424630 -0.665234900 -
0.89628578
## 130 -0.13480995  0.70473811 -0.79310345 -0.03132615 -0.559642580 -
0.84781495
## 131  0.02972882  0.81564284 -0.79310345 -0.04578719 -0.580502170 -
0.84949210
## 132  0.13741560  0.77800473 -0.79310345  0.04236935 -0.596997750 -
0.84092921
## 133 -0.11677896  0.57772937 -0.79310345  0.09092211 -0.539898300 -
0.80192881
## 134 -0.32147076  0.58570058 -0.44827586  0.16696733 -0.571103970 -
0.85546987
## 135  0.03555012  0.71513451 -0.44827586  0.29688405 -0.333427910 -
0.65070944
## 136 -0.02597878  0.76136330 -0.79310345  0.08647541 -0.510601030 -
0.78005978
## 137 -0.18817261  0.75022261 -0.72413793  0.21509625 -0.453496350 -
0.74415535
## 138 -0.16677317  0.67012392 -0.44827586  0.18463455 -0.616459580 -
0.89084988
## 139 -0.15234570  0.65997563 -0.44827586  0.03466331 -0.399055330 -
0.70564870
## 140 -0.01531182  0.72728527 -0.86206897  0.15009699 -0.766163990 -
0.95203822
## 141 -0.11012743  0.66161904 -0.44827586  0.19384713 -0.550559200 -
0.83636501
## 142 -0.18894932  0.66850261 -0.37931034  0.07780652 -0.222428470 -
0.53502293
## 143 -0.14479897  0.59951588 -0.44827586  0.12810644 -0.359304180 -
0.63630517
## 144 -0.06238553  0.68539334 -0.37931034  0.13613152 -0.437243530 -
0.67438143
## 145 -0.35775416  0.51560634 -0.72413793  0.27489557 -0.457855150 -
0.77620067
## 146 -0.16479221  0.65210197 -0.93103448 -0.04260905 -0.533797910 -
0.84610799
## 147 -0.23988970  0.60148628 -0.44827586 -0.04526828 -0.206357940 -
0.54331731
## 148 -0.09779091  0.53261671 -0.51724138  0.08273371 -0.425022820 -
0.72805123
## 149 -0.10635614  0.68732989 -0.44827586  0.16047905 -0.688455420 -
0.88128901
## 150 -0.37125319  0.56090496 -0.44827586  0.12038890 -0.127759450 -
0.42309982
## 151 -0.43299933  0.38429442 -0.79310345 -0.14721567 -0.295204410 -
0.63004502
```

```
## 152 -0.60103576  0.37964410 -0.79310345 -0.06797201 -0.131813290 -
0.46545867
## 153 -0.55898412  0.36200273 -0.58620690 -0.08657778 -0.665821500 -
0.92554064
## 154 -0.40254282  0.47282766 -0.51724138  0.05501108 -0.447461190 -
0.75573967
## 155 -0.51739830  0.47801905 -0.79310345 -0.05433614 -0.457761090 -
0.77174365
## 156 -0.55831392  0.34046962 -0.86206897  0.09824171 -0.327722550 -
0.64115771
## 157 -0.44736019  0.44355553 -0.79310345 -0.13231954 -0.404366170 -
0.70698755
## 158 -0.58882794  0.33697024 -0.79310345 -0.03183300 -0.214605590 -
0.56561039
## 159 -0.38083785  0.49046904 -0.79310345 -0.18535232 -0.343106570 -
0.67495928
## 160 -0.53487973  0.40431117 -0.79310345 -0.23949327 -0.239658180 -
0.59317830
## 161 -0.57841429  0.34953910 -0.79310345 -0.20240156 -0.388698330 -
0.71826820
## 162 -0.62216995  0.38624685 -0.79310345 -0.10259090 -0.274569570 -
0.58019524
## 163 -0.63631134  0.26459474 -0.79310345  0.11027323 -0.226001270 -
0.51950815
## 164 -0.57968655  0.44127109 -0.79310345 -0.05299103 -0.430625600 -
0.73265926
## 165 -0.56429332  0.32488567 -0.79310345 -0.18193522  0.026778022 -
0.29130711
## 166 -0.62649356  0.30820451 -0.79310345 -0.39514308 -0.100640250 -
0.41845010
## 167 -0.52809154  0.25303343 -0.79310345 -0.31287057 -0.313804320 -
0.62954974
## 168 -0.66782959  0.25390846 -0.79310345 -0.23935199  0.005371226 -
0.34299436
## 169 -0.49666783  0.44846507 -0.79310345 -0.02274211 -0.046212148 -
0.36292061
## 170 -0.31023194  0.50617884 -0.79310345 -0.05463488 -0.501471500 -
0.77783403
## 171 -0.33617140  0.38136736 -0.79310345 -0.13232022 -0.375923530 -
0.67314975
## 172 -0.35943883  0.39130372 -0.79310345 -0.09736308 -0.574837280 -
0.84315867
## 173 -0.57608973  0.39341825 -0.86206897 -0.03793474 -0.397901320 -
0.71444930
## 174 -0.56699582  0.29094351 -0.79310345  0.01628130 -0.443601490 -
0.77801855
## 175 -0.63628987  0.29425176 -0.79310345 -0.04690781 -0.170464140 -
0.52207736
## 176 -0.41938111  0.52085244 -0.79310345  0.02051198 -0.564206120 -
0.83772249
```

```
## 177 -0.96802677 -0.56854380 -0.93103448 -0.12771712 -0.328444720 -
0.70517293
##                 NA          NA          NA          NA          NA
## 1    -0.993725650 -0.99375495 -0.991975700 -0.993364720 -0.988175430
## 2    -0.990335490 -0.99196029 -0.989731980 -0.994488840 -0.989548820
## 3    -0.989280070 -0.99086668 -0.987274290 -0.993178830 -0.999889770
## 4    -0.992768920 -0.99169983 -0.989054890 -0.994454550 -0.995562410
## 5    -0.995522810 -0.99438901 -0.993305480 -0.995484690 -0.982177180
## 6    -0.994732920 -0.99515619 -0.994298620 -0.994485120 -0.983048280
## 7    -0.987885800 -0.99054611 -0.988054870 -0.993518100 -0.975939360
## 8    -0.989851440 -0.98979026 -0.986656880 -0.994219790 -0.980202220
## 9    -0.992072630 -0.99289011 -0.990630320 -0.995119170 -0.996128380
## 10   -0.982316830 -0.98405698 -0.979903930 -0.986107090 -0.983319420
## 11   -0.984763040 -0.98661714 -0.983490280 -0.987666350 -0.996215400
## 12   -0.994729360 -0.99480169 -0.992799970 -0.996138670 -0.992616410
## 13   -0.996818870 -0.99631669 -0.995477860 -0.995200320 -0.988245940
## 14   -0.995533350 -0.99545097 -0.993913100 -0.995486500 -0.991137870
## 15   -0.989026080 -0.98780475 -0.983700100 -0.989721870 -0.998101630
## 16   -0.996815010 -0.99757854 -0.996070230 -0.998231100 -0.977776450
## 17   -0.998852640 -0.99774096 -0.996531760 -0.997363820 -0.997927460
## 18   -0.996350040 -0.99609913 -0.995541380 -0.996447010 -0.993601240
## 19   -0.996740650 -0.99704535 -0.996180890 -0.996921460 -0.988580510
## 20   -0.999479460 -0.99958203 -0.999151900 -0.998551120 -0.992382150
## 21   -0.998323590 -0.99509300 -0.994072930 -0.996226900 -0.988415860
## 22   -0.994495990 -0.99278698 -0.992553750 -0.993371170 -0.990476900
## 23   -0.992584990 -0.99181646 -0.991389480 -0.989987740 -0.996969080
## 24   -0.994291460 -0.99276945 -0.989484080 -0.994764130 -0.995853290
## 25   -0.994448150 -0.99520624 -0.993875570 -0.996000370 -0.985738950
## 26   -0.994398240 -0.99426938 -0.991565060 -0.996248430 -0.996973670
## 27   -0.993227540 -0.99555244 -0.993422690 -0.996751140 -0.983982420
## 28   -0.975658570 -0.96429842 -0.964865130 -0.964577700 -0.965639180
## 29   -0.994769740 -0.99278695 -0.990244820 -0.993587620 -0.989413200
## 30   -0.993985270 -0.99407461 -0.991727560 -0.996279650 -0.993065710
## 31   -0.860321470 -0.76927158 -0.837239020 -0.756883370 -0.945209170
## 32   -0.851317880 -0.82288377 -0.857608840 -0.811591800 -0.869590550
## 33   -0.913779770 -0.90566871 -0.915528040 -0.899244260 -0.947291990
## 34   -0.990336360 -0.98782658 -0.988269390 -0.986864890 -0.977694550
## 35   -0.995547620 -0.99517066 -0.993573380 -0.996232300 -0.998875570
## 36   -0.997786290 -0.99658205 -0.995773260 -0.996512440 -0.988780910
## 37   -0.997792140 -0.99581104 -0.994429510 -0.995755820 -0.989821410
## 38   -0.997603230 -0.99632383 -0.995266040 -0.997456640 -0.989132120
## 39   -0.979568200 -0.97790115 -0.975680380 -0.980507460 -0.987984320
## 40   -0.992638060 -0.99098543 -0.990028520 -0.989837040 -0.977740580
## 41   -0.994544950 -0.99489100 -0.993282390 -0.996504130 -0.992708480
## 42   -0.992333800 -0.99338603 -0.991660510 -0.994692390 -0.978709690
## 43   -0.993412050 -0.99215353 -0.990221060 -0.993722790 -0.987431460
## 44   -0.993779440 -0.99534721 -0.993900170 -0.995645560 -0.969716610
## 45   -0.995488110 -0.99565716 -0.993604210 -0.995503120 -0.979987670
## 46   -0.997525660 -0.99647978 -0.994565470 -0.997860090 -0.989408690
## 47   -0.997792740 -0.99754113 -0.996331450 -0.997513030 -0.988392780
```

```
## 48   -0.996570700 -0.99396034 -0.991991440 -0.996093470 -0.996750220
## 49   -0.994121110 -0.99059234 -0.989598290 -0.991507720 -0.998088750
## 50   -0.996025890 -0.99284617 -0.991274290 -0.994737420 -0.995833500
## 51   -0.995735630 -0.99550624 -0.994143960 -0.996690680 -0.987428380
## 52   -0.910289720 -0.89146988 -0.895242930 -0.905928020 -0.948992330
## 53   -0.992513040 -0.99296117 -0.989920300 -0.996230600 -0.992605460
## 54   -0.994505940 -0.99355488 -0.992718490 -0.991907830 -0.991074290
## 55   -0.996208320 -0.99331487 -0.991698250 -0.994262500 -0.999963450
## 56   -0.996996340 -0.99267283 -0.992966360 -0.993224520 -0.991419450
## 57   -0.992976650 -0.99209042 -0.990354220 -0.993724750 -0.996576500
## 58   -0.993151120 -0.99218464 -0.988653890 -0.995458140 -0.986305260
## 59   -0.993998460 -0.99404556 -0.992855750 -0.994000170 -0.990988710
## 60   -0.994224150 -0.99288778 -0.989848320 -0.994419350 -0.993093540
## 61   -0.995748370 -0.99413160 -0.992274980 -0.996200830 -0.986536040
## 62   -0.996309020 -0.99439907 -0.992351850 -0.995907130 -0.993127110
## 63   -0.995831100 -0.99673367 -0.996189590 -0.995095730 -0.983273580
## 64   -0.992761180 -0.99606696 -0.994497830 -0.996534090 -0.994450880
## 65   -0.864884010 -0.86628146 -0.886460140 -0.866553570 -0.915841760
## 66   -0.982140740 -0.97572739 -0.974688060 -0.982267270 -0.997581720
## 67   -0.726190410 -0.59248301 -0.677398480 -0.590491420 -0.965469410
## 68   -0.725460810 -0.64267705 -0.695974930 -0.670984470 -0.853949890
## 69   -0.944513500 -0.95467415 -0.946809150 -0.956294120 -0.922314940
## 70   -0.834354460 -0.74626649 -0.800131810 -0.720022340 -0.986196440
## 71   -0.358482490 -0.32035278 -0.364519100 -0.386572160 -0.857236760
## 72   -0.331756090 -0.25098304 -0.356458890 -0.315821790 -0.676603880
## 73   -0.871886060 -0.82739933 -0.862241780 -0.838166010 -0.902949070
## 74   -0.978231550 -0.98139751 -0.980230230 -0.979350920 -0.983706350
## 75   -0.980659710 -0.97856496 -0.979207690 -0.979060260 -0.975281500
## 76   -0.996567850 -0.99570379 -0.993810530 -0.996988820 -0.984929810
## 77   -0.995277340 -0.99726274 -0.996405660 -0.997307820 -0.970358270
## 78   -0.993919360 -0.99439161 -0.992714620 -0.995609920 -0.990016070
## 79   -0.154044810 -0.18468998 -0.084326809 -0.371772580 -0.804081240
## 80   -0.178445570 -0.23065634 -0.148632220 -0.328694840 -0.794269590
## 81   -0.149438010 -0.32125627 -0.199307570 -0.438663110 -0.511963920
## 82   -0.132222150 -0.23261183 -0.185612370 -0.230926130 -0.848193420
## 83   -0.116087470 -0.20103653 -0.058491029 -0.339918980 -0.411283590
## 84   -0.159020980 -0.25781592 -0.117092580 -0.488179810 -0.783466540
## 85   -0.135439360 -0.19450513 -0.026957271 -0.376729260 -0.743801910
## 86   -0.088076196 -0.03299637  0.077706613 -0.296776350 -0.161123490
## 87   -0.215903460 -0.36040189 -0.240656790 -0.510153150 -0.018009841
## 88   -0.083012895 -0.29820284 -0.210982420 -0.386896090 -0.833038280
## 89   -0.137112510 -0.21444218 -0.188305720 -0.237076130 -0.400104000
## 90   -0.119448350 -0.22363449 -0.226720660 -0.220100720 -0.784312240
## 91   -0.152506800 -0.27939285 -0.233422130 -0.305632210 -0.118408580
## 92   -0.102792800 -0.09745663 -0.055776075 -0.178950960 -0.477911000
## 93   -0.037076583 -0.15403764 -0.131092730 -0.153267550 -0.272407890
## 94   -0.033384888 -0.23700181 -0.144046190 -0.420213030 -0.465217250
## 95   -0.036035559 -0.05434977 -0.087157303 -0.109074920 -0.182194340
## 96   -0.117314840 -0.09609042  0.028679141 -0.307128460 -0.918232050
## 97   -0.131656270 -0.11600375 -0.123203360 -0.198228420 -0.584270570
```

```
## 98  -0.167512290 -0.11953962 -0.106352590 -0.149436540 -0.376225690
## 99  -0.064023916 -0.18547810 -0.084559392 -0.325903350 -0.868901350
## 100 -0.024979346 -0.15457071  0.033447782 -0.318546870 -0.658186640
## 101 -0.014190613 -0.30488220 -0.239892600 -0.375888380 -0.180599850
## 102  0.149027960 -0.05587072 -0.008854814 -0.053299729 -0.450435040
## 103  0.111597180 -0.02934147  0.052345055 -0.064023931 -0.873223730
## 104  0.037196642 -0.02184824  0.001976708 -0.184708130 -0.708687910
## 105 -0.070366165 -0.06938375 -0.003345657 -0.321215640 -0.479630960
## 106 -0.165431590 -0.22728925 -0.175929980 -0.387096770 -0.615084490
## 107 -0.006305701 -0.15557509 -0.119671460 -0.151248950  0.034139084
## 108 -0.018739839 -0.11642689 -0.072287057 -0.121103080 -0.476644290
## 109 -0.066482075 -0.18988930 -0.098893202 -0.295832050 -0.581958980
## 110 -0.076468804 -0.19893948 -0.085196953 -0.396264880  0.004161861
## 111 -0.170505550 -0.13135164 -0.038057414 -0.267892500 -0.431142550
## 112  0.007337009 -0.11242730  0.056542096 -0.328999550 -0.223102320
## 113 -0.111626250 -0.20312045 -0.112978820 -0.238896490 -0.540314250
## 114 -0.165504960 -0.17233329 -0.231786220 -0.158050450 -0.677697950
## 115 -0.196543190 -0.18169343 -0.147543700 -0.286022240 -0.851702220
## 116 -0.086541332 -0.10569655 -0.024123934 -0.295276760 -0.210348380
## 117 -0.052196241 -0.05673831  0.022634514 -0.326818760 -0.389845060
## 118 -0.107683550 -0.14323308 -0.010645574 -0.332763340 -0.795732920
## 119 -0.203189800 -0.29733105 -0.266803560 -0.363703480 -0.480408380
## 120 -0.215868100 -0.20182780 -0.099222763 -0.407369290 -0.899253650
## 121 -0.251961750 -0.17698376 -0.145214260 -0.280783490 -0.368967090
## 122 -0.218164700 -0.32466220 -0.235971880 -0.539093130 -0.854607890
## 123 -0.183801900 -0.26499261 -0.177842180 -0.390170600 -0.211013890
## 124 -0.265151520 -0.24234801 -0.165161140 -0.395860030 -0.865906230
## 125 -0.204727960 -0.20352685 -0.180120580 -0.287772870 -0.660979110
## 126 -0.114899460 -0.24919755 -0.171152750 -0.361664070 -0.393920110
## 127 -0.086251433 -0.25748397 -0.160606540 -0.406592520 -0.351530890
## 128 -0.052287846 -0.10043928 -0.089535465 -0.122720180  0.076914028
## 129 -0.068719010 -0.05850164 -0.093536556 -0.128378630 -0.839669310
## 130  0.028128341 -0.11387575 -0.038425350 -0.162457230 -0.035097722
## 131  0.155831620  0.11662620  0.125143470  0.125164910  0.226845570
## 132  0.128508700  0.18855262  0.225233150  0.071873643 -0.486298450
## 133 -0.006825218 -0.08694342  0.061139935 -0.306705490 -0.128304990
## 134 -0.060360287 -0.07203612  0.084807388 -0.316740860 -0.391235310
## 135  0.351674400  0.27824359  0.469525520 -0.057221898 -0.850369650
## 136  0.211621130  0.09125675  0.055650859  0.075140431  0.120738870
## 137  0.236981360  0.14919345  0.185436700  0.174586620 -0.390352440
## 138  0.146866670  0.03723697  0.094157701 -0.044687900 -0.023199390
## 139 -0.068429084 -0.04759826  0.069036390 -0.245018740 -0.603628970
## 140 -0.018784159 -0.09845751  0.021046762 -0.366301860 -0.702709880
## 141  0.101835760 -0.10038422 -0.002078900 -0.281738630 -0.629746330
## 142  0.007555202 -0.05058293 -0.067060478  0.003046065 -0.122944690
## 143 -0.117883400 -0.34328250 -0.117498860 -0.611320470 -0.537340260
## 144 -0.099703966 -0.17235437 -0.073733630 -0.363542640 -0.675422240
## 145  0.008141825 -0.02671943  0.024434537 -0.086836637 -0.598463320
## 146  0.023269953 -0.10915177 -0.012998143 -0.173249450 -0.183565250
## 147 -0.116464960 -0.30736106 -0.166934790 -0.395938610 -0.582588810
```

```
## 148  -0.188529980 -0.35990221 -0.359520350 -0.346567220  0.136459490
## 149  -0.159543110 -0.39251711 -0.328176270 -0.543991800 -0.869575630
## 150  -0.137888200 -0.28549435 -0.135230410 -0.550005740 -0.757354920
## 151  -0.490400000 -0.61971628 -0.511812120 -0.691284350 -0.606774190
## 152  -0.545202910 -0.66016737 -0.577733360 -0.735139720 -0.678744090
## 153  -0.554557200 -0.64662673 -0.537479710 -0.776271060 -0.846085950
## 154  -0.477144950 -0.59937305 -0.475928010 -0.738701820 -0.792795730
## 155  -0.376664610 -0.50238983 -0.411850610 -0.630325300 -0.252338150
## 156  -0.422543990 -0.49859805 -0.418150420 -0.600484920 -0.492392350
## 157  -0.428059730 -0.52351721 -0.479190190 -0.577867200 -0.596192940
## 158  -0.402990900 -0.49696366 -0.400772070 -0.579760670 -0.796695000
## 159  -0.413108420 -0.57356928 -0.481425540 -0.598178120 -0.423130670
## 160  -0.471099330 -0.59802456 -0.526202420 -0.641105300 -0.684957720
## 161  -0.483479490 -0.52685808 -0.426180190 -0.676417650 -0.992760980
## 162  -0.463826810 -0.58657257 -0.499075470 -0.695207640 -0.768174270
## 163  -0.537715990 -0.61130084 -0.523640950 -0.709236770 -0.767585130
## 164  -0.453953950 -0.53201120 -0.422916110 -0.630925580 -0.629534280
## 165  -0.480385040 -0.57627111 -0.481918130 -0.642212220 -0.591421240
## 166  -0.650319310 -0.73395306 -0.654645080 -0.799825990 -0.987639720
## 167  -0.658561100 -0.72379208 -0.643617300 -0.839420400 -0.904466810
## 168  -0.521539330 -0.61648154 -0.557282430 -0.676482200 -0.638354690
## 169  -0.388769400 -0.44235177 -0.372182520 -0.521022560 -0.938793380
## 170  -0.400605020 -0.48524201 -0.396427420 -0.601849230 -0.709808360
## 171  -0.536967000 -0.57001838 -0.507990420 -0.668775700 -0.826927450
## 172  -0.445254780 -0.58892297 -0.481458590 -0.722657510 -0.715300340
## 173  -0.453501350 -0.54360053 -0.444381880 -0.705785110 -0.887190330
## 174  -0.433356330 -0.54208449 -0.439477300 -0.654781570 -0.952928560
## 175  -0.475785870 -0.53487548 -0.468648630 -0.605914700 -0.467514490
## 176  -0.275524720 -0.31659799 -0.168848440 -0.586472000 -0.397752690
## 177  -0.985690920 -0.98837036 -0.984338250 -0.992194920 -0.990885710
##                NA          NA           NA          NA           NA
NA
## 1   -0.993725650 -0.9999184 -0.991363660 -1.00000000 -0.9365079
0.3469885300
## 2   -0.990335490 -0.9998669 -0.991133890 -1.00000000 -0.8412698
0.5320605200
## 3   -0.989280070 -0.9998455 -0.986657620 -1.00000000 -0.9047619
0.6607950400
## 4   -0.992768920 -0.9998948 -0.988055240 -1.00000000  1.0000000
0.6789213400
## 5   -0.995522810 -0.9999409 -0.994169460 -1.00000000 -1.0000000
0.5590576600
## 6   -0.994732920 -0.9999370 -0.996696570 -1.00000000 -1.0000000
0.2469095700
## 7   -0.987885800 -0.9998239 -0.991344790 -1.00000000 -0.9047619
0.2901766400
## 8   -0.989851440 -0.9998452 -0.989676390 -1.00000000 -0.9682540
0.2497989400
## 9   -0.992072630 -0.9998943 -0.992370540 -1.00000000 -1.0000000
0.2723423500
```

```
## 10  -0.982316830 -0.9996798 -0.979143960 -1.00000000 -1.0000000
0.2508835500
## 11  -0.984763040 -0.9997449 -0.983665630 -1.00000000 -1.0000000
0.5018756100
## 12  -0.994729360 -0.9999350 -0.993912420 -1.00000000 -0.8730159
0.6993621300
## 13  -0.996818870 -0.9999632 -0.994772470 -1.00000000 -0.9047619
0.5363484400
## 14  -0.995533350 -0.9999466 -0.994287620 -1.00000000 -0.9047619
0.5300883200
## 15  -0.989026080 -0.9998182 -0.983772180 -1.00000000 -1.0000000
0.1689790400
## 16  -0.996815010 -0.9999688 -0.995775390 -1.00000000 -0.8412698
0.5438526900
## 17  -0.998852640 -0.9999871 -0.994701560 -1.00000000 -0.9047619
0.6365580600
## 18  -0.996350040 -0.9999578 -0.998067760 -1.00000000 -0.9047619
0.4851884200
## 19  -0.996740650 -0.9999658 -0.997326860 -1.00000000 -0.9365079
0.4373190900
## 20  -0.999479460 -0.9999989 -0.997724840 -1.00000000 -0.5555556
0.6084478600
## 21  -0.998323590 -0.9999704 -0.996035320 -1.00000000 -0.8095238
0.2847594600
## 22  -0.994495990 -0.9999209 -0.996134070 -1.00000000 -0.9682540
0.3771209200
## 23  -0.992584990 -0.9998934 -0.993388270 -1.00000000 -1.0000000
0.4929347100
## 24  -0.994291460 -0.9999186 -0.987498580 -1.00000000 -1.0000000
0.3620332600
## 25  -0.994448150 -0.9999342 -0.994693360 -1.00000000 -0.8730159
0.3615435300
## 26  -0.994398240 -0.9999286 -0.989481090 -1.00000000 -0.6507937
0.3379145400
## 27  -0.993227540 -0.9999227 -0.992911980 -1.00000000 -0.8095238
0.5539181500
## 28  -0.975658570 -0.9992664 -0.988735550 -0.94096500 -1.0000000 -
0.3126725200
## 29  -0.994769740 -0.9999237 -0.990792360 -1.00000000 -0.9682540
0.3098713700
## 30  -0.993985270 -0.9999231 -0.987865960 -1.00000000 -0.4603175
0.4198944500
## 31  -0.860321470 -0.9810988 -0.907808260 -0.41351289 -1.0000000 -
0.1217021700
## 32  -0.851317880 -0.9852895 -0.911245680 -0.39291452 -1.0000000
0.1092438800
## 33  -0.913779770 -0.9950411 -0.933484090 -0.57339379 -1.0000000
0.2096822300
## 34  -0.990336360 -0.9998357 -0.991942680 -1.00000000 -1.0000000
0.2496267000
```

```
## 35   -0.995547620 -0.9999453 -0.992219170 -1.00000000 -0.9365079
0.3506826200
## 36   -0.997786290 -0.9999731 -0.996519820 -1.00000000 -0.9047619
0.2074265700
## 37   -0.997792140 -0.9999695 -0.994114550 -1.00000000 -1.0000000
0.2708855200
## 38   -0.997603230 -0.9999703 -0.996855730 -1.00000000 -0.8730159
0.5841154400
## 39   -0.979568200 -0.9995595 -0.979122770 -0.94096500 -1.0000000
0.1320882700
## 40   -0.992638060 -0.9998883 -0.992098710 -1.00000000 -0.9047619
0.3679518700
## 41   -0.994544950 -0.9999336 -0.992596970 -1.00000000 -0.3968254
0.5990010000
## 42   -0.992333800 -0.9999005 -0.992751010 -1.00000000 -0.9682540
0.3952620100
## 43   -0.993412050 -0.9999051 -0.989531090 -1.00000000 -0.8730159
0.2616099800
## 44   -0.993779440 -0.9999278 -0.993655260 -1.00000000 -0.8095238
0.6291895100
## 45   -0.995488110 -0.9999472 -0.993457970 -1.00000000 -0.7460317
0.7033022200
## 46   -0.997525660 -0.9999704 -0.993956860 -1.00000000 -0.9365079
0.6563867100
## 47   -0.997792740 -0.9999774 -0.995244250 -1.00000000 -0.5873016
0.6573452300
## 48   -0.996570700 -0.9999486 -0.992804010 -1.00000000 -0.6507937
0.4601393700
## 49   -0.994121110 -0.9999021 -0.994955420 -1.00000000 -0.9365079
0.4326346700
## 50   -0.996025890 -0.9999367 -0.993584280 -1.00000000 -0.9365079
0.3473804800
## 51   -0.995735630 -0.9999489 -0.997181900 -1.00000000 -0.7777778
0.5588320200
## 52   -0.910289720 -0.9941662 -0.915143900 -0.54887719 -1.0000000 -
0.2985904000
## 53   -0.992513040 -0.9999000 -0.988862570 -1.00000000 -0.7777778
0.5219704100
## 54   -0.994505940 -0.9999256 -0.992922280 -1.00000000 -0.9365079
0.6160485100
## 55   -0.996208320 -0.9999413 -0.992953190 -1.00000000 -0.9047619
0.1610637100
## 56   -0.996996340 -0.9999448 -0.994620280 -1.00000000 -0.7777778
0.2541574500
## 57   -0.992976650 -0.9998997 -0.991764730 -1.00000000 -0.7777778
0.1264537500
## 58   -0.993151120 -0.9999023 -0.985239220 -1.00000000 -0.8095238
0.1326400900
## 59   -0.993998460 -0.9999231 -0.992942790 -1.00000000  0.1111111
0.5212346200
```

```
## 60   -0.994224150 -0.9999186 -0.988847750 -1.00000000 -0.9682540
0.6650932400
## 61   -0.995748370 -0.9999417 -0.994364550 -1.00000000 -0.9682540
0.4123154500
## 62   -0.996309020 -0.9999486 -0.991340610 -1.00000000 -0.7142857
0.2593893600
## 63   -0.995831100 -0.9999558 -0.995584910 -1.00000000 -0.7777778
0.4380740700
## 64   -0.992761180 -0.9999199 -0.993371200 -1.00000000 -0.9365079
0.5101169800
## 65   -0.864884010 -0.9895661 -0.926129420 -0.36617515 -1.0000000
0.1581953500
## 66   -0.982140740 -0.9995772 -0.984918150 -0.89799999 -1.0000000 -
0.1213258000
## 67   -0.726190410 -0.9392797 -0.771653070 -0.22219618 -1.0000000 -
0.5928170300
## 68   -0.725460810 -0.9477711 -0.801278870 -0.15542519 -1.0000000 -
0.5033246500
## 69   -0.944513500 -0.9981406 -0.945348930 -0.86121670 -1.0000000
0.2517987100
## 70   -0.834354460 -0.9761745 -0.855801340 -0.36617515 -1.0000000 -
0.2392823500
## 71   -0.358482490 -0.7769378 -0.533136360  0.19254267 -1.0000000
0.1546325600
## 72   -0.331756090 -0.7449660 -0.542507870  0.17679454 -1.0000000
0.0878468550
## 73   -0.871886060 -0.9873884 -0.914886230 -0.36021288 -1.0000000 -
0.1945270100
## 74   -0.978231550 -0.9995759 -0.981476650 -0.94096500 -0.9682540
0.4104551400
## 75   -0.980659710 -0.9995881 -0.986310160 -0.94096500 -1.0000000
0.2914768200
## 76   -0.996567850 -0.9999579 -0.991524810 -1.00000000 -0.6190476
0.6956899800
## 77   -0.995277340 -0.9999526 -0.996076010 -1.00000000 -0.9365079
0.4243445800
## 78   -0.993919360 -0.9999242 -0.993182260 -1.00000000 -0.9365079
0.4498266800
## 79   -0.154044810 -0.6457574 -0.173641040  0.48492597 -0.9047619
0.0544823200
## 80   -0.178445570 -0.6734369 -0.230523610  0.43822479 -0.8730159
0.1904789800
## 81   -0.149438010 -0.6888975 -0.324641950  0.44137229 -0.8730159
0.3107567400
## 82   -0.132222150 -0.6520411 -0.273560360  0.40829089 -0.8730159
0.2664596800
## 83   -0.116087470 -0.6330723 -0.185905190  0.51019853 -0.8730159 -
0.0016147957
## 84   -0.159020980 -0.6734330 -0.262023970  0.48455399 -0.8730159
0.0021477746
```

```
## 85  -0.135439360 -0.6403001 -0.016373756  0.51969074 -0.8730159 -
0.1231366900
## 86  -0.088076196 -0.5530119 -0.135930810  0.43225078 -0.8730159
0.0221059370
## 87  -0.215903460 -0.7310965 -0.293747140  0.33628378 -0.9047619
0.0157406780
## 88  -0.083012895 -0.6486673 -0.244795110  0.43796065 -0.8730159
0.2273547200
## 89  -0.137112510 -0.6481626 -0.360082280  0.41528241 -0.8730159
0.1070100300
## 90  -0.119448350 -0.6426551 -0.370063990  0.40537327 -0.8730159
0.2123590000
## 91  -0.152506800 -0.6773415 -0.394483350  0.34802308 -0.8730159
0.4605431400
## 92  -0.102792800 -0.5872610 -0.271981600  0.50917576 -0.8730159
0.2062615900
## 93  -0.037076583 -0.5747297 -0.260705710  0.38154617 -0.8730159
0.2016702700
## 94  -0.033384888 -0.6023691 -0.310668010  0.49127978 -0.8730159
0.1801664500
## 95  -0.036035559 -0.5345303 -0.359958900  0.41885954 -0.8730159
0.1129500500
## 96  -0.117314840 -0.5940108  0.005501702  0.55580877 -0.8730159 -
0.0974688160
## 97  -0.131656270 -0.6090033 -0.276035950  0.45102411 -0.9047619
0.0070858463
## 98  -0.167512290 -0.6276175 -0.278450650  0.39704562 -0.9047619
0.0786760710
## 99  -0.064023916 -0.6007552  0.005477770  0.46296308 -0.8730159
0.0762898690
## 100 -0.024979346 -0.5683191  0.105460690  0.53878655 -0.8730159
0.1438764000
## 101 -0.014190613 -0.6138059 -0.416362470  0.40588765 -0.8730159
0.4910935200
## 102  0.149027960 -0.4250266 -0.145616060  0.53333816 -0.8730159
0.4572065500
## 103  0.111597180 -0.4375736 -0.010766383  0.61481392 -0.8730159
0.2037805400
## 104  0.037196642 -0.4793557 -0.350925240  0.54196427 -0.8730159 -
0.0176822320
## 105 -0.070366165 -0.5591249 -0.322595440  0.45311431 -0.8730159 -
0.0846711350
## 106 -0.165431590 -0.6661916 -0.321905190  0.44360145 -0.8730159
0.0747145660
## 107 -0.006305701 -0.5583316 -0.210099750  0.43453109 -0.8730159
0.2499020000
## 108 -0.018739839 -0.5502383 -0.139896470  0.48868615 -0.8730159
0.2310112700
## 109 -0.066482075 -0.6036433 -0.185541910  0.49247380 -0.8730159
0.1268386100
```

```
## 110 -0.076468804 -0.6121146 -0.340419560  0.44123831 -0.8730159
0.1385365300
## 111 -0.170505550 -0.6336091 -0.223464580  0.39560538 -0.9047619
0.0135985540
## 112  0.007337009 -0.5340486 -0.078407955  0.51533546 -0.8730159
0.1464688600
## 113 -0.111626250 -0.6315786 -0.140519350  0.42927695 -0.8730159
0.3400990600
## 114 -0.165504960 -0.6466910 -0.369781340  0.38221230 -0.8730159
0.1402781900
## 115 -0.196543190 -0.6644839 -0.448458840  0.30928178 -0.8730159 -
0.1000872800
## 116 -0.086541332 -0.5822409 -0.273286100  0.42308903 -0.8730159 -
0.0776586510
## 117 -0.052196241 -0.5442448 -0.354736740  0.49743901 -0.8730159 -
0.0004543834
## 118 -0.107683550 -0.6076059 -0.044467147  0.54803343 -0.8730159 -
0.0281603030
## 119 -0.203189800 -0.7065759 -0.384929640  0.42316559 -0.8730159
0.1493397900
## 120 -0.215868100 -0.6803899 -0.253564340  0.38920769 -0.9047619 -
0.0562424510
## 121 -0.251961750 -0.6870953 -0.326520380  0.34917181 -0.9047619 -
0.1529935000
## 122 -0.218164700 -0.7216400 -0.439451770  0.38050881 -0.8730159
0.0849413550
## 123 -0.183801900 -0.6873963 -0.349040850  0.34507105 -0.9047619
0.0961692280
## 124 -0.265151520 -0.7155852 -0.362521580  0.42625433 -0.9047619 -
0.0882371920
## 125 -0.204727960 -0.6760148 -0.344689030  0.42360167 -0.9047619 -
0.0085176052
## 126 -0.114899460 -0.6490620 -0.235734540  0.41459836 -0.9047619
0.1288688500
## 127 -0.086251433 -0.6372653 -0.202347250  0.50992673 -0.9047619
0.1613241700
## 128 -0.052287846 -0.5621610 -0.263515890  0.38612846 -0.9047619
0.0622728880
## 129 -0.068719010 -0.5537407 -0.309603880  0.49973332 -0.9047619 -
0.0243561220
## 130  0.028128341 -0.5226930 -0.126556030  0.50883363 -0.9047619
0.0044452838
## 131  0.155831620 -0.3418109  0.064083035  0.54413907 -0.9047619
0.0811071280
## 132  0.128508700 -0.3226445  0.037676505  0.62955444 -0.9047619
0.0290747960
## 133 -0.006825218 -0.5318519 -0.026724010  0.48531557 -0.9047619
0.0368105120
## 134 -0.060360287 -0.5549417 -0.094096784  0.60203530 -0.9047619 -
0.1322643100
```

```
## 135  0.351674400 -0.1180426  0.115581600  0.70868414 -0.8730159 -
0.1849670700
## 136  0.211621130 -0.3170708 -0.091755693  0.53980558 -0.9047619
0.0548360890
## 137  0.236981360 -0.2708503  0.036148569  0.65158263 -0.8730159
0.0823426050
## 138  0.146866670 -0.3855151 -0.138804570  0.57543104 -0.8730159 -
0.0426792560
## 139 -0.068429084 -0.5490078 -0.106881580  0.55447508 -0.9047619 -
0.1385937100
## 140 -0.018784159 -0.5431443 -0.292885620  0.57170891 -0.9365079 -
0.1136407200
## 141  0.101835760 -0.4731314 -0.279860490  0.58461108 -0.8730159
0.2458853500
## 142  0.007555202 -0.5087188 -0.096829060  0.45895059 -0.8730159
0.4169967200
## 143 -0.117883400 -0.6800002 -0.060189840  0.50562765 -0.8730159
0.0214135650
## 144 -0.099703966 -0.6144584 -0.315818010  0.49326714 -0.8730159
0.0298191110
## 145  0.008141825 -0.4982092 -0.265391420  0.50593781 -0.8730159 -
0.0180865730
## 146  0.023269953 -0.5236384 -0.121111930  0.46569729 -0.8730159
0.1576507300
## 147 -0.116464960 -0.6685094 -0.185892080  0.47394563 -0.8730159
0.1311660000
## 148 -0.188529980 -0.7186020 -0.439632290  0.25857519 -0.9047619
0.3236447700
## 149 -0.159543110 -0.7141275 -0.503776160  0.26720403 -0.9047619
0.2356109100
## 150 -0.137888200 -0.6722282 -0.223835570  0.45172433 -0.9047619
0.1284368500
## 151 -0.490400000 -0.8909494 -0.487111400  0.08418295 -0.9047619
0.1366502800
## 152 -0.545202910 -0.9125975 -0.614679960  0.07307724 -0.9047619
0.0592315480
## 153 -0.554557200 -0.9129009 -0.510268130  0.12962829 -0.3650794
0.0533180870
## 154 -0.477144950 -0.8834833 -0.498408300  0.18568446 -0.9047619
0.1778486700
## 155 -0.376664610 -0.8312194 -0.394015250  0.14826844 -0.9047619
0.0308640590
## 156 -0.422543990 -0.8460390 -0.490362700  0.21763157 -0.9047619 -
0.0829051570
## 157 -0.428059730 -0.8532860 -0.579439460  0.15794992 -0.9047619
0.0703079790
## 158 -0.402990900 -0.8391393 -0.498488790  0.25946165 -0.9047619
0.1962395400
## 159 -0.413108420 -0.8584609 -0.443129270  0.13577009 -0.9047619
0.2847890900
```

```
## 160 -0.471099330 -0.8814271 -0.511411880  0.14442884 -0.9047619
0.0812455940
## 161 -0.483479490 -0.8711864 -0.502425160  0.23637378 -0.9047619 -
0.0097787997
## 162 -0.463826810 -0.8771270 -0.559266510  0.08921904 -0.9682540
0.0282641130
## 163 -0.537715990 -0.9026420 -0.547872540  0.14368407 -0.9682540
0.1614015100
## 164 -0.453953950 -0.8633239 -0.455242430  0.28269687 -0.9047619
0.0470512240
## 165 -0.480385040 -0.8801823 -0.464905160  0.14501566 -0.9047619
0.0208213390
## 166 -0.650319310 -0.9469743 -0.652567570 -0.02404271 -0.9047619
0.1856000600
## 167 -0.658561100 -0.9473755 -0.654950170 -0.10889129 -0.5238095
0.0873389060
## 168 -0.521539330 -0.8991854 -0.544035520  0.11898470 -0.9047619
0.1359527000
## 169 -0.388769400 -0.8213307 -0.458383010  0.30072570 -0.9047619 -
0.0899816070
## 170 -0.400605020 -0.8356645 -0.366787620  0.30011563 -0.9047619 -
0.1917156200
## 171 -0.536967000 -0.8948744 -0.589866070  0.12799056 -0.9047619
0.0509572070
## 172 -0.445254780 -0.8717871 -0.475349680  0.13097840 -0.9047619
0.2037843200
## 173 -0.453501350 -0.8655776 -0.496189120  0.22571606 -0.9682540
0.1143425100
## 174 -0.433356330 -0.8588803 -0.455848810  0.27571219 -0.9047619
0.0030473944
## 175 -0.475785870 -0.8705831 -0.543929970  0.10483880 -0.9047619
0.1914780400
## 176 -0.275524720 -0.7436620 -0.243890650  0.33753232 -0.9365079 -
0.1592591600
## 177 -0.985690920 -0.9997745 -0.983550100 -1.00000000 -1.0000000
0.5700360200
##              NA          NA          NA          NA          NA
NA
## 1   -0.516080150 -0.802760030 -0.980134850 -0.96130944 -0.97365344 -
0.95226383
## 2   -0.624870990 -0.900159980 -0.988295550 -0.98332192 -0.98265928 -
0.98632076
## 3   -0.724696720 -0.928539380 -0.989254770 -0.98602772 -0.98427365 -
0.99097943
## 4   -0.701130680 -0.909639080 -0.989412800 -0.98783575 -0.98684991 -
0.98674877
## 5   -0.528901340 -0.858932520 -0.991433030 -0.98905935 -0.98774359 -
0.99146166
## 6   -0.520879250 -0.802525440 -0.990500020 -0.98586094 -0.98551203 -
0.98820413
```

```
## 7    -0.668835170 -0.933442670 -0.988269200 -0.98456854 -0.98360123 -
0.98532835
## 8    -0.655502710 -0.932563070 -0.989430610 -0.98706484 -0.98597788 -
0.98819296
## 9    -0.750485140 -0.929474370 -0.991629280 -0.99175866 -0.99118172 -
0.99152182
## 10   -0.510115820 -0.801918730 -0.984787930 -0.98038779 -0.98185032 -
0.97677071
## 11   -0.516755790 -0.785871600 -0.983458360 -0.98117839 -0.98170707 -
0.97856013
## 12   -0.639222460 -0.913926470 -0.996503330 -0.99552256 -0.99586763 -
0.99504547
## 13   -0.522725310 -0.780518790 -0.997906930 -0.99725026 -0.99734709 -
0.99671097
## 14   -0.606106210 -0.868773650 -0.998563850 -0.99842929 -0.99793995 -
0.99878034
## 15   -0.521877750 -0.818395510 -0.911040740 -0.88447314 -0.89821508 -
0.87978404
## 16   -0.712339950 -0.958450370 -0.956402270 -0.91767988 -0.94237059 -
0.90073151
## 17   -0.773383180 -0.911918770 -0.986569870 -0.98167070 -0.98340872 -
0.98281100
## 18   -0.609302740 -0.885184130 -0.992441810 -0.98791994 -0.98932372 -
0.98526539
## 19   -0.653089880 -0.893307750 -0.995609800 -0.99348569 -0.99346737 -
0.99448022
## 20   -0.771339350 -0.926101460 -0.997203780 -0.99453695 -0.99566363 -
0.99249089
## 21   -0.484636900 -0.840143730 -0.998868500 -0.99922087 -0.99940774 -
0.99889900
## 22   -0.396317730 -0.778713370 -0.998525380 -0.99850046 -0.99825912 -
0.99866098
## 23   -0.220374890 -0.520914710 -0.998244610 -0.99793024 -0.99744997 -
0.99784536
## 24   -0.681698160 -0.927892800 -0.998036620 -0.99770490 -0.99801087 -
0.99711676
## 25   -0.625976600 -0.885281270 -0.997216890 -0.99782288 -0.99746648 -
0.99837647
## 26   -0.766256660 -0.955495760 -0.996745320 -0.99619603 -0.99601448 -
0.99659198
## 27   -0.751057850 -0.956217440 -0.996608070 -0.99570376 -0.99608872 -
0.99466088
## 28    0.090920462 -0.278872130 -0.975069870 -0.97112442 -0.96532763 -
0.97797090
## 29   -0.579103710 -0.857323550 -0.969706230 -0.95058339 -0.96232223 -
0.94131080
## 30   -0.828016050 -0.965492240 -0.969720210 -0.95245005 -0.96343914 -
0.94537184
## 31    0.738946120  0.511376480 -0.604335330 -0.22046404 -0.40771925 -
0.10573931
```

```
## 32    0.557461750   0.304627210 -0.651630720 -0.31174630 -0.45139736 -
0.20866426
## 33    0.362513670   0.125909600 -0.857225560 -0.81369615 -0.84062854 -
0.82335470
## 34   -0.155550010  -0.508150850 -0.969105230 -0.97115637 -0.97232673 -
0.96707218
## 35   -0.667191600  -0.915531910 -0.984756730 -0.97336140 -0.98010124 -
0.96745800
## 36   -0.536936340  -0.847461420 -0.991537000 -0.98593044 -0.98939729 -
0.98450396
## 37   -0.546690730  -0.842581090 -0.994108380 -0.99442573 -0.99441721 -
0.99455519
## 38   -0.678680660  -0.926549750 -0.995823910 -0.99733499 -0.99726329 -
0.99712642
## 39   -0.253993090  -0.650402600 -0.889930380 -0.83292149 -0.87408273 -
0.80339787
## 40   -0.265719360  -0.585592070 -0.877742840 -0.82666953 -0.86381238 -
0.80146070
## 41   -0.763458840  -0.934748300 -0.930170170 -0.88862055 -0.91789493 -
0.86779257
## 42   -0.592543850  -0.890449960 -0.986153950 -0.97464616 -0.98074581 -
0.96935142
## 43   -0.538518490  -0.834577240 -0.991922620 -0.98483098 -0.98845029 -
0.98255035
## 44   -0.634140030  -0.895902070 -0.994683020 -0.98765240 -0.99181008 -
0.98341819
## 45   -0.680098750  -0.889592210 -0.992630430 -0.99005640 -0.99099827 -
0.98878906
## 46   -0.755922100  -0.964797680 -0.995941380 -0.99444503 -0.99506396 -
0.99271229
## 47   -0.766019840  -0.935935580 -0.996031540 -0.99405488 -0.99491589 -
0.99396622
## 48   -0.649661140  -0.915159500 -0.997023780 -0.99654661 -0.99602942 -
0.99717078
## 49   -0.434489140  -0.776727800 -0.996449240 -0.99679823 -0.99649414 -
0.99701627
## 50   -0.576712780  -0.887776070 -0.995728130 -0.99605699 -0.99610940 -
0.99616594
## 51   -0.661989060  -0.918029590 -0.994425020 -0.99501370 -0.99405647 -
0.99648144
## 52    0.008822020  -0.420293590 -0.875997740 -0.80624765 -0.84398354 -
0.78085716
## 53   -0.739580190  -0.948349500 -0.932491350 -0.89574669 -0.91882099 -
0.87974487
## 54   -0.300120570  -0.596214690 -0.984666230 -0.97054765 -0.97977281 -
0.96262911
## 55   -0.512910390  -0.838030660 -0.996027150 -0.99206000 -0.99365914 -
0.98975768
## 56   -0.279115580  -0.674629250 -0.996331250 -0.99385786 -0.99536134 -
0.99397641
```

```
## 57   -0.583876970 -0.866261490 -0.996988710 -0.99608841 -0.99607595 -
0.99606701
## 58   -0.689999600 -0.954463780 -0.995999180 -0.99333786 -0.99484835 -
0.99195180
## 59   -0.583320840 -0.821620160 -0.997892560 -0.99788020 -0.99773248 -
0.99824591
## 60   -0.675354610 -0.915485880 -0.998285120 -0.99803195 -0.99779876 -
0.99822949
## 61   -0.643520740 -0.926153870 -0.998611540 -0.99858622 -0.99819155 -
0.99864174
## 62   -0.664499200 -0.925309550 -0.999142590 -0.99900690 -0.99899642 -
0.99921097
## 63   -0.546190800 -0.759095550 -0.998203110 -0.99804483 -0.99803933 -
0.99839687
## 64   -0.912224990 -0.944848870 -0.997687220 -0.99708838 -0.99768364 -
0.99651059
## 65    0.290669740 -0.091568925 -0.877859260 -0.78956074 -0.80965005 -
0.83771004
## 66   -0.279360540 -0.713271570 -0.901943980 -0.83823923 -0.87359886 -
0.81727060
## 67    0.528643840  0.227434180 -0.449813210 -0.20359081 -0.15814813 -
0.33964782
## 68    0.274668050 -0.142617630 -0.458576380 -0.23512790 -0.16719870 -
0.43276262
## 69   -0.272645160 -0.552621550 -0.802486180 -0.77207963 -0.76650716 -
0.78034996
## 70    0.828928860  0.747224430 -0.417400160 -0.55289109 -0.59494194 -
0.54072101
## 71    0.184910240 -0.227514590 -0.102020090  0.27991626  0.35310592 -
0.05584191
## 72    0.291964890 -0.123483090  0.105046270  0.14654068  0.30882276 -
0.01979653
## 73    0.350174220 -0.070534524 -0.766829560 -0.73479036 -0.74224790 -
0.76978574
## 74   -0.115315600 -0.412274410 -0.950443690 -0.89957191 -0.93083282 -
0.88595455
## 75   -0.091312041 -0.498246590 -0.942482300 -0.91073852 -0.93153857 -
0.89551546
## 76   -0.733599040 -0.951501710 -0.963614710 -0.93434582 -0.95856737 -
0.91661482
## 77   -0.709368530 -0.937566180 -0.986608360 -0.97951337 -0.98237973 -
0.98026514
## 78   -0.652407080 -0.915499620 -0.995244800 -0.99335465 -0.99380802 -
0.99432375
## 79   -0.220105440 -0.632717150 -0.222176040 -0.27364953 -0.21459858 -
0.45997291
## 80   -0.143708360 -0.528425900 -0.268279820 -0.31462338 -0.30995843 -
0.42906877
## 81   -0.365959880 -0.710174980 -0.308670720 -0.40140024 -0.39666603 -
0.38793535
```

```
## 82    0.081417901 -0.172208540 -0.060131490 -0.27464609 -0.18842722 -
0.22137716
## 83   -0.277845780 -0.648587560 -0.003821466 -0.24624861 -0.15841288 -
0.26926252
## 84   -0.407367270 -0.795769470 -0.174531260 -0.30735586 -0.34327855 -
0.18848186
## 85   -0.381702910 -0.739897060 -0.268318530 -0.37690138 -0.37740422 -
0.37815352
## 86   -0.188957190 -0.622886810 -0.244183750 -0.38477677 -0.34817440 -
0.46184524
## 87   -0.366297190 -0.736872220 -0.309179110 -0.30476058 -0.22241719 -
0.38038878
## 88   -0.275557330 -0.611068170 -0.337908030 -0.32354691 -0.39405752 -
0.36473156
## 89    0.055502889 -0.258720910 -0.332612030 -0.37380292 -0.45839497 -
0.29483601
## 90    0.135498050 -0.148993320 -0.302202880 -0.34932270 -0.38321061 -
0.21602933
## 91   -0.010170202 -0.335593160 -0.249785530 -0.31441572 -0.35257235 -
0.16920732
## 92   -0.045966571 -0.402878970 -0.211084220 -0.28294851 -0.38579910 -
0.10289468
## 93    0.131297670 -0.166488810 -0.274797620 -0.38562721 -0.38573851 -
0.31370910
## 94   -0.365440820 -0.714920220 -0.221419630 -0.34667919 -0.29976890 -
0.32933867
## 95    0.105042290 -0.275227680 -0.162256870 -0.23155516 -0.16917548 -
0.22730279
## 96   -0.282790000 -0.661736100 -0.096642888 -0.30197348 -0.24722033 -
0.27601093
## 97    0.027940241 -0.360048080 -0.064486452 -0.28667994 -0.22533280 -
0.29000813
## 98    0.146490620 -0.173908940 -0.129067770 -0.30415416 -0.22948135 -
0.32325960
## 99   -0.278264540 -0.613745850 -0.243141960 -0.40587447 -0.27582273 -
0.54069723
## 100 -0.365297640 -0.715121890 -0.285766370 -0.33204219 -0.35173085 -
0.22742662
## 101 -0.281372780 -0.609780860 -0.233298900 -0.36154540 -0.36374673 -
0.24620009
## 102  0.036248158 -0.217257160 -0.124314940 -0.30043308 -0.37455782 -
0.14221320
## 103 -0.033995444 -0.318495560 -0.076998524 -0.30170548 -0.33014756 -
0.18618208
## 104 -0.111400070 -0.535097270 -0.085531348 -0.28821455 -0.25708616 -
0.25381294
## 105 -0.230599140 -0.684979670 -0.156978180 -0.34581942 -0.25819222 -
0.40077157
## 106 -0.207081610 -0.619593860 -0.272292640 -0.35178264 -0.36261901 -
0.26187134
```

```
## 107   0.110719140 -0.178116960 -0.198742660 -0.30999068 -0.27274449 -
0.24622952
## 108   0.092889116 -0.181353720 -0.268297380 -0.28341605 -0.27175924 -
0.21878192
## 109  -0.201166680 -0.563827920 -0.253512840 -0.30757282 -0.28432143 -
0.27533613
## 110  -0.324073020 -0.733507800 -0.124848530 -0.31950765 -0.24129339 -
0.44413327
## 111  -0.131835560 -0.537453870 -0.143674900 -0.30188274 -0.19664585 -
0.40581184
## 112  -0.385618120 -0.761314580 -0.112228260 -0.17676290 -0.12425374 -
0.36329818
## 113  -0.046470199 -0.339227340 -0.220608260 -0.28315595 -0.26673886 -
0.26649885
## 114   0.263158860 -0.002109412 -0.268825670 -0.30761212 -0.35345482 -
0.17625353
## 115  -0.081360657 -0.481788770 -0.188183070 -0.31190146 -0.25668381 -
0.28270433
## 116  -0.192453840 -0.626529620 -0.154711520 -0.29203848 -0.25244181 -
0.22638688
## 117  -0.223712760 -0.671227320 -0.236292530 -0.33644829 -0.28843428 -
0.42694237
## 118  -0.313211820 -0.671050690 -0.319803870 -0.41738711 -0.38892499 -
0.46180742
## 119  -0.103267770 -0.452225560 -0.297994660 -0.36074234 -0.32589238 -
0.44473732
## 120  -0.228908750 -0.650331990 -0.223947870 -0.32073596 -0.22300787 -
0.43810432
## 121   0.018900225 -0.390667980 -0.259913940 -0.31377176 -0.30161047 -
0.28201330
## 122  -0.348974150 -0.749770500 -0.245190740 -0.34908752 -0.29279572 -
0.42655808
## 123  -0.259849650 -0.649311250 -0.292129170 -0.39232042 -0.32260696 -
0.44072600
## 124  -0.229914780 -0.637993930 -0.211100350 -0.33850922 -0.28157404 -
0.36424941
## 125  -0.008846872 -0.402024800 -0.117519140 -0.26321550 -0.14836736 -
0.38531116
## 126  -0.187199170 -0.577936240 -0.400037750 -0.60156768 -0.54247771 -
0.64169052
## 127  -0.374079320 -0.712635220 -0.185746680 -0.50106049 -0.40902529 -
0.56952521
## 128   0.154807520 -0.181288550 -0.016616702 -0.22657702 -0.19788711 -
0.16488056
## 129   0.041779958 -0.318355150 -0.218599040 -0.23900998 -0.16282390 -
0.33893678
## 130  -0.055600245 -0.383132260 -0.393926540 -0.49510104 -0.39076847 -
0.62377928
## 131   0.211114310 -0.065317184 -0.142051790 -0.32330905 -0.25691745 -
0.40870404
```

```
## 132   0.028879696 -0.353266500 -0.186168320 -0.38094888 -0.31623534 -
0.45171007
## 133 -0.309873050 -0.707556440 -0.370973600 -0.60390766 -0.51809029 -
0.71711757
## 134 -0.374940440 -0.763403860 -0.354428000 -0.52886717 -0.49030250 -
0.57716805
## 135 -0.356715260 -0.757472360 -0.001111616 -0.35993431 -0.30670289 -
0.43219243
## 136   0.106933000 -0.203622130 -0.125012780 -0.37415395 -0.28973965 -
0.49243680
## 137   0.206571250 -0.036242900  0.106550890 -0.14811375 -0.08189678 -
0.22869396
## 138 -0.014887684 -0.391913800  0.060879191 -0.10540063  0.00197659 -
0.29335299
## 139 -0.268484330 -0.663894060  0.063267395 -0.27154578 -0.11460722 -
0.53365116
## 140 -0.393450070 -0.795163580  0.031010355 -0.13739218 -0.01451202 -
0.24468425
## 141 -0.341179700 -0.709135070 -0.120828140 -0.40024832 -0.23897868 -
0.55766505
## 142   0.340272310  0.142197000 -0.354783160 -0.50939908 -0.37715191 -
0.66049653
## 143 -0.672006410 -0.948909820 -0.292554900 -0.36917458 -0.25762087 -
0.42515290
## 144 -0.293040230 -0.705748270 -0.195351630 -0.36648482 -0.24177015 -
0.51396550
## 145 -0.021045613 -0.345582320 -0.076904550 -0.04638246 -0.05505226 -
0.07130753
## 146 -0.073548313 -0.428967190  0.054620820 -0.19209454 -0.06691495 -
0.33693577
## 147 -0.343561060 -0.640076820 -0.148946010 -0.32259014 -0.19505123 -
0.49479121
## 148   0.107828340 -0.170133330 -0.231303180 -0.30998427 -0.17603454 -
0.54625939
## 149 -0.346962300 -0.732090990 -0.351245260 -0.52218990 -0.43526918 -
0.61568940
## 150 -0.508024300 -0.866322570 -0.388463760 -0.53123556 -0.38345382 -
0.68599468
## 151 -0.502713500 -0.787377520 -0.297037100 -0.21444414 -0.09092280 -
0.23376610
## 152 -0.535748490 -0.819710170 -0.330241040 -0.22781872 -0.20273743 -
0.18522965
## 153 -0.619296500 -0.906959520 -0.223204310  0.10688412  0.06096611 -
0.12324664
## 154 -0.639381900 -0.920832570 -0.179474380 -0.04214863 -0.01699973 -
0.26268621
## 155 -0.415118860 -0.775586680 -0.353495240 -0.25778065 -0.19152199 -
0.25030092
## 156 -0.296563510 -0.685430820 -0.210885290 -0.28408636 -0.26602998 -
0.35387245
```

```
## 157 -0.190250490 -0.547423040 -0.277247820 -0.22333704 -0.16998933 -
0.28436492
## 158 -0.362998050 -0.685745070 -0.329877250 -0.18380354 -0.17152482 -
0.16847452
## 159 -0.238694550 -0.524140270 -0.362211340 -0.23326716 -0.23411580 -
0.20128510
## 160 -0.322867910 -0.607389950 -0.332362990 -0.17562659 -0.16017273 -
0.09834541
## 161 -0.463513980 -0.822190830 -0.217603160  0.10058385  0.10424537 -
0.21097560
## 162 -0.433317230 -0.803709120 -0.318680090  0.01762557 -0.04605173 -
0.09710247
## 163 -0.470715500 -0.801559940 -0.464700370 -0.39622137 -0.34368158 -
0.40862462
## 164 -0.436387850 -0.749419300 -0.400642080 -0.34285434 -0.30454155 -
0.32911740
## 165 -0.390522040 -0.697896070 -0.474733150 -0.34349828 -0.35612109 -
0.25931653
## 166 -0.606312150 -0.855429500 -0.454618950 -0.38520419 -0.41349061 -
0.30461895
## 167 -0.609831230 -0.916521660 -0.427814590 -0.27903185 -0.28162308 -
0.21596983
## 168 -0.312417130 -0.645802230 -0.461294680 -0.24891870 -0.27830916 -
0.24598581
## 169 -0.244041060 -0.587619270 -0.393807690 -0.20328643 -0.25060844 -
0.06869157
## 170 -0.438024030 -0.760861850 -0.181730740  0.10469958  0.05537478 -
0.17728536
## 171 -0.318291250 -0.715489720 -0.265300290 -0.01621424 -0.08349131 -
0.10050819
## 172 -0.581559840 -0.865958760 -0.453705340 -0.40567899 -0.38265265 -
0.48555441
## 173 -0.503503820 -0.843158280 -0.357746830 -0.36980208 -0.26770488 -
0.45938950
## 174 -0.510170510 -0.803300970 -0.361925180 -0.33172236 -0.21956958 -
0.48546717
## 175 -0.214440440 -0.607228670 -0.498239330 -0.37428379 -0.36123900 -
0.38052404
## 176 -0.438003930 -0.835233950 -0.497184550 -0.37466764 -0.35595275 -
0.37038596
## 177 -0.739309730 -0.938617400 -0.923649730 -0.87793618 -0.90474852 -
0.86106041
##              NA          NA          NA          NA          NA
NA
## 1   -0.989498130 -0.980134850 -0.9992403 -9.926555e-01 -0.70129141 -
1.0000000
## 2   -0.991828780 -0.988295550 -0.9998112 -9.939785e-01 -0.72068300 -
0.9487180
## 3   -0.995702960 -0.989254770 -0.9998539 -9.932383e-01 -0.73652148 -
0.7948718
```

```
## 4    -0.996199360 -0.989412800 -0.9998756 -9.891355e-01 -0.72089079 -
1.0000000
## 5    -0.998353180 -0.991433030 -0.9999018 -9.893211e-01 -0.76337215 -
0.8974359
## 6    -0.994757810 -0.990500020 -0.9998606 -9.919667e-01 -0.76857669 -
1.0000000
## 7    -0.994520720 -0.988269200 -0.9998280 -9.890402e-01 -0.73563944 -
1.0000000
## 8    -0.998239890 -0.989430610 -0.9998673 -9.900350e-01 -0.73563944 -
1.0000000
## 9    -0.995196510 -0.991629280 -0.9999268 -9.914284e-01 -0.85031043 -
1.0000000
## 10   -0.993196820 -0.984787930 -0.9997363 -9.819689e-01 -0.67136577 -
1.0000000
## 11   -0.986835890 -0.983458360 -0.9997359 -9.807114e-01 -0.64063330 -
1.0000000
## 12   -0.998717930 -0.996503330 -0.9999751 -9.972278e-01 -0.89669536 -
0.9487180
## 13   -0.998603150 -0.997906930 -0.9999874 -9.968187e-01 -0.95605675 -
1.0000000
## 14   -0.997899810 -0.998563850 -0.9999931 -9.964571e-01 -1.00000000 -
0.9487180
## 15   -0.846802630 -0.911040740 -0.9927112 -9.561298e-01 -0.38735863 -
1.0000000
## 16   -0.952351440 -0.956402270 -0.9967816 -9.827764e-01 -0.50587034 -
1.0000000
## 17   -0.990984740 -0.986569870 -0.9997727 -9.911647e-01 -0.72940807 -
0.9487180
## 18   -0.997550070 -0.992441810 -0.9998962 -9.931732e-01 -0.82896585 -
1.0000000
## 19   -0.998251830 -0.995609800 -0.9999598 -9.954067e-01 -0.87235403 -
0.6923077
## 20   -0.999184370 -0.997203780 -0.9999723 -9.972637e-01 -0.95605675 -
1.0000000
## 21   -0.999182050 -0.998868500 -0.9999960 -9.992980e-01 -1.00000000 -
0.8974359
## 22   -0.997425860 -0.998525380 -0.9999932 -9.983035e-01 -1.00000000 -
0.9487180
## 23   -0.996756060 -0.998244610 -0.9999907 -9.950493e-01 -1.00000000 -
1.0000000
## 24   -0.995904830 -0.998036620 -0.9999894 -9.977373e-01 -0.95605675 -
1.0000000
## 25   -0.995605610 -0.997216890 -0.9999872 -9.961026e-01 -1.00000000 -
0.9487180
## 26   -0.994284780 -0.996745320 -0.9999792 -9.962035e-01 -0.92407535 -
0.5384615
## 27   -0.998557440 -0.996608070 -0.9999763 -9.962337e-01 -0.95605675 -
0.9487180
## 28   -0.993790910 -0.975069870 -0.9994380 -9.629166e-01 -0.54048931 -
1.0000000
```

```
## 29   -0.955186890 -0.969706230 -0.9987207 -9.807381e-01 -0.55879632 -
1.0000000
## 30   -0.939239860 -0.969720210 -0.9987915 -9.884241e-01 -0.59372493 -
1.0000000
## 31   -0.860489140 -0.604335330 -0.7329466 -7.602135e-01  0.12049670 -
1.0000000
## 32   -0.985830120 -0.651630720 -0.7917769 -7.041354e-01  0.20283679 -
1.0000000
## 33   -0.840134240 -0.857225560 -0.9814633 -9.488295e-01 -0.29636694 -
1.0000000
## 34   -0.957713860 -0.969105230 -0.9993450 -9.746884e-01 -0.54048931 -
1.0000000
## 35   -0.981095220 -0.984756730 -0.9996032 -9.923166e-01 -0.74408588 -
1.0000000
## 36   -0.997988760 -0.991537000 -0.9998681 -9.957341e-01 -0.85316499 -
1.0000000
## 37   -0.993281400 -0.994108380 -0.9999587 -9.952531e-01 -0.87235403 -
1.0000000
## 38   -0.995599990 -0.995823910 -0.9999802 -9.973850e-01 -0.95605675 -
0.8974359
## 39   -0.772226620 -0.889930380 -0.9861206 -9.493254e-01 -0.45884973 -
1.0000000
## 40   -0.732339620 -0.877742840 -0.9845983 -9.418111e-01 -0.38882895 -
1.0000000
## 41   -0.858548360 -0.930170170 -0.9938520 -9.714675e-01 -0.32437270 -
1.0000000
## 42   -0.992002720 -0.986153950 -0.9996430 -9.913491e-01 -0.74408588 -
1.0000000
## 43   -0.993477710 -0.991922620 -0.9998566 -9.969765e-01 -0.82896585 -
1.0000000
## 44   -0.994055080 -0.994683020 -0.9999050 -9.950771e-01 -0.88040512 -
1.0000000
## 45   -0.993998010 -0.992630430 -0.9999184 -9.936338e-01 -0.85316499 -
1.0000000
## 46   -0.997366790 -0.995941380 -0.9999671 -9.951843e-01 -0.95605675 -
1.0000000
## 47   -0.995818190 -0.996031540 -0.9999651 -9.970236e-01 -0.87235403 -
1.0000000
## 48   -0.999157730 -0.997023780 -0.9999817 -9.960423e-01 -0.95605675 -
0.8974359
## 49   -0.991813270 -0.996449240 -0.9999806 -9.954250e-01 -0.95605675 -
0.7435897
## 50   -0.996170220 -0.995728130 -0.9999746 -9.959586e-01 -0.92407535 -
0.8974359
## 51   -0.995585680 -0.994425020 -0.9999636 -9.929242e-01 -0.89669536 -
0.9487180
## 52   -0.973125620 -0.875997740 -0.9816599 -9.384076e-01 -0.25550515 -
1.0000000
## 53   -0.860835380 -0.932491350 -0.9945197 -9.717323e-01 -0.31183209 -
1.0000000
```

```
## 54   -0.990675970 -0.984666230 -0.9995388 -9.888417e-01 -0.74408588 -
1.0000000
## 55   -0.998525860 -0.996027150 -0.9999514 -9.939748e-01 -0.92407535 -
1.0000000
## 56   -0.996271710 -0.996331250 -0.9999651 -9.969614e-01 -0.89669536 -
1.0000000
## 57   -0.996994580 -0.996988710 -0.9999795 -9.964805e-01 -0.95605675 -
0.9487180
## 58   -0.998625220 -0.995999180 -0.9999604 -9.962070e-01 -0.89669536 -
1.0000000
## 59   -0.997379700 -0.997892560 -0.9999895 -9.972823e-01 -1.00000000 -
0.9487180
## 60   -0.995768130 -0.998285120 -0.9999912 -9.975532e-01 -1.00000000 -
0.9487180
## 61   -0.995994320 -0.998611540 -0.9999937 -9.967453e-01 -1.00000000 -
0.5897436
## 62   -0.997814890 -0.999142590 -0.9999962 -9.988149e-01 -1.00000000 -
0.3333333
## 63   -0.995300720 -0.998203110 -0.9999910 -9.984837e-01 -1.00000000 -
1.0000000
## 64   -0.997845370 -0.997687220 -0.9999861 -9.974178e-01 -0.95605675 -
1.0000000
## 65   -0.986322900 -0.877859260 -0.9792330 -9.347239e-01 -0.19015287 -
0.9487180
## 66   -0.866731780 -0.901943980 -0.9874184 -9.503399e-01 -0.20706669 -
1.0000000
## 67   -0.930094530 -0.449813210 -0.6868963 -5.104779e-01  0.28658244 -
1.0000000
## 68   -0.945223210 -0.458576380 -0.7076709 -4.262176e-01  0.31821140 -
0.8974359
## 69   -0.831200770 -0.802486180 -0.9702922 -7.842055e-01 -0.03164523 -
1.0000000
## 70    0.692489430 -0.417400160 -0.8404004 -7.210631e-01  0.29621198 -
1.0000000
## 71   -0.860687820 -0.102020090 -0.1876670 -3.807863e-01  0.44082134 -
1.0000000
## 72    0.096773496  0.105046270 -0.2065881 -2.245526e-01  0.55555542 -
0.9487180
## 73   -0.896473480 -0.766829560 -0.9595394 -8.245920e-01  0.08199943 -
0.9487180
## 74   -0.982643370 -0.950443690 -0.9953694 -9.643683e-01 -0.45880691 -
1.0000000
## 75   -0.961714160 -0.942482300 -0.9959528 -9.662586e-01 -0.34913753 -
1.0000000
## 76   -0.932478050 -0.963614710 -0.9978850 -9.839517e-01 -0.52419907 -
1.0000000
## 77   -0.995592660 -0.986608360 -0.9997383 -9.918476e-01 -0.75445221 -
1.0000000
## 78   -0.998919500 -0.995244800 -0.9999574 -9.976216e-01 -0.89669536 -
0.9487180
```

```
## 79   -0.451366810 -0.222176040 -0.6523037 -4.316143e-01  0.61789992 -
0.8461538
## 80   -0.822996500 -0.268279820 -0.6910795 -3.093163e-01  0.58298687 -
0.7948718
## 81   -0.705971720 -0.308670720 -0.7469317 -4.763219e-01  0.64320440 -
0.7948718
## 82   -0.356889220 -0.060131490 -0.5843539  2.942702e-02  0.76867854 -
0.7948718
## 83   -0.607805840 -0.003821466 -0.5418318 -5.771304e-02  0.79969401 -
0.7948718
## 84   -0.489283480 -0.174531260 -0.6513929 -3.060780e-01  0.64305165 -
0.7948718
## 85   -0.816956060 -0.268318530 -0.7215857 -4.268052e-01  0.67696593 -
0.7948718
## 86   -0.875339070 -0.244183750 -0.7163951 -3.480180e-01  0.72730696 -
0.7948718
## 87   -0.892039300 -0.309179110 -0.7003159 -2.233438e-01  0.64346088 -
0.8461538
## 88   -0.754669020 -0.337908030 -0.7195335 -4.614414e-01  0.58598036 -
0.7948718
## 89   -0.484601090 -0.332612030 -0.7422954 -5.625138e-01  0.57489721 -
0.7948718
## 90   -0.600682130 -0.302202880 -0.7203700 -3.243305e-01  0.62376792 -
0.7948718
## 91   -0.481462130 -0.249785530 -0.6842237 -2.936323e-01  0.59044417 -
0.7948718
## 92   -0.493109630 -0.211084220 -0.6530464 -4.653036e-01  0.68761130 -
0.7948718
## 93   -0.922929380 -0.274797620 -0.7279517 -4.830762e-01  0.68505559 -
0.7948718
## 94   -0.853873830 -0.221419630 -0.6897093 -2.254226e-01  0.66502859 -
0.7948718
## 95   -0.633176680 -0.162256870 -0.6049414 -2.940712e-01  0.69110063 -
0.7948718
## 96   -0.812866300 -0.096642888 -0.6154594 -8.645789e-02  0.78943259 -
0.7948718
## 97   -0.153423560 -0.064486452 -0.5928391 -1.700329e-01  0.72524612 -
0.8461538
## 98   -0.744632900 -0.129067770 -0.6307508 -3.333354e-01  0.66817483 -
0.8461538
## 99   -0.695212890 -0.243141960 -0.7255569 -8.161373e-02  0.71803625 -
0.7948718
## 100 -0.782096350 -0.285766370 -0.7061268 -3.067846e-01  0.67612797 -
0.7948718
## 101 -0.753493860 -0.233298900 -0.7014149 -2.902085e-01  0.67725520 -
0.7948718
## 102 -0.457181850 -0.124314940 -0.6267658 -4.426335e-01  0.67755645 -
0.7948718
## 103 -0.319403040 -0.076998524 -0.6064936 -4.596257e-01  0.67288607 -
0.7948718
```

```
## 104 -0.659851260 -0.085531348 -0.6032339 -1.335996e-01  0.70449207 -
0.7948718
## 105 -0.191596710 -0.156978180 -0.6635677 -3.067739e-01  0.68604630 -
0.7948718
## 106 -0.515538860 -0.272292640 -0.7110636 -4.171654e-01  0.61880827 -
0.7948718
## 107 -0.808855920 -0.198742660 -0.6624499 -1.916128e-01  0.68761130 -
0.7948718
## 108 -0.751806790 -0.268297380 -0.6747182 -3.047071e-01  0.66454897 -
0.7948718
## 109 -0.758214490 -0.253512840 -0.6820696 -1.697703e-01  0.62617089 -
0.7948718
## 110 -0.913295600 -0.124848530 -0.6368440 -2.462671e-01  0.75444915 -
0.8461538
## 111 -0.899995200 -0.143674900 -0.6357745 -1.024230e-01  0.73535479 -
0.8461538
## 112 -0.582869280 -0.112228260 -0.5510862 -3.877473e-01  0.63461987 -
0.8974359
## 113 -0.680348180 -0.220608260 -0.6568348 -5.177133e-01  0.62460588 -
0.7948718
## 114 -0.725355710 -0.268825670 -0.6876621 -3.801981e-01  0.64570302 -
0.7948718
## 115 -0.746378940 -0.188183070 -0.6592424 -1.870532e-01  0.73668859 -
0.7948718
## 116 -0.598933780 -0.154711520 -0.6352176 -1.666335e-01  0.71391553 -
0.7948718
## 117 -0.455565120 -0.236292530 -0.6903155 -4.278826e-01  0.66803831 -
0.7948718
## 118 -0.754685400 -0.319803870 -0.7577623 -4.306422e-01  0.58926312 -
0.7948718
## 119 -0.774526900 -0.297994660 -0.7244312 -4.195732e-01  0.61106170 -
0.8461538
## 120 -0.560771090 -0.223947870 -0.6777415 -1.959167e-01  0.64884926 -
0.7948718
## 121 -0.918852710 -0.259913940 -0.6876102 -2.452545e-01  0.70508259 -
0.8461538
## 122 -0.479782240 -0.245190740 -0.6998591 -2.185385e-01  0.68736387 -
0.8461538
## 123 -0.686752910 -0.292129170 -0.7371306 -2.745954e-01  0.66611398 -
0.8461538
## 124 -0.561906220 -0.211100350 -0.6817078 -4.239363e-01  0.65419287 -
0.7948718
## 125 -0.403539950 -0.117519140 -0.6038289 -9.848573e-02  0.70895588 -
0.8461538
## 126 -0.837207680 -0.400037750 -0.8507665 -5.187299e-01  0.62014207 -
0.7435897
## 127 -0.364553930 -0.185746680 -0.7423162 -4.149593e-01  0.65256980 -
0.3846154
## 128 -0.565355160 -0.016616702 -0.5368246 -3.091968e-01  0.75120725 -
1.0000000
```

```
## 129 -0.913274620 -0.218599040 -0.6316600 -3.449501e-01  0.62229760 -
1.0000000
## 130 -0.755727680 -0.393926540 -0.8129070 -3.535498e-01  0.55427968 -
0.7435897
## 131 -0.446638820 -0.142051790 -0.6461105 -2.433061e-01  0.67965816 -
1.0000000
## 132 -0.777363170 -0.186168320 -0.6922088 -3.864133e-01  0.74948950 -
1.0000000
## 133 -0.845592020 -0.370973600 -0.8426574 -4.813889e-01  0.56595336 -
0.3846154
## 134 -0.976064920 -0.354428000 -0.8130663 -4.055755e-01  0.66586655 -
0.3846154
## 135 -0.060953426 -0.001111616 -0.5997828 -4.467372e-01  0.68638939 -
0.3846154
## 136 -0.666446900 -0.125012780 -0.6636269 -2.311268e-01  0.77255183 -
0.2820513
## 137 -0.383740880  0.106550890 -0.4258510 -1.509006e-01  0.80341455 -
1.0000000
## 138 -0.964142400  0.060879191 -0.4222949 -7.524749e-02  0.85964788 -
1.0000000
## 139 -0.837546600  0.063267395 -0.5218859  2.584028e-05  0.85592734 -
1.0000000
## 140 -0.700539870  0.031010355 -0.4586734 -2.628713e-01  0.68976683 -
0.9487180
## 141 -0.653632130 -0.120828140 -0.6737906 -7.108737e-02  0.69943773 -
0.6923077
## 142 -0.764007190 -0.354783160 -0.8061647 -2.592263e-01  0.62279344 -
0.3333333
## 143 -0.928523360 -0.292554900 -0.7265504 -2.159496e-01  0.67481040 -
0.3333333
## 144 -0.549149470 -0.195351630 -0.6890869 -3.290286e-01  0.74659069 -
0.2820513
## 145 -0.323051560 -0.076904550 -0.4487405 -4.434785e-01  0.62809521 -
1.0000000
## 146 -0.329189320  0.054620820 -0.4807353 -2.618734e-01  0.71028968 -
0.9487180
## 147 -0.818193660 -0.148946010 -0.6486456 -1.620762e-01  0.68483245 -
1.0000000
## 148 -0.842040010 -0.231303180 -0.6750309 -1.934792e-01  0.73781582 -
0.8461538
## 149 -0.833509620 -0.351245260 -0.8096770 -3.971834e-01  0.59805422 -
0.3846154
## 150 -0.699974560 -0.388463760 -0.8244474 -2.572261e-01  0.59386311 -
0.3846154
## 151 -0.864532240 -0.297037100 -0.6461228 -1.264808e-01  0.59299988 -
0.8461538
## 152 -0.936047130 -0.330241040 -0.6651437 -2.445688e-01  0.62280151 -
0.8461538
## 153 -0.965729330 -0.223204310 -0.3919144 -4.401760e-01  0.57052808 -
1.0000000
```

```
## 154 -0.619150780 -0.179474380 -0.4897197 -3.122500e-01  0.54787498 -
1.0000000
## 155 -0.873191230 -0.353495240 -0.6896573 -1.854748e-01  0.57274975 -
0.8461538
## 156  0.003003123 -0.210885290 -0.6535791 -3.586781e-01  0.54146255 -
0.8461538
## 157 -0.907478910 -0.277247820 -0.6443690 -2.474997e-01  0.65197927 -
0.8461538
## 158 -0.841726300 -0.329877250 -0.6388787 -2.568949e-01  0.55415123 -
0.8461538
## 159 -0.909510890 -0.362211340 -0.6785815 -3.925256e-01  0.61041735 -
0.8461538
## 160 -0.931426890 -0.332362990 -0.6346819 -2.172142e-01  0.60144887 -
0.8461538
## 161 -0.864336400 -0.217603160 -0.3949612 -1.709217e-01  0.53411616 -
0.8461538
## 162 -0.800559600 -0.318680090 -0.4970651 -6.412615e-01  0.46413207 -
1.0000000
## 163 -0.855659040 -0.464700370 -0.7917871 -4.477044e-01  0.50339198 -
0.8461538
## 164 -0.874639240 -0.400642080 -0.7486744 -2.849468e-01  0.49720742 -
0.8461538
## 165 -0.927558620 -0.474733150 -0.7695467 -4.678792e-01  0.49829378 -
0.8461538
## 166 -0.622101390 -0.454618950 -0.7840737 -4.182070e-01  0.44078674 -
0.8461538
## 167 -0.774301110 -0.427814590 -0.7236194 -3.614872e-01  0.46698904 -
0.8461538
## 168 -0.746604200 -0.461294680 -0.7162147 -5.923213e-01  0.35824292 -
0.8461538
## 169 -0.931876600 -0.393807690 -0.6707413 -2.129132e-01  0.58092603 -
0.8461538
## 170 -0.702073840 -0.181730740 -0.3774355 -2.673922e-01  0.58045546 -
1.0000000
## 171 -0.719239550 -0.265300290 -0.5037595 -4.236951e-01  0.44466999 -
1.0000000
## 172 -0.839258730 -0.453705340 -0.7930938 -4.590748e-01  0.50638345 -
0.8461538
## 173 -0.817897710 -0.357746830 -0.7485264 -3.325142e-01  0.49730308 -
0.8461538
## 174 -0.922033790 -0.361925180 -0.7313425 -2.384414e-01  0.56633697 -
0.8461538
## 175 -0.928537430 -0.498239330 -0.7902781 -4.330635e-01  0.46262716 -
0.8461538
## 176 -0.886942780 -0.497184550 -0.7901962 -4.581144e-01  0.43463977 -
0.8461538
## 177 -0.965485920 -0.923649730 -0.9926574 -9.558503e-01 -0.27851782 -
1.0000000
##               NA           NA           NA           NA           NA
## 1   -0.128988900  0.586156430  0.374604620 -0.991990440 -0.99069746
```

```
## 2     -0.271958460 -0.336310410 -0.720015080 -0.995853860 -0.99639947
## 3     -0.212727900 -0.535352080 -0.871914140 -0.995030500 -0.99512739
## 4     -0.035684195 -0.230090900 -0.511216950 -0.995220710 -0.99523693
## 5     -0.273582010 -0.510281850 -0.830701770 -0.995092780 -0.99546483
## 6     -0.297329060 -0.346044540 -0.727270490 -0.995143310 -0.99523870
## 7     -0.257032130 -0.321590840 -0.658435210 -0.995641480 -0.99463909
## 8     -0.197271520 -0.407284300 -0.733313370 -0.995629120 -0.99450684
## 9      0.073417207 -0.371388800 -0.674769740 -0.995260370 -0.99600721
## 10    -0.139966360  0.106785040 -0.131360290 -0.990981210 -0.99059941
## 11    -0.047159012  0.007872171 -0.283559950 -0.991314280 -0.98929750
## 12     0.098996469 -0.284076810 -0.624663890 -0.997652250 -0.99787507
## 13     0.156655840 -0.391155110 -0.674003690 -0.999046710 -0.99905917
## 14     0.325339050 -0.759329890 -0.942476200 -0.999028000 -0.99905443
## 15    -0.173335390  0.076217194 -0.303778220 -0.990241940 -0.98927719
## 16    -0.360926710  0.557766740  0.335414040 -0.997604000 -0.99883527
## 17    -0.098182183 -0.145410510 -0.560772860 -0.997332450 -0.99846040
## 18    -0.176980010  0.162066130 -0.095406438 -0.997592650 -0.99761851
## 19    -0.108585250 -0.410711940 -0.762764880 -0.998504830 -0.99819704
## 20    -0.056741167  0.207013510 -0.023061747 -0.999572440 -0.99956029
## 21     0.480056330 -0.628405660 -0.853398900 -0.999046760 -0.99915254
## 22     0.345175480 -0.706175280 -0.917827470 -0.998424150 -0.99888625
## 23     0.251222440 -0.681138410 -0.875573210 -0.998965660 -0.99854020
## 24     0.353436660 -0.362797940 -0.665224830 -0.998726460 -0.99902310
## 25     0.310761930 -0.757406290 -0.944406370 -0.998736150 -0.99886745
## 26     0.169752430 -0.477322780 -0.800641670 -0.998384630 -0.99900752
## 27     0.201730510 -0.201241330 -0.492436820 -0.997969270 -0.99865929
## 28    -0.267608210 -0.533023140 -0.828530150 -0.983317240 -0.97721350
## 29    -0.256812190  0.434330490  0.169223500 -0.998589760 -0.99876688
## 30    -0.199227050  0.324371120  0.009439168 -0.998973150 -0.99932551
## 31    -0.618203520  0.437668450  0.169706170 -0.870864370 -0.80216905
## 32    -0.721767650  0.410936290  0.161880280 -0.872383570 -0.83747045
## 33    -0.108759280  0.017846477 -0.422483780 -0.947617610 -0.94961434
## 34     0.152693070  0.009003776 -0.291796040 -0.989565570 -0.98918242
## 35    -0.229857230  0.435375170  0.195818710 -0.995805800 -0.99546410
## 36    -0.070297819  0.120527360 -0.267596650 -0.996085020 -0.99554573
## 37     0.249913900 -0.427782620 -0.745822670 -0.996031740 -0.99580097
## 38     0.538695120 -0.634218450 -0.852381000 -0.995969140 -0.99636766
## 39    -0.221438220  0.439169730  0.176630840 -0.993638200 -0.99346944
## 40    -0.189562790  0.345574970  0.043375653 -0.995618120 -0.99556750
## 41    -0.230031170  0.478519320  0.224553410 -0.996659150 -0.99642101
## 42    -0.298283610  0.394319560  0.144579340 -0.995894820 -0.99565892
## 43    -0.212746820  0.205466800 -0.137301900 -0.996757250 -0.99725922
## 44    -0.231234930  0.617944550  0.475066250 -0.998401250 -0.99822553
## 45    -0.001229121 -0.044097021 -0.385403810 -0.997642810 -0.99717794
## 46     0.187595440  0.019224137 -0.242046160 -0.997074670 -0.99708205
## 47     0.063502947 -0.198679660 -0.584182130 -0.998110990 -0.99784862
## 48     0.210691550 -0.597560740 -0.875848260 -0.998235290 -0.99796309
## 49     0.269142560 -0.605603100 -0.852242220 -0.997960480 -0.99767112
## 50     0.267520820 -0.464400070 -0.763836390 -0.997652870 -0.99754752
## 51     0.234871860 -0.664081050 -0.911990770 -0.997302130 -0.99594383
```

```
## 52   -0.279994740   0.307262000   0.008909053  -0.952483800  -0.93054398
## 53   -0.246751490   0.370997280   0.077533354  -0.998537160  -0.99855628
## 54   -0.251624700   0.620868780   0.453887530  -0.998332200  -0.99834175
## 55   -0.103349820   0.235849840  -0.010924559  -0.998544840  -0.99869335
## 56    0.077716295  -0.085214216  -0.513365340  -0.998850630  -0.99936052
## 57    0.099895475  -0.447229460  -0.756583750  -0.999116860  -0.99894755
## 58   -0.024256720   0.043181648  -0.291360250  -0.998590720  -0.99870387
## 59    0.195474530  -0.665860440  -0.894125590  -0.998711860  -0.99833283
## 60    0.231484370  -0.675813990  -0.899761020  -0.999299340  -0.99909877
## 61    0.300566370  -0.773069470  -0.931703180  -0.999027580  -0.99928455
## 62    0.504592040  -0.723050350  -0.926233940  -0.998599620  -0.99845846
## 63    0.320741970  -0.602773780  -0.875093210  -0.998488690  -0.99853391
## 64    0.191896550  -0.279122230  -0.607458690  -0.998704110  -0.99840436
## 65   -0.610467000  -0.164121170  -0.617588700  -0.931882470  -0.90994766
## 66   -0.375909580   0.336923720   0.029954210  -0.987550820  -0.98726320
## 67   -0.654503730  -0.281081010  -0.668047000  -0.766726150  -0.64139664
## 68   -0.653149860  -0.343494430  -0.725220850  -0.761960650  -0.68522496
## 69   -0.204908310  -0.152650190  -0.520394420  -0.934034940  -0.92066111
## 70    0.311882730  -0.037418204  -0.433803130  -0.733013660  -0.75641948
## 71   -0.566465630  -0.324511600  -0.726222780  -0.608227810  -0.49217599
## 72   -0.192329460  -0.399052820  -0.741798110  -0.612610810  -0.49043707
## 73   -0.107221210  -0.162395140  -0.584023540  -0.913041490  -0.89052661
## 74   -0.452778100   0.456979030   0.140754840  -0.985250630  -0.98519500
## 75   -0.222909120   0.388152880   0.120166270  -0.986909550  -0.98187267
## 76   -0.195136530   0.735855200   0.600799940  -0.996916030  -0.99648845
## 77   -0.175910430  -0.075735290  -0.494904380  -0.996444440  -0.99705279
## 78    0.038252729  -0.305053810  -0.686018590  -0.996650540  -0.99695369
## 79   -0.000469865  -0.461129690  -0.816100760  -0.431831650  -0.47637007
## 80    0.130224380  -0.243454770  -0.624929310  -0.428185870  -0.49288443
## 81    0.200414800  -0.189093110  -0.500953340  -0.401038320  -0.48192421
## 82    0.327632380  -0.245198520  -0.470641330  -0.217668850  -0.29922633
## 83    0.348634260  -0.403038370  -0.669193410  -0.187550950  -0.30033796
## 84    0.418139140   0.107001600  -0.127340650  -0.338358810  -0.46501488
## 85    0.250392290  -0.170142150  -0.507271300  -0.397191100  -0.50292913
## 86    0.298801920  -0.303159330  -0.638120670  -0.353548820  -0.43963334
## 87   -0.038943067  -0.344111480  -0.674228880  -0.472893240  -0.48842516
## 88    0.251326520  -0.023811861  -0.432809270  -0.449340500  -0.45131020
## 89    0.346634220   0.158416600  -0.154937440  -0.462446520  -0.51696700
## 90    0.387464290   0.248054560   0.057317095  -0.417613450  -0.46060184
## 91    0.455989690   0.271928960   0.075948964  -0.378519930  -0.37255783
## 92    0.436834330   0.412583160   0.247680020  -0.289650590  -0.33084143
## 93    0.332127810  -0.042099894  -0.300286530  -0.341366340  -0.39315099
## 94    0.271447680  -0.206517500  -0.496768280  -0.349592320  -0.40042849
## 95    0.210188690  -0.255902300  -0.548014370  -0.301635720  -0.32515791
## 96    0.321338670  -0.257782380  -0.525025200  -0.233780970  -0.32888667
## 97    0.286484500  -0.317320220  -0.608043600  -0.140438620  -0.32881358
## 98    0.262279310  -0.359489340  -0.649950930  -0.276440410  -0.39035666
## 99    0.230826250  -0.583248180  -0.836620170  -0.355065760  -0.47367033
## 100   0.197513700   0.100794550  -0.122802190  -0.447162630  -0.48223636
## 101   0.376813250   0.090537620  -0.107234520  -0.297182200  -0.37921508
```

```
## 102   0.659177900   0.252334350   0.051393941 -0.147249140 -0.14526252
## 103   0.517423770   0.046310758 -0.202201380 -0.172883860 -0.20925775
## 104   0.298029870 -0.188408070 -0.473868160 -0.206791720 -0.37097505
## 105   0.404369540 -0.404643380 -0.713606540 -0.257236080 -0.39936344
## 106   0.255028960   0.037454966 -0.209217060 -0.396696540 -0.49782738
## 107   0.309107990 -0.105835940 -0.365895060 -0.334348070 -0.41546378
## 108   0.270651020 -0.048004413 -0.316468880 -0.369812630 -0.40259904
## 109   0.198926510 -0.154089010 -0.434699950 -0.352441740 -0.43098331
## 110   0.252350700 -0.465703820 -0.754824400 -0.263500240 -0.42342258
## 111   0.151358900 -0.497028450 -0.785351150 -0.271497260 -0.43771207
## 112   0.125392880 -0.395778420 -0.773420190 -0.286815950 -0.36801892
## 113   0.211098030 -0.144712840 -0.478410250 -0.427123680 -0.44092133
## 114   0.305295110   0.226689020   0.009265417 -0.378141930 -0.40271978
## 115   0.270595880 -0.229293890 -0.496136750 -0.340106680 -0.42102192
## 116   0.346304250 -0.107075130 -0.371076030 -0.360219120 -0.35212350
## 117   0.234325930 -0.278200970 -0.621699350 -0.357101690 -0.40498368
## 118   0.260726830 -0.255855090 -0.592703970 -0.412318470 -0.49888911
## 119   0.206035780 -0.314465100 -0.667312690 -0.386655110 -0.48364219
## 120   0.105982670 -0.417604770 -0.720532650 -0.412701360 -0.43768385
## 121   0.068076754 -0.150089770 -0.435253480 -0.435859020 -0.47170007
## 122   0.239070470 -0.300130490 -0.630815890 -0.359960550 -0.49777513
## 123   0.151208090 -0.382296760 -0.685930770 -0.387248420 -0.56088837
## 124   0.278277930 -0.311244570 -0.632478370 -0.463667240 -0.54236514
## 125   0.179257590 -0.421903510 -0.727391010 -0.332809800 -0.39731236
## 126   0.423361830 -0.524480460 -0.779120060 -0.460038110 -0.53467792
## 127   0.586562220 -0.580414480 -0.839593070 -0.195953750 -0.31756213
## 128   0.326974420 -0.149341960 -0.432850330 -0.128814290 -0.15087110
## 129   0.111024640 -0.382546770 -0.727987290 -0.330651300 -0.41445103
## 130   0.248612470 -0.595649990 -0.868493100 -0.478175540 -0.62720248
## 131   0.200919150 -0.380883080 -0.698538780 -0.305680850 -0.32229578
## 132   0.285814160 -0.466910460 -0.758986190 -0.267769620 -0.24068848
## 133   0.402616670 -0.655097970 -0.887117310 -0.408175480 -0.50842111
## 134   0.502321950 -0.372114430 -0.663846300 -0.380106820 -0.41146393
## 135   0.526174240 -0.444570760 -0.764318030 -0.045316739 -0.08997891
## 136   0.451618680 -0.514188600 -0.795963810 -0.131445830 -0.29666575
## 137   0.273737150 -0.377958240 -0.709846550 -0.004970723 -0.24911928
## 138   0.170782420 -0.484208450 -0.797660050 -0.136903000 -0.20306158
## 139   0.398700940 -0.725689740 -0.930992290 -0.133857360 -0.17244728
## 140   0.137628420 -0.438781190 -0.755022050 -0.170594090 -0.24950130
## 141   0.349111670 -0.691307450 -0.908207980 -0.325291530 -0.51669880
## 142   0.216014720 -0.691864860 -0.909706410 -0.378854500 -0.57034479
## 143   0.146562890 -0.457571010 -0.731197000 -0.401168410 -0.61002030
## 144   0.210788730 -0.606760230 -0.875743060 -0.367593520 -0.51105052
## 145   0.135289950 -0.158092200 -0.526894170 -0.192777220 -0.34055324
## 146   0.246278320 -0.476837770 -0.797899470 -0.151834630 -0.23107572
## 147   0.132367420 -0.598759330 -0.874669410 -0.300874350 -0.40326244
## 148 -0.010212182 -0.606109100 -0.888485900 -0.378310740 -0.48349842
## 149   0.292581490 -0.568230960 -0.829612160 -0.342707470 -0.51446856
## 150   0.056476776 -0.753012940 -0.942564920 -0.506140560 -0.60864282
## 151 -0.212149580 -0.296138250 -0.571495090 -0.575114560 -0.59458090
```

```
## 152  -0.115400930 -0.076834355 -0.358283050 -0.619041020 -0.62284776
## 153  -0.452526840 -0.198072600 -0.631407890 -0.629260920 -0.69225517
## 154  -0.253701570 -0.304636430 -0.704233550 -0.594048890 -0.66266502
## 155  -0.133963280 -0.166660770 -0.466616430 -0.612151070 -0.60415752
## 156   0.058707483 -0.263364350 -0.626837640 -0.627530610 -0.67521700
## 157  -0.177572500 -0.294188070 -0.632271370 -0.555289170 -0.61997247
## 158  -0.129272500 -0.068153259 -0.393509330 -0.567393010 -0.59840377
## 159  -0.135138740 -0.044562799 -0.354483480 -0.654670490 -0.74620984
## 160  -0.190654100  0.035211763 -0.223861500 -0.652160170 -0.70376348
## 161  -0.490413660 -0.255990800 -0.680825990 -0.626461250 -0.67522747
## 162  -0.387842760 -0.106048420 -0.531296280 -0.639349620 -0.68974531
## 163  -0.204968450 -0.240160670 -0.544478570 -0.714461290 -0.76359517
## 164  -0.132426040 -0.129345280 -0.434742530 -0.655288880 -0.73871788
## 165  -0.183550660  0.142489360 -0.100359830 -0.681059370 -0.79093633
## 166   0.033127126  0.163737210 -0.109983300 -0.730525580 -0.79381781
## 167  -0.209194200  0.058550945 -0.224157770 -0.696018590 -0.75598105
## 168  -0.300047110 -0.024945733 -0.384468140 -0.729754500 -0.78358879
## 169  -0.262182910  0.282118350  0.080741088 -0.633442020 -0.66594927
## 170  -0.400065190 -0.212435070 -0.650486670 -0.608550020 -0.66821927
## 171  -0.275837560 -0.085902875 -0.505572840 -0.682104950 -0.74680377
## 172  -0.173113040 -0.288723090 -0.652145120 -0.673200220 -0.72566892
## 173  -0.132903980 -0.433829760 -0.745697500 -0.665204770 -0.72417457
## 174  -0.283733900 -0.497915890 -0.813582880 -0.652962360 -0.73939005
## 175  -0.283047820 -0.119067030 -0.454845130 -0.696755710 -0.72364799
## 176  -0.291036550 -0.126935100 -0.446320090 -0.690824540 -0.68135533
## 177  -0.336738340  0.339825470  0.039313473 -0.984665140 -0.98736090
##                NA           NA           NA           NA           NA
NA
## 1    -0.989940840 -0.9924478 -0.99104773 -0.991990440 -0.9999368 -
0.99045792
## 2    -0.995442090 -0.9968660 -0.99443965 -0.995853860 -0.9999807 -
0.99454373
## 3    -0.994639570 -0.9960596 -0.99586627 -0.995030500 -0.9999731 -
0.99375529
## 4    -0.995722200 -0.9952731 -0.99573175 -0.995220710 -0.9999744 -
0.99522600
## 5    -0.995278660 -0.9956093 -0.99741797 -0.995092780 -0.9999745 -
0.99548682
## 6    -0.994397870 -0.9960880 -0.99851938 -0.995143310 -0.9999740 -
0.99453048
## 7    -0.994202190 -0.9944906 -0.99693400 -0.995641480 -0.9999745 -
0.99393973
## 8    -0.994727290 -0.9940182 -0.99700639 -0.995629120 -0.9999740 -
0.99542254
## 9    -0.995828480 -0.9954818 -0.99360770 -0.995260370 -0.9999768 -
0.99509545
## 10   -0.991665290 -0.9881993 -0.98487666 -0.990981210 -0.9999291 -
0.99045596
## 11   -0.991070150 -0.9872992 -0.98019716 -0.991314280 -0.9999243 -
0.99156494
```

```
## 12   -0.997537890 -0.9984228 -0.99394960 -0.997652250 -0.9999910 -
0.99772527
## 13   -0.999074360 -0.9991009 -0.99723427 -0.999046710 -0.9999971 -
0.99907380
## 14   -0.998987260 -0.9987670 -0.99464614 -0.999028000 -0.9999970 -
0.99878434
## 15   -0.990277590 -0.9874360 -0.99921381 -0.990241940 -0.9999161 -
0.99200690
## 16   -0.998514260 -0.9991914 -0.98932326 -0.997604000 -0.9999924 -
0.99810780
## 17   -0.998262590 -0.9990130 -0.99408869 -0.997332450 -0.9999909 -
0.99827323
## 18   -0.997620120 -0.9971885 -0.99656551 -0.997592650 -0.9999903 -
0.99678462
## 19   -0.998099100 -0.9985864 -0.99858868 -0.998504830 -0.9999943 -
0.99843259
## 20   -0.999513360 -0.9998248 -0.99811689 -0.999572440 -0.9999990 -
0.99912662
## 21   -0.998882190 -0.9995602 -0.99568164 -0.999046760 -0.9999972 -
0.99826866
## 22   -0.998514800 -0.9991018 -0.99473379 -0.998424150 -0.9999951 -
0.99707442
## 23   -0.998098960 -0.9987528 -0.99739921 -0.998965660 -0.9999961 -
0.99660003
## 24   -0.998662780 -0.9995703 -0.99711617 -0.998726460 -0.9999962 -
0.99796910
## 25   -0.998648250 -0.9992808 -0.99540335 -0.998736150 -0.9999960 -
0.99812154
## 26   -0.998705390 -0.9992119 -0.99198837 -0.998384630 -0.9999952 -
0.99784929
## 27   -0.998189140 -0.9990764 -0.99450398 -0.997969270 -0.9999934 -
0.99705200
## 28   -0.979634410 -0.9769933 -0.99576448 -0.983317240 -0.9997427 -
0.98371550
## 29   -0.998552020 -0.9990494 -0.99924561 -0.998589760 -0.9999955 -
0.99758285
## 30   -0.999281250 -0.9995148 -0.99608874 -0.998973150 -0.9999972 -
0.99937853
## 31   -0.842461170 -0.7659209 -0.92556114 -0.870864370 -0.9854569 -
0.85411352
## 32   -0.853738400 -0.8136828 -0.92417694 -0.872383570 -0.9885839 -
0.86117139
## 33   -0.948711020 -0.9432020 -0.98226831 -0.947617610 -0.9984418 -
0.94045971
## 34   -0.988716020 -0.9893900 -0.99013396 -0.989565570 -0.9999101 -
0.98868956
## 35   -0.994819970 -0.9968963 -0.99343692 -0.995805800 -0.9999779 -
0.99574759
## 36   -0.995185010 -0.9969412 -0.99019753 -0.996085020 -0.9999794 -
0.99617987
```

```
## 37  -0.995107760 -0.9969620 -0.99566137 -0.996031740 -0.9999798 -
0.99572229
## 38  -0.995715450 -0.9968154 -0.99155006 -0.995969140 -0.9999811 -
0.99539158
## 39  -0.992558730 -0.9951524 -0.99214964 -0.993638200 -0.9999598 -
0.99168382
## 40  -0.995006180 -0.9965661 -0.99622578 -0.995618120 -0.9999773 -
0.99572975
## 41  -0.995961750 -0.9976372 -0.99630116 -0.996659150 -0.9999841 -
0.99558577
## 42  -0.994942440 -0.9960887 -0.99288056 -0.995894820 -0.9999788 -
0.99515938
## 43  -0.996687530 -0.9976274 -0.99685033 -0.996757250 -0.9999865 -
0.99602121
## 44  -0.998330200 -0.9981729 -0.99785201 -0.998401250 -0.9999940 -
0.99840421
## 45  -0.997332490 -0.9975639 -0.99730607 -0.997642810 -0.9999896 -
0.99825910
## 46  -0.996382650 -0.9977261 -0.99384419 -0.997074670 -0.9999873 -
0.99571860
## 47  -0.997370140 -0.9984297 -0.99488412 -0.998110990 -0.9999925 -
0.99672798
## 48  -0.997371030 -0.9987365 -0.99832373 -0.998235290 -0.9999931 -
0.99617399
## 49  -0.997418340 -0.9975718 -0.99535004 -0.997960480 -0.9999917 -
0.99618643
## 50  -0.997427450 -0.9984201 -0.99659712 -0.997652870 -0.9999904 -
0.99735628
## 51  -0.995562750 -0.9973083 -0.99709372 -0.997302130 -0.9999854 -
0.99723825
## 52  -0.941187210 -0.9277066 -0.98641411 -0.952483800 -0.9980448 -
0.95690253
## 53  -0.998362530 -0.9991014 -0.99875023 -0.998537160 -0.9999950 -
0.99817487
## 54  -0.998218340 -0.9984038 -0.99784325 -0.998332200 -0.9999940 -
0.99824777
## 55  -0.998178570 -0.9994722 -0.99648329 -0.998544840 -0.9999952 -
0.99759211
## 56  -0.999239380 -0.9995474 -0.99660813 -0.998850630 -0.9999969 -
0.99878001
## 57  -0.998611080 -0.9996639 -0.99690582 -0.999116860 -0.9999971 -
0.99758068
## 58  -0.998505480 -0.9989831 -0.99643124 -0.998590720 -0.9999954 -
0.99824890
## 59  -0.998005890 -0.9984082 -0.99487524 -0.998711860 -0.9999951 -
0.99730494
## 60  -0.998716530 -0.9996072 -0.99888334 -0.999299340 -0.9999978 -
0.99802542
## 61  -0.999130740 -0.9997593 -0.99714013 -0.999027580 -0.9999973 -
0.99865872
```

```
## 62   -0.998298450 -0.9983027 -0.99644814 -0.998599620 -0.9999950 -
0.99769682
## 63   -0.998291120 -0.9989640 -0.99867688 -0.998488690 -0.9999948 -
0.99755837
## 64   -0.998068260 -0.9986838 -0.99862932 -0.998704110 -0.9999952 -
0.99696778
## 65   -0.924565330 -0.9012832 -0.98211932 -0.931882470 -0.9965091 -
0.94034557
## 66   -0.985929040 -0.9886452 -0.99841031 -0.987550820 -0.9998801 -
0.98545486
## 67   -0.626469180 -0.6308901 -0.93318728 -0.766726150 -0.9529631 -
0.60167959
## 68   -0.639822950 -0.7231345 -0.85551034 -0.761960650 -0.9592336 -
0.60244383
## 69   -0.917684630 -0.9169325 -0.99283948 -0.934034940 -0.9970331 -
0.90979854
## 70   -0.718594090 -0.7706939 -0.88330704 -0.733013660 -0.9642029 -
0.70701144
## 71   -0.473071200 -0.5050029 -0.84466333 -0.608227810 -0.8928428 -
0.56584744
## 72   -0.496699060 -0.5535897 -0.67684134 -0.612610810 -0.8934496 -
0.59209391
## 73   -0.899589900 -0.8849732 -0.94625555 -0.913041490 -0.9946798 -
0.91918262
## 74   -0.983354320 -0.9889369 -0.99123773 -0.985250630 -0.9998417 -
0.98455525
## 75   -0.983815580 -0.9836513 -0.97717952 -0.986909550 -0.9998304 -
0.98883111
## 76   -0.995990750 -0.9975481 -0.99069812 -0.996916030 -0.9999853 -
0.99682693
## 77   -0.996438810 -0.9979723 -0.99491549 -0.996444440 -0.9999848 -
0.99588890
## 78   -0.996206590 -0.9979601 -0.99506132 -0.996650540 -0.9999854 -
0.99499931
## 79   -0.386560930 -0.5458954 -0.78545635 -0.431831650 -0.8384003 -
0.32664943
## 80   -0.452924210 -0.5292179 -0.41777475 -0.428185870 -0.8411587 -
0.46812294
## 81   -0.409072050 -0.5314852 -0.61916770 -0.401038320 -0.8290308 -
0.36942893
## 82   -0.232848910 -0.3154129 -0.47159853 -0.217668850 -0.7011995 -
0.31486359
## 83   -0.294856650 -0.2434806  0.19174195 -0.187550950 -0.6872493 -
0.14880443
## 84   -0.397580930 -0.4668181 -0.29741948 -0.338358810 -0.8012707 -
0.34364966
## 85   -0.480282790 -0.4819249 -0.62368880 -0.397191100 -0.8326609 -
0.45604590
## 86   -0.404607010 -0.4858389 -0.70627500 -0.353548820 -0.8006680 -
0.43648485
```

```
## 87   -0.430052950 -0.5356770 -0.40341371 -0.472893240 -0.8547629 -
0.40754818
## 88   -0.403709180 -0.5008579 -0.78034726 -0.449340500 -0.8379370 -
0.30925851
## 89   -0.486578160 -0.4871110 -0.73347368 -0.462446520 -0.8581112 -
0.49006408
## 90   -0.403315710 -0.4198380 -0.82900185 -0.417613450 -0.8295787 -
0.25825598
## 91   -0.321188970 -0.3817965 -0.36414664 -0.378519930 -0.7914053 -
0.40571082
## 92   -0.277654460 -0.2959778 -0.55547118 -0.289650590 -0.7433997 -
0.25384161
## 93   -0.362448880 -0.3531111 -0.81734771 -0.341366340 -0.7831832 -
0.39792159
## 94   -0.333845700 -0.4597368 -0.84708052 -0.349592320 -0.7884573 -
0.35071358
## 95   -0.216251490 -0.3650619 -0.39855705 -0.301635720 -0.7466415 -
0.22949748
## 96   -0.249632630 -0.3083439 -0.78300513 -0.233780970 -0.7181886 -
0.16889724
## 97   -0.247937510 -0.3115409 -0.47889783 -0.140438620 -0.6729392 -
0.08211249
## 98   -0.308406620 -0.4029157 -0.71425708 -0.276440410 -0.7556203 -
0.15506552
## 99   -0.408031680 -0.4753910 -0.72480514 -0.355065760 -0.8099410 -
0.36747292
## 100 -0.437197880 -0.4650086 -0.58530499 -0.447162630 -0.8449671 -
0.36411302
## 101 -0.338875280 -0.3269472 -0.47723358 -0.297182200 -0.7612237 -
0.31560449
## 102 -0.148737430 -0.0292403  0.06625646 -0.147249140 -0.6106844 -
0.15475894
## 103 -0.116113660 -0.2455750 -0.84466565 -0.172883860 -0.6482244 -
0.12976897
## 104 -0.304759850 -0.3622529 -0.55957102 -0.206791720 -0.7184902 -
0.24076750
## 105 -0.285924390 -0.4232388 -0.68804164 -0.257236080 -0.7497839 -
0.20152981
## 106 -0.409503930 -0.5205797 -0.84981234 -0.396696540 -0.8312850 -
0.29752072
## 107 -0.367338350 -0.4010482 -0.27564581 -0.334348070 -0.7866532 -
0.31678440
## 108 -0.378911790 -0.3480491 -0.80575669 -0.369812630 -0.7967932 -
0.31427338
## 109 -0.356243500 -0.4017016 -0.30030172 -0.352441740 -0.7979461 -
0.18977362
## 110 -0.371997580 -0.4812671 -0.28255381 -0.263500240 -0.7591980 -
0.43551786
## 111 -0.287996710 -0.5831427 -0.31596061 -0.271497260 -0.7665133 -
0.12281974
```

```
## 112 -0.303849340 -0.3558707  0.02325691 -0.286815950 -0.7535531 -
0.36457572
## 113 -0.438628240 -0.3934435 -0.25857590 -0.427123680 -0.8277807 -
0.48260690
## 114 -0.356908550 -0.3798210 -0.78720563 -0.378141930 -0.7999390 -
0.45404058
## 115 -0.405363460 -0.3676766 -0.79961553 -0.340106680 -0.7904490 -
0.31458176
## 116 -0.342918720 -0.3823132 -0.79449415 -0.360219120 -0.7783993 -
0.41301460
## 117 -0.329515170 -0.4734979 -0.94053766 -0.357101690 -0.7926327 -
0.26281751
## 118 -0.432784890 -0.5395613 -0.73121226 -0.412318470 -0.8370887 -
0.47024926
## 119 -0.428622200 -0.5391799 -0.68587257 -0.386655110 -0.8242443 -
0.40504901
## 120 -0.371168230 -0.5350442 -0.48783158 -0.412701360 -0.8219328 -
0.39975931
## 121 -0.407950430 -0.4933928 -0.90303467 -0.435859020 -0.8386077 -
0.40742612
## 122 -0.405562550 -0.5888659 -0.62980532 -0.359960550 -0.8176426 -
0.31590116
## 123 -0.458769310 -0.5922118 -0.48007355 -0.387248420 -0.8418064 -
0.29057639
## 124 -0.412922340 -0.6351368 -0.90944325 -0.463667240 -0.8641177 -
0.32306466
## 125 -0.296413680 -0.4501088 -0.37971119 -0.332809800 -0.7809810 -
0.30337996
## 126 -0.476460690 -0.6187804 -0.52331811 -0.460038110 -0.8612835 -
0.44984062
## 127 -0.189299500 -0.4219820 -0.17861912 -0.195953750 -0.6968854 -
0.19534629
## 128 -0.018653714 -0.2958953  0.01481340 -0.128814290 -0.6034574
0.08215446
## 129 -0.363669500 -0.4933067 -0.68466007 -0.330651300 -0.7849027 -
0.37363745
## 130 -0.533671990 -0.7375957 -0.88376034 -0.478175540 -0.8852695 -
0.54724380
## 131 -0.242956470 -0.4204195 -0.54125789 -0.305680850 -0.7474129 -
0.20571038
## 132 -0.144689820 -0.3818355 -0.39170583 -0.267769620 -0.7037608 -
0.16051014
## 133 -0.404499820 -0.6102961 -0.42149393 -0.408175480 -0.8378534 -
0.35684325
## 134 -0.345282930 -0.5142039 -0.68779632 -0.380106820 -0.8031021 -
0.41013587
## 135 -0.008074972 -0.2326886 -0.28396213 -0.045316739 -0.5329127 -
0.09862427
## 136 -0.192586120 -0.4404437 -0.41790309 -0.131445830 -0.6579363 -
0.09030228
```

```
## 137 -0.156714670 -0.3244686 -0.67542800 -0.004970723 -0.5715028 -
0.07541190
## 138 -0.097672410 -0.4166819 -0.42126568 -0.136903000 -0.6277945 -
0.23156139
## 139 -0.119103900 -0.3463461  0.10020272 -0.133857360 -0.6145558 -
0.25786357
## 140 -0.199202520 -0.3926083 -0.28386670 -0.170594090 -0.6616496 -
0.25997526
## 141 -0.415579450 -0.6252966 -0.66079612 -0.325291530 -0.8084271 -
0.37467865
## 142 -0.482933220 -0.6799066 -0.81765525 -0.378854500 -0.8406470 -
0.48167740
## 143 -0.458285350 -0.7740701 -0.74790595 -0.401168410 -0.8564185 -
0.22371569
## 144 -0.418106570 -0.6047841 -0.63008770 -0.367593520 -0.8236324 -
0.42738072
## 145 -0.205604420 -0.4868442  0.16951953 -0.192777220 -0.7026025 -
0.19655836
## 146 -0.147352250 -0.4191368 -0.99229821 -0.151834630 -0.6457017 -
0.25628314
## 147 -0.266547450 -0.5687618 -0.57593357 -0.300874350 -0.7696424 -
0.18009918
## 148 -0.355903140 -0.6412967 -0.67901009 -0.378310740 -0.8211340 -
0.19366367
## 149 -0.379997470 -0.6506970 -0.37997094 -0.342707470 -0.8148394 -
0.30605296
## 150 -0.497230200 -0.7398789 -0.63675171 -0.506140560 -0.8904198 -
0.38491682
## 151 -0.518294170 -0.6465854 -0.62395126 -0.575114560 -0.9067318 -
0.40385660
## 152 -0.590850610 -0.6699553 -0.87652462 -0.619041020 -0.9225294 -
0.58663264
## 153 -0.619077060 -0.7710533 -0.79897126 -0.629260920 -0.9360184 -
0.51003152
## 154 -0.583058560 -0.7374988 -0.71134729 -0.594048890 -0.9233362 -
0.47843809
## 155 -0.526842470 -0.7383398 -0.92090851 -0.612151070 -0.9175451 -
0.50554096
## 156 -0.590839300 -0.7324492 -0.69380591 -0.627530610 -0.9330956 -
0.48970066
## 157 -0.574268730 -0.6818159 -0.83533083 -0.555289170 -0.9062657 -
0.56312812
## 158 -0.539998160 -0.6153719 -0.83047475 -0.567393010 -0.9054766 -
0.41094020
## 159 -0.684961450 -0.8033699 -0.87002878 -0.654670490 -0.9486090 -
0.58922320
## 160 -0.671450160 -0.6975065 -0.92273637 -0.652160170 -0.9425856 -
0.65406251
## 161 -0.584059030 -0.7833509 -0.80278379 -0.626461250 -0.9328583 -
0.45693228
```

```
## 162  -0.652447350 -0.7517182 -0.80478311 -0.639349620 -0.9378635 -
0.62537793
## 163  -0.714203680 -0.7992430 -0.82849488 -0.714461290 -0.9619354 -
0.71868853
## 164  -0.697779010 -0.7875562 -0.69481707 -0.655288880 -0.9478271 -
0.64486772
## 165  -0.734983780 -0.8369588 -0.38855825 -0.681059370 -0.9587497 -
0.70349225
## 166  -0.761597780 -0.8158044 -0.84140665 -0.730525580 -0.9677714 -
0.73373435
## 167  -0.694645530 -0.8125949 -0.68905867 -0.696018590 -0.9578082 -
0.65032707
## 168  -0.731372670 -0.8345909 -0.84998243 -0.729754500 -0.9666256 -
0.70671161
## 169  -0.612059970 -0.7405541 -0.94433961 -0.633442020 -0.9329668 -
0.52281401
## 170  -0.638427620 -0.7237252 -0.86028675 -0.608550020 -0.9276722 -
0.61229592
## 171  -0.685747390 -0.8261538 -0.70449123 -0.682104950 -0.9541359 -
0.70566170
## 172  -0.651582960 -0.8244657 -0.70729738 -0.673200220 -0.9497858 -
0.59343444
## 173  -0.658381690 -0.8156095 -0.95749277 -0.665204770 -0.9480059 -
0.66156613
## 174  -0.655819560 -0.7782322 -0.65420256 -0.652962360 -0.9474274 -
0.52598706
## 175  -0.653539930 -0.8087402 -0.90392076 -0.696755710 -0.9539760 -
0.59503441
## 176  -0.646623020 -0.7630327 -0.96308300 -0.690824540 -0.9469587 -
0.71453841
## 177  -0.985670980 -0.9898835 -0.98891211 -0.984665140 -0.9998510 -
0.98350140
##               NA          NA            NA            NA            NA
## 1    -0.8713058 -1.00000000 -0.0743230270 -0.2986763700 -0.71030407
## 2    -1.0000000 -1.00000000  0.1580745400 -0.5950509400 -0.86149931
## 3    -1.0000000 -0.55555556  0.4145028100 -0.3907481500 -0.76010372
## 4    -0.9556959 -0.93650794  0.4045725300 -0.1172902000 -0.48284451
## 5    -1.0000000 -0.93650794  0.0877530130 -0.3514709300 -0.69920515
## 6    -1.0000000 -1.00000000  0.0199533100 -0.5454101100 -0.84461930
## 7    -0.9556959 -1.00000000  0.1458435100 -0.2171981800 -0.56443048
## 8    -0.9556959 -1.00000000  0.1363819200 -0.0823069720 -0.42171544
## 9    -0.9556959 -1.00000000  0.3140378300 -0.2694012600 -0.57299535
## 10   -0.9556959 -1.00000000  0.2673825000  0.3395260700  0.14045152
## 11   -0.9234519 -1.00000000  0.1205033900  0.3487709800  0.05768159
## 12   -1.0000000 -1.00000000  0.3514418100 -0.6110136400 -0.87836268
## 13   -1.0000000 -0.87301587  0.6898970400 -0.6863889400 -0.87875110
## 14   -1.0000000 -0.96825397  0.7400228700 -0.5640998000 -0.76590135
## 15   -0.9234519 -1.00000000  0.1309584900  0.2076888100 -0.06805428
## 16   -1.0000000 -0.07936508  0.6615399700 -0.7821365100 -0.95352020
## 17   -1.0000000 -0.90476190  0.5606675500 -0.7788766000 -0.94042078
```

```
## 18   -1.0000000 -0.80952381   0.4286142100 -0.3288989500 -0.59686050
## 19   -1.0000000 -1.00000000   0.3484126400 -0.5013006700 -0.83824289
## 20   -1.0000000 -0.80952381   0.6671556500 -0.9416710100 -0.96552162
## 21   -1.0000000 -0.80952381   0.6011337500 -0.8338895700 -0.96857963
## 22   -1.0000000 -0.93650794   0.5763390200 -0.8481980300 -0.95024737
## 23   -1.0000000 -0.93650794   0.4802250900 -0.7019699400 -0.89511812
## 24   -1.0000000 -0.93650794   0.4681909300 -0.9097857800 -0.98659509
## 25   -1.0000000 -0.33333333   0.7300843500 -0.7463820600 -0.94166398
## 26   -1.0000000  0.23809524   0.6770731600 -0.7154621100 -0.93748334
## 27   -1.0000000 -0.96825397   0.7182839800 -0.8249189200 -0.96440686
## 28   -0.7958862 -1.00000000  -0.2576072700  0.1561853000 -0.24178130
## 29   -1.0000000 -0.96825397   0.5824263000 -0.7433974800 -0.89952310
## 30   -1.0000000 -0.77777778   0.7555930900 -0.7686233600 -0.92854834
## 31   -0.1818385 -1.00000000  -0.4635334700  0.7430984500  0.59673312
## 32   -0.1877216 -1.00000000  -0.2545513900  0.4824853600  0.25609488
## 33   -0.5611422 -1.00000000   0.1812865600  0.1433580800 -0.09741830
## 34   -0.8713058 -1.00000000   0.1234895100 -0.1768117100 -0.54858082
## 35   -1.0000000 -0.93650794   0.2009247500 -0.5081272800 -0.86266897
## 36   -1.0000000 -0.93650794   0.0545947810 -0.4307437200 -0.82318141
## 37   -1.0000000 -0.93650794   0.0923549480 -0.5374699400 -0.86192620
## 38   -1.0000000 -0.93650794   0.4536777200 -0.5275393300 -0.83912516
## 39   -0.9556959 -0.90476190   0.1908948000 -0.4444823800 -0.81650184
## 40   -1.0000000 -0.65079365   0.2070365900 -0.4673260900 -0.82105451
## 41   -1.0000000 -0.55555556   0.1069484200 -0.4898510300 -0.85323158
## 42   -1.0000000 -0.90476190   0.2173128400 -0.4310890100 -0.77074801
## 43   -1.0000000 -0.90476190   0.4586033900 -0.6961387400 -0.88056095
## 44   -1.0000000 -0.80952381   0.3501309600 -0.4478065400 -0.75140574
## 45   -1.0000000 -0.90476190   0.3022782000 -0.3335937800 -0.72037357
## 46   -1.0000000 -0.93650794   0.3089236400 -0.6103704200 -0.88061181
## 47   -1.0000000 -0.93650794   0.3343271800 -0.6593410100 -0.91519949
## 48   -1.0000000 -0.93650794   0.3189176600 -0.7297535400 -0.93847392
## 49   -1.0000000 -0.84126984   0.5196640800 -0.4616772900 -0.72987211
## 50   -1.0000000 -0.84126984   0.3269380900 -0.4973049900 -0.84641778
## 51   -1.0000000 -0.93650794  -0.1114284900 -0.4529215100 -0.84470535
## 52   -0.4684899 -1.00000000  -0.2748910300  0.3839069100 -0.02176383
## 53   -1.0000000 -0.90476190   0.4284733900 -0.6876359400 -0.91251203
## 54   -1.0000000 -0.84126984   0.4375321400 -0.5190843100 -0.81303967
## 55   -1.0000000 -0.71428571   0.5438481700 -0.8551394700 -0.98402776
## 56   -1.0000000 -0.90476190   0.6389389400 -0.8521711200 -0.95425386
## 57   -1.0000000 -0.90476190   0.5971281900 -0.9005186100 -0.98844764
## 58   -1.0000000 -1.00000000   0.3945063800 -0.6844966900 -0.90188828
## 59   -1.0000000 -0.93650794   0.2575364800 -0.6000930600 -0.83542768
## 60   -1.0000000 -0.93650794   0.6178431300 -0.8669652100 -0.97793030
## 61   -1.0000000  0.42857143   0.9185763800 -0.8603116500 -0.97914218
## 62   -1.0000000 -0.93650794   0.6141518300 -0.5846061000 -0.77528459
## 63   -1.0000000 -0.96825397   0.5646892900 -0.7167522000 -0.93040119
## 64   -1.0000000 -1.00000000   0.7228187700 -0.6728203600 -0.89079713
## 65   -0.4006057 -1.00000000  -0.1186406500  0.3963554300  0.07040545
## 66   -0.8713058 -0.96825397   0.0438738220 -0.3121101600 -0.67548227
## 67    0.1459270 -1.00000000  -0.8006835500  0.1960381800 -0.12889495
```

```
## 68     0.1443033 -1.00000000 -0.6912192200 -0.1570085300 -0.56191796
## 69    -0.3079143 -1.00000000 -0.3507199500  0.0847559100 -0.22865906
## 70     0.1745404 -1.00000000 -0.2816841500 -0.2680415200 -0.60964376
## 71     0.3498070 -1.00000000 -0.5251700200  0.0633637140 -0.33051979
## 72     0.3275272 -1.00000000 -0.5338671300  0.0189791800 -0.43705914
## 73    -0.3510624 -1.00000000 -0.2695649900  0.2850845800 -0.09160476
## 74    -0.8287342 -0.93650794  0.2927778200 -0.3861117800 -0.77042624
## 75    -0.8794230 -1.00000000  0.2477329300  0.0994874830 -0.40035933
## 76    -1.0000000 -1.00000000  0.2295159600 -0.4743435800 -0.84518609
## 77    -1.0000000 -0.93650794  0.3558033900 -0.6454892600 -0.90675792
## 78    -1.0000000 -0.80952381  0.4254729200 -0.7181711300 -0.93506965
## 79     0.5383088 -0.90476190 -0.1516417800 -0.3121368900 -0.67395058
## 80     0.4716551 -0.87301587  0.1737092600 -0.1766254400 -0.58428353
## 81     0.5670434 -0.87301587  0.2443055400 -0.3654165600 -0.69620082
## 82     0.6080054 -0.87301587  0.2627864400 -0.2033007200 -0.54687320
## 83     0.5898116 -0.87301587  0.4151864400  0.0462393480 -0.26919186
## 84     0.5704650 -0.87301587  0.3353569700 -0.2424583700 -0.55257680
## 85     0.4544980 -0.87301587  0.2199417800 -0.0268334960 -0.38146903
## 86     0.5795624 -0.90476190  0.2182461800 -0.2470620900 -0.60713395
## 87     0.4835364 -0.90476190 -0.0209132840 -0.2014770600 -0.59466014
## 88     0.4872084 -0.87301587 -0.0873468110 -0.1735880900 -0.56638099
## 89     0.4712680 -0.87301587  0.1185137200 -0.0136891640 -0.31731551
## 90     0.5462144 -0.87301587  0.2048007200 -0.0376529720 -0.26887324
## 91     0.4996237 -0.87301587  0.2394544800 -0.0798890330 -0.45424795
## 92     0.6154285 -0.87301587  0.2278396200 -0.0377496960 -0.32972788
## 93     0.5492325 -0.87301587  0.1705633600  0.0158003850 -0.28573754
## 94     0.5982714 -0.90476190  0.1611026400 -0.2623224500 -0.62609741
## 95     0.6110235 -0.87301587  0.0982239220 -0.2602701400 -0.60099427
## 96     0.6797007 -0.87301587  0.1035837900 -0.1095888600 -0.42216552
## 97     0.6869697 -0.90476190  0.1743448300 -0.1869211200 -0.49384468
## 98     0.6245834 -0.90476190  0.2108131500 -0.2428114000 -0.56927603
## 99     0.5760444 -0.87301587  0.2936991500 -0.2413333300 -0.55187161
## 100    0.4699232 -0.87301587  0.3948549100 -0.0483287520 -0.37316280
## 101    0.6005987 -0.87301587  0.3562601100  0.0040713823 -0.26704180
## 102    0.6588716 -0.87301587  0.2383139700  0.2785569100  0.03432269
## 103    0.6272565 -0.87301587  0.0564785330 -0.1846265100 -0.54960683
## 104    0.5847700 -0.87301587  0.3848584900 -0.2056903900 -0.51911727
## 105    0.5921058 -0.87301587  0.4140957200 -0.3276461700 -0.63373341
## 106    0.5478086 -0.87301587  0.3665951300 -0.3950299400 -0.64919349
## 107    0.5197906 -0.87301587  0.2203890000 -0.1199580000 -0.44379143
## 108    0.5923307 -0.87301587  0.0775928090  0.0844927310 -0.18710903
## 109    0.5460768 -0.87301587  0.1655629700 -0.0966768530 -0.37672629
## 110    0.5163845 -0.90476190  0.2414844300 -0.2079250000 -0.59041372
## 111    0.5958899 -0.90476190  0.0414466300 -0.6232547300 -0.89124865
## 112    0.5873304 -0.87301587  0.1754617800 -0.1091713000 -0.44844837
## 113    0.4632073 -0.87301587  0.2642732700  0.1239663700 -0.18368135
## 114    0.5386959 -0.87301587  0.2480218300 -0.0473068940 -0.36059448
## 115    0.6019271 -0.87301587  0.2012964500  0.0594423530 -0.22444915
## 116    0.5474473 -0.87301587  0.1339104300 -0.0003612047 -0.41276796
## 117    0.6526393 -0.87301587  0.0799232480 -0.3174157000 -0.66626897
```

```
## 118    0.4808345 -0.87301587   0.2623174400 -0.2921580300 -0.65602444
## 119    0.5661564 -0.90476190   0.2100353600 -0.2920756400 -0.64701325
## 120    0.5251523 -0.90476190   0.0781750220 -0.2851854700 -0.69624001
## 121    0.5267723 -0.90476190   0.0828915820 -0.1804281000 -0.54215157
## 122    0.5507159 -0.87301587   0.1389796800 -0.4547713000 -0.78753094
## 123    0.5106932 -0.90476190   0.1960543500 -0.4814671200 -0.75226919
## 124    0.5051230 -0.90476190   0.1697788100 -0.5810097400 -0.85618464
## 125    0.5970807 -0.90476190   0.0557139620 -0.3055499900 -0.65765213
## 126    0.4773708 -0.96825397   0.0020676879 -0.2994248900 -0.69116994
## 127    0.5909860 -0.96825397  -0.0615250130 -0.4192888700 -0.78169916
## 128    0.6901418 -0.90476190  -0.0009285913 -0.3386454100 -0.72914396
## 129    0.6004868 -0.90476190   0.2936519100 -0.2779943300 -0.65627300
## 130    0.5032956 -0.33333333   0.4489403000 -0.6489900700 -0.91684738
## 131    0.5766398 -0.90476190   0.1583959400 -0.2319507700 -0.62703112
## 132    0.6228679 -0.90476190   0.0007837935 -0.3053153600 -0.71706482
## 133    0.5155560 -0.96825397   0.1692699100 -0.4752742200 -0.82304700
## 134    0.5032353 -0.96825397   0.2798822800 -0.3684737100 -0.75361313
## 135    0.7212580 -0.87301587   0.0622944110 -0.3460433800 -0.73261272
## 136    0.6413533 -0.96825397   0.4221697500 -0.4241041600 -0.76814981
## 137    0.6691055 -0.87301587   0.3353146500 -0.4389266600 -0.72882018
## 138    0.6922196 -0.84126984   0.0274672870 -0.3913719600 -0.79501703
## 139    0.6251788 -0.93650794   0.0848849230 -0.2310517800 -0.67927826
## 140    0.6390836 -0.96825397   0.1792416900 -0.2517046200 -0.66882668
## 141    0.5489994 -0.74603175   0.2929126700 -0.5934816500 -0.88647571
## 142    0.5409646 -0.80952381   0.3732030300 -0.6042860700 -0.87676679
## 143    0.5249028 -0.87301587   0.2433984900 -0.8760421400 -0.99466425
## 144    0.5446366 -0.87301587   0.1790902800 -0.5083457100 -0.83070137
## 145    0.6234469 -0.87301587   0.1497109400 -0.4678187700 -0.83985299
## 146    0.6678726 -0.87301587   0.0704096110 -0.3685420500 -0.77672856
## 147    0.6306781 -0.87301587   0.0304554930 -0.5526038200 -0.87490677
## 148    0.5810026 -0.90476190   0.3167519200 -0.5825539400 -0.88660191
## 149    0.5941581 -0.90476190   0.3422299000 -0.6153147800 -0.90082709
## 150    0.4781202 -0.90476190   0.1363229000 -0.6972542300 -0.94101851
## 151    0.4102345 -0.90476190  -0.0066072733 -0.3314703700 -0.68594563
## 152    0.3917082 -0.90476190   0.0598413330 -0.2308114900 -0.62155200
## 153    0.3852255 -0.90476190   0.0421753790 -0.5967528100 -0.88181655
## 154    0.4041317 -0.84126984   0.0357294090 -0.5442092400 -0.83419390
## 155    0.3823614 -0.84126984  -0.2082514200 -0.4762936000 -0.86253422
## 156    0.3567115 -0.90476190  -0.0563201720 -0.5220328200 -0.82199476
## 157    0.4109008 -1.00000000   0.1364363600 -0.3734326000 -0.73275212
## 158    0.4064416 -0.90476190   0.0882438120 -0.2499341300 -0.57235640
## 159    0.3245965 -0.90476190   0.2898003000 -0.6427789400 -0.89386292
## 160    0.3225197 -0.90476190   0.1636337600 -0.1927685200 -0.47931144
## 161    0.3368056 -0.90476190   0.0109419930 -0.6002536700 -0.91258056
## 162    0.3390300 -1.00000000   0.0569325730 -0.3414782000 -0.72333310
## 163    0.2563588 -0.90476190   0.2262922300 -0.4763913100 -0.79673463
## 164    0.2625911 -0.90476190   0.2572531600 -0.4876809200 -0.80676003
## 165    0.2195451 -0.90476190   0.2263963900 -0.5833219400 -0.87791073
## 166    0.1745816 -0.96825397   0.0292520520 -0.4044535800 -0.72984544
## 167    0.2367021 -0.90476190   0.0224573150 -0.5369909500 -0.85683214
```

```
## 168   0.2447102 -0.90476190   0.1290343100 -0.5935797200 -0.88109366
## 169   0.3302334 -0.90476190  -0.0499360020 -0.3928730100 -0.76269564
## 170   0.3081212 -0.90476190  -0.0896030540 -0.3658195000 -0.72421874
## 171   0.2719983 -0.80952381   0.0766943700 -0.6041799900 -0.91457365
## 172   0.2816441 -1.00000000   0.0699577390 -0.5957174200 -0.91327660
## 173   0.3329353 -0.80952381   0.1301925600 -0.6057239000 -0.90106345
## 174   0.3064573 -0.84126984   0.1410482300 -0.6105228600 -0.85013883
## 175   0.3207460 -0.90476190  -0.0782934840 -0.5454037300 -0.87419542
## 176   0.2414172 -0.84126984  -0.1740794700 -0.3425282700 -0.75728683
## 177  -0.8099757 -0.96825397   0.0656836350 -0.4972597600 -0.79892446
##                     NA            NA            NA            NA          NA
## 1    -0.1127543400   0.030400372 -0.464761390 -0.018445884 -0.8412468
## 2     0.0534769550  -0.007434566 -0.732626210   0.703510590 -0.8447876
## 3    -0.1185592600   0.177899480  0.100699210   0.808529080 -0.8489335
## 4    -0.0367879730  -0.012892494  0.640011040 -0.485366450 -0.8486494
## 5     0.1233200500   0.122541960  0.693578290 -0.615970610 -0.8478653
## 6     0.0826321550  -0.143439010  0.275040750 -0.368224040 -0.8496316
## 7    -0.2127540600  -0.230621930  0.014636690 -0.189511530 -0.8521502
## 8    -0.0208880150   0.593995810 -0.561870670   0.467383330 -0.8510167
## 9     0.0129540210   0.080936389 -0.234312630   0.117797010 -0.8479715
## 10   -0.0205896460  -0.127730180 -0.482870540 -0.070670135 -0.8482944
## 11    0.0806994690   0.595790550 -0.475802450   0.115930620 -0.8515618
## 12    0.0017609637  -0.065980273  0.578861120 -0.651945130 -0.8527234
## 13   -0.0775517230  -0.101221890  0.639083990   0.765484880 -0.8506545
## 14    0.1056204700  -0.090277545 -0.132402800   0.498814190 -0.8497727
## 15    0.0622966190  -0.058719320  0.031207971 -0.268791330 -0.7309373
## 16   -0.1218522200  -0.029076714 -0.013034217 -0.056927156 -0.7611008
## 17   -0.0014463033  -0.048109773 -0.340473490 -0.229154570 -0.7591722
## 18   -0.0283318580   0.092367048 -0.822238610   0.367557440 -0.7593633
## 19   -0.1658491500  -0.033006915 -0.240571550   0.788192910 -0.7610519
## 20    0.2449313100   0.102568970  0.066134774 -0.411729480 -0.7606202
## 21    0.1606073500   0.197773910  0.257657210 -0.381102130 -0.7605277
## 22   -0.0023201840   0.150390830  0.142331320 -0.853711290 -0.7620229
## 23   -0.0323374980  -0.301298380  0.132575960 -0.022379316 -0.7615089
## 24   -0.5428842400  -0.249544510  0.006986179 -0.235199540 -0.7589601
## 25   -0.0214455400   0.337009870 -0.436684990 -0.622922020 -0.7589769
## 26    0.0256519910   0.066502648 -0.226315510 -0.225357990 -0.7621967
## 27    0.2310603100   0.429282530  0.681154290  0.815225620 -0.7637021
## 28    0.0135259730   0.043354353  0.021485361  0.046689153 -0.6670846
## 29    0.1947347500  -0.148055620  0.033529451 -0.127027870 -0.5648074
## 30   -0.2286883400  -0.097214562  0.024191641  0.006329124 -0.5793674
## 31    0.1792231800   0.077594975  0.056348280 -0.316726630 -0.5828063
## 32    0.1147599500   0.114436210 -0.070782460 -0.001460983 -0.5529392
## 33   -0.0049131687   0.033987522 -0.036067731  0.205112560 -0.4183681
## 34   -0.0123379320   0.094622460  0.029126625 -0.134245210 -0.3058841
## 35    0.0961930970  -0.131374980  0.077639880 -0.037327157 -0.3091949
## 36    0.0643981520   0.300923870  0.117655440 -0.046454587 -0.3167322
## 37   -0.0081442943   0.559317550  0.142526980 -0.016025225 -0.3145750
## 38   -0.0742619280   0.324511330  0.161269690  0.192140510 -0.3148856
## 39    0.3212502900  -0.050327903  0.584279980 -0.426198260 -0.6543561
```

```
## 40   -0.0332840060 -0.192608550  0.617873510 -0.512405460 -0.6507820
## 41   -0.1437755800 -0.235154520  0.689865800 -0.573560570 -0.6451461
## 42    0.0081153282  0.106761350  0.900588870 -0.794045890 -0.6465785
## 43    0.0461880310  0.251286790 -0.506864840 -0.583071760 -0.6470622
## 44    0.0461273210  0.112450510 -0.519914550 -0.134551200 -0.6451051
## 45    0.1248438700 -0.378424150 -0.641466180  0.341445110 -0.6463337
## 46    0.0331936620  0.331452520 -0.693793230  0.395252820 -0.6479974
## 47   -0.1080917300  0.371172170 -0.500428060  0.454992430 -0.6462539
## 48   -0.1325788700 -0.345562400  0.289201850  0.355138020 -0.6460439
## 49    0.0265410280 -0.286820710  0.785790040 -0.300857290 -0.6448514
## 50    0.1265118500  0.637388690 -0.081017137 -0.187249070 -0.6432203
## 51   -0.1750681300  0.266021650  0.285314860  0.465166740 -0.6454598
## 52   -0.0685798980 -0.043105439 -0.332248510  0.487505250  0.4324785
## 53   -0.1130479400  0.223038100 -0.393074660  0.359037150  0.3998533
## 54    0.2931448500 -0.018634898 -0.246979720  0.453923120  0.3990658
## 55    0.2405257400  0.149804360  0.393610910  0.386719130  0.3995548
## 56   -0.3475187000 -0.469154840  0.308854890 -0.354146240  0.3988886
## 57   -0.3276613300 -0.689302550  0.397034800 -0.310910610  0.3988974
## 58    0.7510889700  0.626431780  0.263400940 -0.646225070  0.3988811
## 59    0.1984363000  0.241702010 -0.011946523 -0.096104861  0.3987777
## 60   -0.0466892300 -0.282930350  0.541432330  0.727894650  0.3980197
## 61   -0.3282750400  0.447150500  0.079283632 -0.108642230  0.3971343
## 62   -0.2409816600 -0.544387870 -0.228994820 -0.039423200  0.3973035
## 63   -0.1965436500 -0.665017330  0.772095840  0.775333580  0.3977580
## 64    0.1702030400  0.310624530  0.663555470  0.337821050  0.3977906
## 65    0.0334878560  0.061567529 -0.514438170  0.240942860  0.2057594
## 66    0.1534405500 -0.528678050 -0.478887620  0.388870110  0.2785440
## 67    0.1394751700  0.039215644 -0.495302820  0.082695923  0.2720829
## 68    0.0024180696 -0.002366143 -0.101877640  0.543206600  0.3787915
## 69   -0.1093918400  0.121178870  0.002749453  0.098027740  0.5023862
## 70   -0.1167685700 -0.391404110  0.413596360  0.051019612  0.4945353
## 71    0.1528296200  0.149602360  0.127245050  0.192852070  0.5087332
## 72    0.1231081600  0.432539740 -0.083445798  0.025647796  0.6682843
## 73   -0.0007928036  0.267189470 -0.186201930  0.098098759  0.7929702
## 74    0.4472253300  0.022634024 -0.051352659  0.156333780  0.7969283
## 75   -0.0283187270 -0.115114940 -0.044386256  0.058185081  0.7973937
## 76   -0.1315768500  0.565616580 -0.010565179  0.046694737  0.7991744
## 77    0.0894277650 -0.191935090  0.377740900  0.071105431  0.7972570
## 78    0.1387421700 -0.479116010  0.263321580 -0.412015950  0.7964124
## 79   -0.1608831200  0.564736320  0.912473220 -0.412836070 -0.7737066
## 80   -0.0219768550  0.506609390 -0.700053020 -0.840942950 -0.7671632
## 81    0.3720410300 -0.106183570 -0.923835330  0.344459190 -0.7574139
## 82   -0.3785736400 -0.582073330 -0.886348740  0.063337412 -0.7625343
## 83   -0.0729063780  0.656842080 -0.291200050  0.077922024 -0.7639681
## 84    0.2279383100  0.011124233  0.272253810  0.207345250 -0.7661857
## 85   -0.1482182400 -0.552254850  0.205244310  0.377500410 -0.7766768
## 86    0.1754768800  0.551512200 -0.221460600 -0.688191320 -0.7842253
## 87   -0.5161541400  0.461593890  0.921734830 -0.367224050 -0.7601763
## 88   -0.0769055250  0.525659440  0.500027690 -0.643309590 -0.7641134
## 89    0.8347709900 -0.849025300 -0.357327500 -0.170313160 -0.7654885
```

```
## 90   -0.1581363300 -0.759188590 -0.270994760  0.201838520 -0.7646006
## 91   -0.1657555900  0.648271640  0.303367780  0.822135870 -0.7602417
## 92   -0.0400304370  0.257251660  0.076090927 -0.123424790 -0.7528818
## 93   -0.4227126300 -0.356212950 -0.403728040 -0.169087180 -0.7559765
## 94    0.7482928400  0.668579570 -0.459455020  0.291569570 -0.7639973
## 95    0.5924629400 -0.448267850 -0.579214510  0.836637940 -0.7680147
## 96   -0.4389106400 -0.710034970  0.121017950 -0.023407756 -0.7694772
## 97   -0.5387171800  0.833200500  0.457681980  0.211526520 -0.7767360
## 98    0.4606548700  0.765161570  0.424756900  0.167462670 -0.7869627
## 99   -0.0531583540  0.512810490 -0.811517960  0.581624360 -0.7641851
## 100   0.4662107800 -0.205652070 -0.282600790  0.207175110 -0.7569977
## 101  -0.0845498020 -0.497418560  0.162352500 -0.408397320 -0.7507395
## 102   0.7176453300  0.401581250 -0.038345181 -0.593632420 -0.7499626
## 103   0.3733684700 -0.358117660 -0.025813658  0.810168750 -0.7512087
## 104  -0.5228653400  0.644425130  0.427021120  0.697137950 -0.7521812
## 105   0.7158481400  0.228243580  0.277383940 -0.318153500 -0.7619169
## 106  -0.0355104380 -0.760584690  0.535230060 -0.957049970 -0.7731985
## 107  -0.3749949600  0.147097300 -0.338795480 -0.454474740 -0.7773315
## 108   0.4854516800  0.476313610 -0.550600780  0.389290780 -0.7794364
## 109  -0.0102483440 -0.579204270 -0.521203010  0.810517390 -0.7700047
## 110  -0.4217641400 -0.471106050  0.077417664  0.237209330 -0.7560886
## 111  -0.3364846200  0.373741110  0.597146290 -0.257187610 -0.7577825
## 112  -0.2904975200 -0.230933140  0.955379020 -0.603208950 -0.7550758
## 113   0.8330108600  0.319390640  0.946113550 -0.029271039 -0.7475173
## 114  -0.0657608370 -0.765499700  0.810453430  0.090854819 -0.7506961
## 115  -0.4735909800  0.653035390  0.664344190  0.681687830 -0.7556625
## 116   0.6848406900  0.424515800 -0.284663320 -0.021918480 -0.7661803
## 117  -0.1217077600 -0.300205950 -0.813565820 -0.888403980 -0.7695421
## 118  -0.5766661800  0.398499350 -0.447815970 -0.579070840 -0.7719047
## 119   0.4246765200 -0.192487540 -0.352359420  0.309341780 -0.7779164
## 120   0.6591435000 -0.367384330 -0.274644650  0.292815570 -0.7747675
## 121   0.0541384120 -0.492606970  0.615095010  0.346940040 -0.7741005
## 122  -0.2371414100 -0.583154390  0.121184080 -0.140030140 -0.7808835
## 123  -0.2964846400  0.623604220 -0.299838730  0.175934040 -0.7831538
## 124   0.6151863800  0.571299850  0.143779250  0.240494550 -0.7799536
## 125   0.4796791100 -0.571218450  0.435895240 -0.435920800 -0.7713631
## 126  -0.2947875800 -0.582191560  0.046130951 -0.112672810 -0.7683400
## 127  -0.2728047500  0.315993280  0.783686160 -0.288010060 -0.7907645
## 128  -0.0485041760  0.653022460  0.972225460  0.530881870 -0.8022357
## 129   0.0002111819  0.068551448  0.955957900 -0.616748120 -0.8036190
## 130  -0.0275834440  0.432609540 -0.943390250  0.107830320 -0.8006682
## 131   0.1402629300 -0.116672280  0.975040020  0.594270290 -0.8128886
## 132  -0.1021958800 -0.044056353 -0.738124400 -0.576297360 -0.8113968
## 133   0.1675993200  0.013802323 -0.960124610 -0.081783026 -0.8029214
## 134   0.8738045200 -0.315115980 -0.960521040  0.678076900 -0.8106353
## 135   0.0036457563 -0.705994280  0.977198780 -0.174690920 -0.7461619
## 136  -0.8431305200  0.635292260  0.905506740  0.343408830 -0.7619855
## 137   0.1595506600  0.731199690  0.935449070 -0.101694210 -0.7557764
## 138   0.5595619500 -0.964759860  0.798683420 -0.486991850 -0.7436420
## 139  -0.6938542900  0.435755700 -0.954718370  0.777159000 -0.7432326
```

```
## 140   0.3781963900   0.894063940   0.812622260  -0.424187280 -0.7507135
## 141   0.0594542120  -0.800865520  -0.849875300  -0.698906010 -0.7553770
## 142  -0.3470415800  -0.091058847  -0.926615110   0.434069520 -0.7711619
## 143  -0.6722505600  -0.152870330   0.985283880  -0.254879540 -0.7399262
## 144  -0.2252616100   0.785611740   0.893840020   0.701630710 -0.7576977
## 145   0.4748558000  -0.597493470   0.889267420  -0.315009410 -0.7662243
## 146  -0.2370696000   0.340482590   0.602830000  -0.561069250 -0.7506691
## 147  -0.4138692500   0.634555650   0.751069070   0.434283160 -0.7512011
## 148   0.0466957500   0.475769790   0.906800650  -0.371855300 -0.7688610
## 149   0.4838184700  -0.712491670  -0.872521480  -0.755811120 -0.7628088
## 150   0.3892028500  -0.635065030  -0.920455440   0.293529320 -0.7709432
## 151   0.1987993700  -0.515057560  -0.960808140   0.798594600 -0.7301796
## 152  -0.1833122800  -0.366714300  -0.932360730   0.257389960 -0.6954808
## 153  -0.1407953000  -0.235431060  -0.904871490  -0.524824340 -0.6816201
## 154  -0.0993320880  -0.413969630  -0.968821180  -0.132384440 -0.6867150
## 155   0.3605935400   0.455744360   0.777627720  -0.057846298 -0.6932668
## 156   0.4988535000   0.179757530  -0.818937070  -0.056916321 -0.6983891
## 157   0.4438407900  -0.199366790   0.684450550   0.761996200 -0.7022529
## 158  -0.0511231490   0.279914670   0.984108740   0.600523150 -0.6918901
## 159   0.3350311400  -0.817833310  -0.963266510  -0.904298650 -0.6976624
## 160   0.7241294300  -0.142842600  -0.958263900  -0.767436710 -0.6624351
## 161  -0.5154456100   0.578529420  -0.950428200   0.715585020 -0.6576454
## 162  -0.5784310600   0.661165970  -0.931458810   0.700749750 -0.6580320
## 163  -0.8572077100  -0.661554160  -0.344863790  -0.700888390 -0.6622363
## 164  -0.9395976200  -0.647406180  -0.753252660   0.141815520 -0.6671171
## 165  -0.0755811980  -0.488692510   0.904460740   0.845250600 -0.6674005
## 166   0.0097332985  -0.286142140   0.974469780  -0.364880900 -0.6534964
## 167   0.1407098200  -0.046210397   0.891381340  -0.662970180 -0.6440912
## 168   0.1357776000   0.659119290  -0.984461460   0.674556300 -0.6951592
## 169   0.5573184600   0.491481990  -0.931485780  -0.116662410 -0.6694655
## 170  -0.7196080800  -0.192927900  -0.961774600   0.134304000 -0.6629732
## 171  -0.5025175400  -0.368694340  -0.823093870   0.528154280 -0.6624537
## 172   0.1245478100  -0.612535900   0.843872600  -0.330133100 -0.6713999
## 173   0.3114788000  -0.695962360  -0.791060770  -0.107879260 -0.6740130
## 174   0.3229567300  -0.781349940   0.498949680   0.836395450 -0.6713263
## 175   0.5796483500   0.888921350   0.974813500  -0.488198930 -0.6702557
## 176   0.1115831000   0.938893570   0.962845750  -0.836773290 -0.6678084
## 177   0.0283619890  -0.137186330  -0.074016220   0.022322308 -0.6875829
##                NA            NA
## 1     0.179940610 -0.05862692
## 2     0.180288890 -0.05431672
## 3     0.180637310 -0.04911782
## 4     0.181934760 -0.04766318
## 5     0.185151160 -0.04389225
## 6     0.184822510 -0.04212638
## 7     0.182169970 -0.04300999
## 8     0.183778510 -0.04197583
## 9     0.188982480 -0.03736393
## 10    0.190310330 -0.03441729
## 11    0.187609320 -0.03468117
```

```
## 12    0.186050360 -0.03585209
## 13    0.187610540 -0.03599795
## 14    0.188812200 -0.03506340
## 15    0.283158550  0.03644391
## 16    0.263118580  0.02417211
## 17    0.264324470  0.02701434
## 18    0.264032790  0.02966402
## 19    0.262885990  0.02934573
## 20    0.263169350  0.02957303
## 21    0.263183490  0.03028845
## 22    0.262170280  0.02998699
## 23    0.262550060  0.02963917
## 24    0.264256230  0.03045603
## 25    0.264223610  0.03074315
## 26    0.262090130  0.02940367
## 27    0.261103360  0.02856296
## 28    0.054216165 -0.21887457
## 29   -0.027044798 -0.26605456
## 30   -0.021566893 -0.25753010
## 31   -0.020755925 -0.25526977
## 32   -0.053538987 -0.26042439
## 33   -0.142549020 -0.30588383
## 34   -0.213339040 -0.33700092
## 35   -0.221116620 -0.32645795
## 36   -0.217729340 -0.32332877
## 37   -0.218935200 -0.32398842
## 38   -0.219166890 -0.32348431
## 39    0.006141106 -0.21275283
## 40   -0.003048538 -0.21119617
## 41   -0.013061244 -0.21042962
## 42   -0.012405519 -0.20965049
## 43   -0.011866506 -0.20955912
## 44   -0.014516278 -0.20966409
## 45   -0.014783523 -0.20853819
## 46   -0.014168187 -0.20755542
## 47   -0.016451134 -0.20766551
## 48   -0.016965715 -0.20754128
## 49   -0.017046458 -0.20844898
## 50   -0.018360329 -0.20900476
## 51   -0.017047243 -0.20796204
## 52   -0.553351480 -0.43287564
## 53   -0.550364440 -0.42759273
## 54   -0.546724650 -0.43124421
## 55   -0.546476810 -0.43164599
## 56   -0.546712260 -0.43120727
## 57   -0.546858840 -0.43105379
## 58   -0.546717150 -0.43119994
## 59   -0.546249720 -0.43166802
## 60   -0.545550470 -0.43219711
## 61   -0.544679910 -0.43287147
```

```
## 62   -0.544197740 -0.43343266
## 63   -0.544442360 -0.43330166
## 64   -0.543991110 -0.43379089
## 65   -0.536103870 -0.36073577
## 66   -0.544091990 -0.38929322
## 67   -0.534122170 -0.39742768
## 68   -0.488443150 -0.48705651
## 69   -0.431270830 -0.57287374
## 70   -0.465940030 -0.53580206
## 71   -0.496131770 -0.50619728
## 72   -0.336641200 -0.67268482
## 73   -0.034019619 -0.92814826
## 74    0.125018540 -0.97719373
## 75    0.131802250 -0.97526294
## 76    0.115960310 -0.97723061
## 77    0.111747530 -0.97914858
## 78    0.107917800 -0.98014271
## 79    0.252432120  0.04409874
## 80    0.256918810  0.04463760
## 81    0.264451700  0.03941682
## 82    0.260850420  0.03973498
## 83    0.259628940  0.04141249
## 84    0.258258320  0.04012817
## 85    0.251218400  0.03810504
## 86    0.246085430  0.03716229
## 87    0.262951370  0.03572594
## 88    0.258759810  0.04641268
## 89    0.258193260  0.04397244
## 90    0.259326270  0.04039656
## 91    0.261528800  0.04604602
## 92    0.266728660  0.04569190
## 93    0.264995500  0.04285138
## 94    0.259415750  0.04276505
## 95    0.256900640  0.04075430
## 96    0.256167160  0.03857539
## 97    0.251406470  0.03618038
## 98    0.244471120  0.03467662
## 99    0.260564580  0.03144204
## 100   0.263320650  0.04884426
## 101   0.268018570  0.04698288
## 102   0.269151250  0.04310044
## 103   0.268419420  0.04211614
## 104   0.267974570  0.04034707
## 105   0.261528930  0.03768443
## 106   0.254039120  0.03452880
## 107   0.251088760  0.03531365
## 108   0.249355450  0.03765167
## 109   0.255555090  0.04045722
## 110   0.264391690  0.04629429
## 111   0.262950420  0.04782205
```

```
## 112    0.264814030    0.04800342
## 113    0.269452430    0.05166433
## 114    0.268269770    0.04559727
## 115    0.265405600    0.04147005
## 116    0.258602670    0.03737588
## 117    0.256581010    0.03447432
## 118    0.255059650    0.03326035
## 119    0.250936360    0.03278583
## 120    0.253014680    0.03388856
## 121    0.253689410    0.03154663
## 122    0.248986280    0.03159831
## 123    0.246745200    0.03784673
## 124    0.247868710    0.04525565
## 125    0.253337150    0.04834654
## 126    0.256712180    0.04047408
## 127    0.242047690    0.03258242
## 128    0.234166340    0.03181717
## 129    0.231639410    0.04323660
## 130    0.233024400    0.04686457
## 131    0.225553730    0.04087687
## 132    0.225428600    0.04701636
## 133    0.232054580    0.04364982
## 134    0.228404980    0.03115404
## 135    0.269037730    0.05828833
## 136    0.262214970    0.02971734
## 137    0.266270290    0.03287107
## 138    0.273120250    0.04607592
## 139    0.273990580    0.04197545
## 140    0.267235560    0.05152319
## 141    0.263918240    0.05174118
## 142    0.255434010    0.03470660
## 143    0.274971900    0.05058339
## 144    0.264695150    0.03548836
## 145    0.258456680    0.03834999
## 146    0.269014770    0.04043820
## 147    0.269852220    0.02665056
## 148    0.256403840    0.04006835
## 149    0.257773570    0.05605128
## 150    0.254993310    0.03977426
## 151    0.275742600    0.07579027
## 152    0.303214410    0.06548249
## 153    0.311837470    0.07051928
## 154    0.308242830    0.07046834
## 155    0.306132510    0.05896741
## 156    0.304878010    0.04432452
## 157    0.303035600    0.03645705
## 158    0.309128760    0.04641444
## 159    0.301654250    0.06557045
## 160    0.327175240    0.06198867
## 161    0.330475490    0.06228532
```

```
## 162   0.330792120   0.05906039
## 163   0.327858030   0.05902543
## 164   0.325035110   0.05557465
## 165   0.324882440   0.05529812
## 166   0.332668010   0.06594806
## 167   0.338510740   0.06962704
## 168   0.304615200   0.05993533
## 169   0.322234890   0.06204643
## 170   0.326775400   0.06210766
## 171   0.328843070   0.05198831
## 172   0.321962740   0.05606397
## 173   0.318959990   0.06247472
## 174   0.322172120   0.05511074
## 175   0.323389230   0.05210825
## 176   0.323679240   0.06055876
## 177   0.313849470   0.01011299
##  [ reached 'max' / getOption("max.print") -- omitted 10122 rows ]
```