## Computational Simulation of the Eigenvalues of a Stochastic Matrix

## Ali Taqi

## Eigenvalues of a Normal Matrix

```
2.359468 1.569176 0.375787 -2.477303
## [1]
##
                                   x2
                                                              x4 time element_index
                    x1
                                                 xЗ
## 21
         -22891112.49 -5.919984e+06
                                       16294299.08
                                                     31140348.92
                                                     -7461348.99
## 42
          -5221465.90 -6.100184e+06
                                        3436922.99
                                                                    20
                                                                                    2
                                                                                    3
##
  63
           8931267.25
                        4.805969e+06
                                       -6207151.24
                                                     -4484700.09
                                                                    20
   84
          49521642.18
                        2.335285e+07 -34643154.79 -35078469.00
                                                                    20
                                                                                    4
##
                                                                                    5
   105
         -18397754.26 -7.620294e+05
                                       13325275.66
                                                     37260180.59
                                                                                    6
##
   126
            110042.65 -7.503214e+06
                                        -519112.57
                                                    -23234304.47
                                                                    20
                                                                                    7
##
   147
         -21248618.46
                        8.532895e+05
                                       15489792.38
                                                     48340773.03
                                                                    20
  168
                                        8699604.89
                                                     -2224347.18
                                                                                    8
##
         -12743586.59 -9.679854e+06
                                                                    20
## 189
         -28812029.96 -5.623651e+06
                                       20611799.20
                                                     44782692.18
                                                                                    9
## 210
          -4690903.66
                        6.888766e+06
                                        3805804.52
                                                     31188572.48
                                                                    20
                                                                                   10
## 231
          55744778.80
                        2.187689e+07 -39249291.69
                                                    -52986740.40
                                                                    20
                                                                                   11
  252
         -11216363.50
                        1.517561e+06
                                        8248768.45
                                                     28821414.35
                                                                                   12
  273
                                                                                   13
##
         -22542501.58 -6.622534e+06
                                       16012594.72
                                                     28279980.05
                                                                    20
##
  294
           5250743.50
                        8.819241e+06
                                       -3298769.73
                                                     15733274.74
                                                                                   14
  315
            733413.71 -7.828201e+06
                                        -993886.17 -25581314.77
                                                                    20
                                                                                   15
##
   336
          12050936.91
                        2.870430e+06
                                       -8593738.22 -17152367.36
                                                                                   16
  357
          33031974.27
                        8.826876e+06 -23497790.35 -44069952.00
                                                                    20
                                                                                   17
##
   378
          44574684.20
                        1.435562e+07 -31564496.91 -51973575.69
                                                                                   18
##
   399
         -45390259.10 -1.474615e+07
                                       32132453.22
                                                     52525516.39
                                                                    20
                                                                                   19
   420
          30490263.82
                        1.493311e+07 -21292147.94
                                                    -19879997.61
                                                                    20
                                                                                   20
   441
         -25773862.07 -8.466890e+06
                                       18241808.75
                                                                    20
                                                                                   21
##
                                                     29543893.91
##
   462
          -2997144.74
                        3.544359e+05
                                        2206777.19
                                                      7563858.20
                                                                    20
                                                                                   22
   483
           9598959.94
                                       -6829281.82 -12592661.04
##
                        2.640756e+06
                                                                    20
                                                                                   23
## 504
           2938731.34 -4.750195e+05
                                       -2167335.54
                                                     -7794001.87
                                                                                   24
## 525
          41300852.14
                        1.305806e+07 -29257170.60 -48890625.29
                                                                    20
                                                                                   25
## 546
          18458192.57
                        1.267992e+06 -13352335.82 -35882706.04
                                                                    20
                                                                                   26
## 567
                                                                                   27
          56345978.64
                        2.514267e+07 -39501030.39 -44291224.91
                                                                    20
## 588
                        1.116141e+07 -14884457.64
                                                                    20
                                                                                   28
          21371528.27
                                                   -11808988.24
   609
         -26643064.04 -1.977023e+07
                                       18224250.97
                                                     -3188489.31
                                                                    20
                                                                                   29
##
  630
         -24650812.98 -1.125354e+07
                                       17269674.81
                                                     18609776.09
                                                                    20
                                                                                   30
  651
                        3.095682e+07 -34920961.25
                                                                                   31
## 672
                                                                                   32
         -25153342.05 -3.812177e+06
                                       18055244.87
                                                     42447874.50
                                                                    20
## 693
          -6411430.52 -6.589471e+06
                                        4279783.12
                                                     -6377135.80
                                                                    20
                                                                                   33
                                                                                   34
## 714
          19176525.38
                        1.915354e+07 -12822770.78
                                                     17407025.69
                                                                    20
  735
          27393881.39
                        1.462783e+07 -19063117.32
                                                   -14162738.71
                                                                                   35
   756
          22826904.49
                        3.066017e+06 -16421669.68 -39773334.59
                                                                    20
                                                                                   36
                                                                                   37
##
   777
          -2247677.87
                        2.525379e+06
                                        1784927.38
                                                     12590373.12
                                                                    20
  798
           5108513.16
                        1.475803e+07
                                       -2851244.81
                                                     34230293.46
                                                                    20
                                                                                   38
##
## 819
          38183958.76 1.322051e+07 -26988375.25 -41704149.33
                                                                                   39
```

```
## 840
          -3578426.65 -6.281822e+06
                                       2234613.29 -11546308.63
                                                                   20
                                                                                 40
                                                                                 41
## 861
         -18692840.45 -1.595920e+06
                                     13505976.76
                                                    35390451.36
                                                                   20
                                                     9880123.76
##
  882
          16118616.31 1.455150e+07 -10870734.79
                                                                   20
                                                                                 42
         -23233413.87 -1.153005e+06
                                                                                 43
## 903
                                      16825791.82
                                                    46500597.62
                                                                   20
## 924
         -29328025.93 -1.040474e+07
                                      20707398.13
                                                    31240611.69
                                                                   20
                                                                                 44
                                      23514742.20
## 945
         -33067637.88 -8.946159e+06
                                                    43774376.96
                                                                                 45
                                                                   20
## 966
          -7876339.08 -1.057980e+07
                                       5119560.96 -15425093.45
                                                                   20
                                                                                 46
## 987
         -33705054.16 -5.640780e+06
                                      24164433.40
                                                    55253596.49
                                                                   20
                                                                                 47
## 1008
           2994119.37 -4.904279e+06
                                      -2461638.13 -21471391.87
                                                                   20
                                                                                 48
                                                                                 49
## 1029
          31571506.93 1.085078e+07 -22313555.20 -34708369.80
                                                                   20
## 1050
           -857095.24
                       2.487456e+06
                                        770552.12
                                                     9475880.29
                                                                   20
                                                                                 50
  1071
                                                                                 51
##
           6662004.57
                       7.084182e+06
                                      -4428204.76
                                                     7370146.03
                                                                   20
## 1092
          14620309.08 -3.533314e+06 -10830287.08 -42291325.72
                                                                   20
                                                                                 52
                                      19901692.12
## 1113
         -28314288.75 -1.162361e+07
                                                    25330871.56
                                                                   20
                                                                                 53
          -3663307.74 -1.429450e+06
                                                                                 54
## 1134
                                       2580302.59
                                                     3508997.77
                                                                   20
## 1155
           3624978.50 -1.574591e+06
                                      -2725978.78 -12626181.75
                                                                   20
                                                                                 55
## 1176
          53343300.48 2.353054e+07 -37406977.66 -42748621.13
                                                                   20
                                                                                 56
## 1197
          29176382.08
                       1.131548e+07 -20546738.53 -28132446.04
                                                                                 57
                                                                   20
## 1218
         -21239490.91
                       3.043975e+05
                                      15455066.14
                                                    46652436.43
                                                                   20
                                                                                 58
          33729807.00
##
  1239
                       2.443623e+07 -23101405.67
                                                     2236966.72
                                                                   20
                                                                                 59
## 1260
           6534291.11 1.359221e+06
                                      -4670724.13
                                                    -9902978.37
                                                                   20
                                                                                 60
           9407688.92 -7.740217e+06
## 1281
                                      -7279220.73 -43935676.18
                                                                   20
                                                                                 61
## 1302
         -16404033.97 -1.411348e+07
                                      11097239.60
                                                    -7945505.72
                                                                                 62
                                                                   20
## 1323
          25581764.05
                       7.789144e+06 -18143574.39 -31213522.25
                                                                   20
                                                                                 63
## 1344
           9384625.84
                       6.874709e+05
                                      -6780583.34 -18093604.16
                                                                   20
                                                                                 64
  1365
         -53753447.35 -2.166077e+07
                                      37819908.05
                                                    49380638.18
                                                                   20
                                                                                 65
                                                                                 66
##
  1386
         -13830357.29 1.055663e+06
                                      10112962.53
                                                    33003092.06
                                                                   20
##
  1407
         -67495371.33 -2.841123e+07
                                      47416460.94
                                                    58283546.21
                                                                   20
                                                                                 67
                                                                                 68
## 1428
          79139173.46 3.091508e+07 -55733898.08 -75676872.92
                                                                   20
                                       3128603.71 -25252232.99
## 1449
          -5262061.38 -1.193741e+07
                                                                                 69
                                                                   20
## 1470
           8332010.45
                       2.976864e+06
                                      -5874711.32
                                                    -8787631.29
                                                                   20
                                                                                 70
## 1491
          -1038541.83 2.094257e+06
                                        868525.19
                                                     8624366.38
                                                                   20
                                                                                 71
  1512
         -13446406.89 -3.858898e+06
                                       9540692.84
                                                    17094516.60
                                                                   20
                                                                                 72
  1533
                                                                                 73
         -11847317.93 -9.702056e+06
                                       8045542.04
                                                    -4226216.71
                                                                   20
##
  1554
                                                    -5400919.36
          -4649011.31 -5.022405e+06
                                       3080766.26
                                                                                 74
##
                                                                   20
                                                                                 75
## 1575
           -118587.97
                       2.956742e+06
                                        264017.84
                                                     9333921.96
                                                                   20
## 1596
          17178646.31 2.024413e+07 -11314568.16
                                                    25024082.79
                                                                   20
                                                                                 76
         -23554987.97 -9.648937e+06
                                                                                 77
## 1617
                                      16558046.43
                                                    21138310.81
                                                                   20
                                                                                 78
##
  1638
          21824685.01
                        1.795916e+07 -14824200.68
                                                     8022842.69
                                                                   20
                                                                                 79
## 1659
         -15684321.17
                       6.416324e+05
                                      11442548.91
                                                    35746304.02
                                                                   20
## 1680
           5816442.09 1.498749e+06
                                      -4139150.34
                                                    -7924469.26
                                                                   20
                                                                                 80
         -13608542.10 -4.048100e+06
## 1701
                                       9660197.45
                                                    16906793.80
                                                                   20
                                                                                 81
## 1722
          -7134035.04 -4.586720e+06
                                       4917707.35
                                                     1301549.06
                                                                   20
                                                                                 82
                                                                                 83
## 1743
         -25050879.43 -1.176891e+07
                                      17522420.58
                                                    17864671.08
                                                                   20
## 1764
          18354939.07 -3.898851e+05 -13363644.19 -40705668.46
                                                                   20
                                                                                 84
                                                                                 85
## 1785
         -49861101.24 -1.760217e+07
                                      35223979.97
                                                    53426720.25
                                                                   20
## 1806
         -35831311.95 -6.882954e+06
                                      25649600.73
                                                    56065491.09
                                                                   20
                                                                                 86
## 1827
           2960437.77 -5.040791e+06
                                      -2438144.14 -21793557.70
                                                                   20
                                                                                 87
  1848
         -24537046.65 -1.830791e+07
                                      16769633.18
                                                    -3272050.57
                                                                   20
                                                                                 88
   1869
          11726011.07
                       1.485767e+07
                                      -7655920.95
                                                    20288394.37
                                                                   20
                                                                                 89
##
## 1890
         -50552272.30 -2.124192e+07
                                      35511812.68
                                                    43753564.27
                                                                   20
                                                                                 90
## 1911
          -4877543.66 4.945883e+06
                                       3834046.97
                                                    25656723.38
                                                                   20
                                                                                 91
## 1932
          18038365.51 6.632072e+06 -12725845.31 -18512897.26
                                                                   20
                                                                                 92
## 1953
           9034811.10 6.257933e+06 -6200183.98
                                                                   20
                                                                                 93
                                                     -266631.53
```

```
32408117.12
## 1974
        -27821463.98 -8.979886e+06
                                      19708561.11
                                                                  20
                                                                                 94
         -31382265.61 -2.178882e+07
                                                                                 95
## 1995
                                      21545459.51
                                                      808378.99
                                                                  20
## 2016
         -31129192.24 -1.309458e+07
                                      21865357.10
                                                   26894588.86
                                                                  20
                                                                                 96
## 2037
          -7202096.34 -1.024296e+06
                                                                                 97
                                       5177116.49
                                                   12371828.73
                                                                  20
## 2058
         -47560627.91 -3.107526e+07
                                      32769083.46
                                                    7198807.88
                                                                  20
                                                                                 98
## 2079
           -414553.26 -2.306644e+06
                                        164432.61
                                                   -6183886.54
                                                                  20
                                                                                 99
## 2100
         -13902491.60 -1.486794e+07
                                       9241143.53 -15621557.86
                                                                  20
                                                                                100
## 2121
         -12168667.79 3.181635e+06
                                       9022570.11
                                                   35918345.81
                                                                  20
                                                                                101
## 2142
         -31961610.51 -1.737907e+07
                                      22227166.62
                                                   15580000.79
                                                                  20
                                                                                102
## 2163
           2433433.40 3.993431e+06
                                      -1540125.36
                                                     6984213.87
                                                                  20
                                                                                103
## 2184
         -53767094.24 -2.715386e+07
                                      37505129.86
                                                   32562775.32
                                                                  20
                                                                                104
## 2205
         -22984797.44 -1.269680e+07
                                      15965205.01
                                                   10569071.59
                                                                  20
                                                                                105
## 2226
         -37670562.06 -3.062731e+07
                                      25605423.69 -12722681.66
                                                                  20
                                                                                106
## 2247
          20681772.56 3.066696e+06 -14848345.35 -35105691.71
                                                                  20
                                                                                107
## 2268
          28217067.54 1.319908e+07 -19747232.42 -20321264.60
                                                                  20
                                                                                108
## 2289
         -10921758.86 -1.444272e+07
                                       7101031.55 -20729545.90
                                                                  20
                                                                                109
## 2310
         -15083913.78 4.144506e+06
                                      11208311.40
                                                   45180537.92
                                                                  20
                                                                                110
  2331
         -14456400.31 -9.457746e+06
                                       9965068.95
                                                     2168999.51
                                                                  20
                                                                                111
## 2352
         -16523428.44 -6.877244e+06
                                      11611017.12
                                                   14502486.29
                                                                  20
                                                                                112
## 2373
           3344283.90 5.061962e+06
                                      -2134348.65
                                                     8316446.38
                                                                  20
                                                                                113
## 2394
          -7156265.99 -1.230189e+07
                                       4482600.45 -22296757.00
                                                                  20
                                                                                114
## 2415
          24800735.82 1.101491e+07 -17384808.22 -19637464.25
                                                                  20
                                                                                115
## 2436
         -29957417.00 -1.260236e+07
                                      21047350.90
                                                   25897395.19
                                                                                116
                                                                  20
## 2457
         -20255410.30 -6.677529e+05
                                      14678455.65
                                                   41539340.19
                                                                  20
                                                                                117
## 2478
          26593269.63 5.154158e+06 -19027323.89 -41447976.19
                                                                  20
                                                                                118
## 2499
          29341069.51 2.634886e+07 -19797485.51
                                                   17553600.43
                                                                  20
                                                                                119
## 2520
         -18093302.65 -7.293427e+06
                                                                                120
                                     12732781.44
                                                   16623463.55
                                                                  20
## 2541
          29793236.94 7.036640e+06 -21241285.23 -42560667.89
                                                                  20
                                                                                121
## 2562
           -890126.18 -5.330517e+06
                                        329617.08 -14440240.79
                                                                  20
                                                                                122
## 2583
          14087809.00 -1.441295e+06 -10316406.49 -34718064.13
                                                                                123
                                                                  20
## 2604
         -37873452.05 -2.227690e+07
                                      26237859.82
                                                   13295459.86
                                                                  20
                                                                                124
## 2625
          22301763.22 1.848801e+07 -15140100.00
                                                     8616482.24
                                                                  20
                                                                                125
##
  2646
          37145438.00
                      7.431327e+06 -26570346.86 -57205700.18
                                                                  20
                                                                                126
                                                                                127
##
  2667
            242398.58 8.055334e+06
                                        296278.20
                                                   24171336.85
                                                                  20
  2688
         -14266582.05 -1.491604e+07
                                       9502920.75 -14985361.92
                                                                                128
##
                                                                  20
## 2709
          -6329409.90 -1.963542e+06
                                       4479342.76
                                                    7585630.54
                                                                  20
                                                                                129
## 2730
         -42135316.91 -1.199565e+07
                                      29926851.46
                                                   53946546.95
                                                                  20
                                                                                130
         -27494999.26 -1.015300e+07
                                                                                131
## 2751
                                      19393355.30
                                                   28078358.56
                                                                  20
                       5.456154e+06 -17140749.93 -34993400.59
                                                                                132
## 2772
          24002547.53
                                                                  20
## 2793
          42087881.89
                       2.478095e+07 -29157410.57 -14702470.40
                                                                  20
                                                                                133
## 2814
          21290725.76 5.044715e+06 -15182468.84 -30378571.04
                                                                  20
                                                                                134
## 2835
          -3389139.22 -9.596023e+05
                                       2407245.27
                                                     4354563.64
                                                                  20
                                                                                135
##
  2856
          16884702.15 -3.291044e+06 -12459375.86 -46414433.95
                                                                  20
                                                                                136
##
                                     -4537317.86
  2877
           6472092.79 2.920294e+06
                                                   -4995112.17
                                                                  20
                                                                                137
## 2898
          67836046.92 2.597899e+07 -47805765.74 -66469502.02
                                                                  20
                                                                                138
          25429781.36 1.245893e+07 -17755497.58 -16558802.52
## 2919
                                                                  20
                                                                                139
## 2940
         -20028076.57 -1.287965e+07
                                      13807488.49
                                                     3650822.92
                                                                  20
                                                                                140
## 2961
          26863176.08 8.247369e+06 -19046796.06 -32562929.04
                                                                  20
                                                                                141
## 2982
         -30389561.68 -9.649661e+06
                                      21537418.51
                                                   35888396.80
                                                                  20
                                                                                142
##
  3003
         -56521425.85 -2.391362e+07
                                      39700462.09
                                                   48435884.69
                                                                  20
                                                                                143
##
  3024
          15851973.88 9.744970e+06 -10961075.63
                                                   -4287595.87
                                                                  20
                                                                                144
## 3045
          -7285712.72 -7.035906e+06
                                       4880011.77
                                                   -5894322.32
                                                                  20
                                                                                145
## 3066
          15265366.61 5.713393e+06 -10759720.85 -15344588.18
                                                                  20
                                                                                146
## 3087
           4317188.02 8.151056e+06 -2660975.70 15689312.74
                                                                  20
                                                                                147
```

```
## 3108
         -10513531.74 -5.582098e+06
                                        7316855.83
                                                      5529110.85
                                                                   20
                                                                                 148
                                                                                 149
## 3129
          30567062.66 1.367347e+07 -21421246.64 -23904629.46
                                                                   20
## 3150
          -9371551.56 -2.956480e+06
                                        6647276.25
                                                     11141406.52
                                                                   20
                                                                                 150
## 3171
          -8088673.06
                                        6186981.38
                                                                                 151
                       5.185203e+06
                                                    33319438.48
                                                                   20
## 3192
          34263969.24
                        1.470664e+07 -24057545.13 -28728956.96
                                                                   20
                                                                                 152
## 3213
          16265722.10
                       1.879712e+07 -10731907.99
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                                                   17686804.78
## 19257 -22837710.52 -1.027098e+07
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                                                                                917
## 19278 -20853212.56 -1.175624e+07
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                                                     8862957.42
                                                                  20
                                                                                918
## 19299
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                                                                                919
## 19320
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                                                   14995063.57
                                                                  20
                                                                                920
                                         64391.85
          18416480.82
## 19341
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                                                                  20
## 19362
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## 19383
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## 19404
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## 19425
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                                                                  20
                       2.825628e+06 -12112110.24 -27701579.42
## 19446
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                                                                  20
## 19467
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                                       1672230.87 -13331412.95
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## 19488
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                                                   -6260571.73
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## 19509
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                                                   -7108458.74
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## 19530
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                                                                  20
## 19551
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                                      -4266697.35
                                                   11675150.30
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                                                                                932
## 19572
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                                        964523.06 -22019169.32
                                                                  20
## 19593
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                                      -5152570.58 -34970237.76
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                                                                  20
## 19614
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                                      -5675866.37 -42177983.06
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  19635
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  19656 -16046920.86
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                                      11747838.17
                                                   38803343.25
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  19677 -16030939.43 1.369852e+06
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                                                     5438553.64
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## 19719
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## 19740
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## 19761
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## 19803 -25944274.72 -1.656038e+06
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## 19866
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## 19887 -25696655.88 -6.215423e+06
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                                     18328837.53
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## 19908 -11369411.87
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## 19929
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                                                                  20
## 19950
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## 19971 -11257534.50 -1.352552e+06
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## 19992
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## 20013 -37812574.61 -1.013755e+07
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## 20034
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## 20055
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## 20076
           5622707.29 2.476999e+06
                                     -3939519.87
                                                   -4503780.82
                                                                  20
                                                                                956
## 20097 -25878629.16 -1.696890e+07 17824960.37
                                                    3726223.09
                                                                  20
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## 20118
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          28374002.54 6.187956e+06 -20266743.89 -42131694.81
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## 20139
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          -2874045.84
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## 20160
                                       2325868.04
                                                   19034496.20
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## 20181 -26278535.02 -1.976023e+07
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                                      17955944.07
                                                   -3955890.58
## 20202
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## 20223
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                                                                               963
## 20244 -16878554.69 -1.603469e+07
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## 20265
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                                                                  20
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  20307 -16699960.44 -1.774598e+07
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  20328 -15876307.61 -6.990659e+06
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## 20349 -31768553.14 -6.049814e+06
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                                                   -3561126.60
## 20391 -21814008.31 -1.649176e+07
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## 20412 26751035.00 4.608757e+06 -19179204.74 -43477184.45
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                                                                  20
## 20433 -20538272.40
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## 20454 -46081064.00 -2.571505e+07
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  20475 -36318741.67 -1.287747e+07
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## 20496
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                                      -1876666.63
                                                   21857442.58
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                                                   30634540.26
## 20517 -11209932.31
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                                                                               977
## 20538
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                                                     4235255.57
                                                                  20
                                                                               978
## 20559 -49718556.09 -2.385900e+07
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                                                   33951619.70
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## 20580
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## 20622 -19741405.02 -4.361995e+06
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## 20643
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## 20664
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## 20727
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## 20769
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## 20790
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## 20811
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          11780599.82
## 20832
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                                     -8098070.62
                                                                               992
                                                     -529757.02
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## 20853
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## 20874
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                                                                  20
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## 20895
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                                                                               995
           -365191.61
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                                                   12107483.84
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                       1.240385e+06 -12267417.54 -32745109.40
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## 20916
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## 20937 -43096499.87 -3.192702e+07 29472566.14
                                                   -5028147.61
                                                                  20
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  20958
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  20979
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                                                                  20
                                                                               999
          34029555.47
##
  21000 -17219419.35
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                                                   44433875.88
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                                                                              1000
##
                                               r_x3
                                                              r_x4 eigen_index
                  r x1
                                 r_x2
## 21
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          3.309865e+00 2.591199e+00 3.412148e+00 1.950629e+00
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## 42
## 63
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## 84
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##
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## 147
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## 168
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## 189
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         -4.989807e-01 9.769972e-01 -5.921982e-01 2.304799e+01
## 210
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## 273
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          1.333744e+00 2.023919e+00 1.266373e+00 3.219816e+00
## 294
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## 315
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        -1.950706e+00 -9.979606e-01 -1.987880e+00 -3.823046e+00
## 336
                                                                           0
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## 357
         -2.277349e+00 -1.824819e+00 -2.291854e+00 -2.880468e+00
## 378
                                                                           0
## 399
         -2.290558e+00 -1.862993e+00 -2.303760e+00 -2.851025e+00
                                                                           Λ
## 420
         -3.420735e+00 -9.384802e+00 -3.332581e+00 -1.388024e+00
                                                                           0
## 441
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         -1.207776e+00 2.347842e-01 -1.289530e+00 -1.078701e+01
                                                                           0
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## 483
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## 504
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                                                                           0
## 525
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## 546
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         -3.023927e+00 -5.279236e+00 -2.977709e+00 -1.735789e+00
## 567
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## 588
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## 609
                                                                           0
## 630
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                                                                           0
## 651
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                                                                           0
         -1.700925e+00 -5.005897e-01 -1.750962e+00 -4.981042e+00
## 672
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## 693
                                                                           0
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## 714
## 735
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                                                                           0
## 756
         -1.656045e+00 -4.253984e-01 -1.711225e+00 -5.247445e+00
                                                                           0
         -5.860153e-01 8.999513e-01 -6.806955e-01 3.608065e+01
                                                                           0
## 777
## 798
         5.533121e-01 1.673781e+00 4.601887e-01 4.790053e+00
                                                                           0
                                                                           0
## 819
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## 840
         1.226675e+00 1.981623e+00 1.154676e+00 3.361434e+00
                                                                           0
## 861
         -1.545461e+00 -2.424727e-01 -1.607325e+00 -6.047633e+00
                                                                           0
## 882
          1.453806e+01 3.556450e+00 1.914456e+01 9.734850e-01
                                                                           0
## 903
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                                                                            0
         -2.437495e+00 -2.331141e+00 -2.438728e+00 -2.551531e+00
                                                                           0
## 924
## 945
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                                                                           0
         2.210569e+00 2.316567e+00 2.196998e+00 2.447796e+00
## 966
                                                                           0
## 987
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        -4.643121e-01 1.005494e+00 -5.589763e-01 2.024551e+01
                                                                           0
## 1008
        -2.380768e+00 -2.142429e+00 -2.386811e+00 -2.660714e+00
## 1029
                                                                           0
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## 1050
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## 1071
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        -1.072924e+00 4.067169e-01 -1.151911e+00 -1.550914e+01
                                                                           0
## 1092
## 1113
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        -2.633085e+00 -3.095555e+00 -2.621797e+00 -2.221649e+00
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## 1134
## 1155
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        -2.984816e+00 -4.997101e+00 -2.941228e+00 -1.777349e+00
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## 1176
## 1197
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## 1218
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## 1239
        -1.144928e+01 5.954490e+00 -9.713898e+00 1.183024e-01
                                                                           0
## 1260
        -1.855525e+00 -7.969334e-01 -1.898073e+00 -4.202553e+00
                                                                           0
        -6.948448e-01 8.030474e-01 -7.837788e-01 1.216163e+02
## 1281
                                                                           0
## 1302
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                                                                           0
## 1323 -2.199672e+00 -1.606374e+00 -2.220328e+00 -3.065903e+00
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## 1344 -1.522902e+00 -2.030117e-01 -1.582991e+00 -6.250517e+00
```

```
-2.713237e+00 -3.456398e+00 -2.694902e+00 -2.106507e+00
        -1.269866e+00 1.618204e-01 -1.341448e+00 -9.524881e+00
## 1386
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## 1407
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## 1428
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## 1449
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## 1470
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        -4.042829e-01 1.057546e+00 -4.942189e-01 1.661541e+01
        -2.132749e+00 -1.418891e+00 -2.153241e+00 -3.249013e+00
## 1512
                                                                          0
## 1533
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                                                                          Λ
## 1554
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                                                                          0
## 1575
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         3.230318e+00 2.572775e+00 3.317470e+00 1.978195e+00
                                                                          0
## 1596
        -2.759512e+00 -3.671915e+00 -2.734891e+00 -2.045527e+00
                                                                          0
## 1617
        -7.398872e+02 4.229130e+00 -5.568645e+01 6.140047e-01
## 1638
                                                                          0
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## 1659
                                                                          0
## 1680
        -2.019879e+00 -1.149740e+00 -2.050538e+00 -3.586362e+00
                                                                          0
## 1701
        -2.168917e+00 -1.526902e+00 -2.193161e+00 -3.143402e+00
                                                                          0
        -6.320216e+00 1.047943e+01 -5.806452e+00 -3.448393e-01
## 1743
        -3.228094e+00 -7.014178e+00 -3.159677e+00 -1.543548e+00
                                                                          0
## 1764
        -1.352488e+00 4.929686e-02 -1.420727e+00 -8.157612e+00
                                                                          0
        -2.426081e+00 -2.298634e+00 -2.430434e+00 -2.571002e+00
## 1785
                                                                          0
        -1.808241e+00 -7.040104e-01 -1.854153e+00 -4.414540e+00
        -4.531083e-01 1.015831e+00 -5.460323e-01 1.942462e+01
## 1827
                                                                          0
        -1.468195e+01 5.415003e+00 -1.186746e+01 2.343559e-01
## 1848
## 1869
        2.577742e+00 2.418414e+00 2.598107e+00 2.244774e+00
                                                                          0
## 1890
        -2.830112e+00 -4.048932e+00 -2.800672e+00 -1.954689e+00
                                                                          0
        -6.218195e-01 8.691352e-01 -7.139255e-01 4.670936e+01
                                                                          0
## 1911
## 1932
        -2.504810e+00 -2.576591e+00 -2.502206e+00 -2.429414e+00
                                                                          4
        -8.735872e+00 7.049366e+00 -7.695295e+00 -5.382000e-02
                                                                          0
## 1953
## 1974
        -2.278260e+00 -1.833192e+00 -2.294953e+00 -2.876007e+00
## 1995
        -8.804053e+00 6.988615e+00 -7.770885e+00 -4.692603e-02
                                                                          0
## 2016
        -2.833815e+00 -4.067158e+00 -2.803603e+00 -1.950399e+00
                                                                          0
## 2037
        -1.675658e+00 -4.590087e-01 -1.729327e+00 -5.125951e+00
                                                                          0
## 2058
        -6.689969e+00 9.469496e+00 -6.117235e+00 -2.839388e-01
                                                                          0
## 2079
         2.406150e-01 1.499535e+00 1.416130e-01 6.124607e+00
                                                                          0
## 2100
         4.659746e+00 2.834012e+00 4.959446e+00 1.618625e+00
                                                                          0
        -1.054099e+00 4.295368e-01 -1.132640e+00 -1.649846e+01
                                                                          0
## 2142
        -4.073832e+00 -4.431848e+01 -3.914783e+00 -9.935734e-01
                                                                          0
         1.403371e+00 2.050125e+00 1.340020e+00 3.135454e+00
## 2163
                                                                          0
                                                                          Λ
## 2184
        -3.582394e+00 -1.234302e+01 -3.478319e+00 -1.273298e+00
        -4.211895e+00 -9.621008e+01 -4.029345e+00 -9.308170e-01
        -1.016736e+02 4.340646e+00 -3.775960e+01 5.677219e-01
                                                                          0
## 2226
## 2247
        -1.692894e+00 -4.858971e-01 -1.743125e+00 -5.028873e+00
                                                                          0
        -3.206104e+00 -6.821965e+00 -3.142872e+00 -1.561550e+00
                                                                          0
## 2268
## 2289
         2.295606e+00 2.341558e+00 2.290198e+00 2.396090e+00
                                                                          1
        -1.040029e+00 4.439876e-01 -1.121032e+00 -1.724891e+01
## 2310
                                                                          0
## 2331
        -6.699007e+00 9.414187e+00 -6.139440e+00 -2.813091e-01
                                                                          0
## 2352
        -2.802560e+00 -3.899663e+00 -2.775459e+00 -1.989127e+00
                                                                          0
## 2373
         1.655310e+00 2.141633e+00 1.605228e+00 2.870599e+00
                                                                          0
## 2394
         1.276115e+00 2.001335e+00 1.206221e+00 3.294181e+00
                                                                          0
        -3.009784e+00 -5.164249e+00 -2.962809e+00 -1.751516e+00
## 2415
                                                                          0
## 2436
        -2.832007e+00 -4.065705e+00 -2.803685e+00 -1.951600e+00
                                                                          0
## 2457 -1.445917e+00 -8.439362e-02 -1.508995e+00 -7.002130e+00
                                                                          0
## 2478 -1.814359e+00 -7.138831e-01 -1.858629e+00 -4.388632e+00
```

```
## 2499
         1.548739e+01 3.587721e+00 2.082946e+01 9.529290e-01
## 2520
       -2.712457e+00 -3.458926e+00 -2.695670e+00 -2.106609e+00
                                                                           0
## 2541
        -1.945558e+00 -9.838078e-01 -1.981453e+00 -3.844712e+00
                                                                           0
         2.207696e-01 1.487590e+00 1.212869e-01 6.239224e+00
                                                                           0
## 2562
## 2583
        -1.235199e+00 2.084545e-01 -1.306910e+00 -1.024587e+01
                                                                           0
        -4.842905e+00 2.842532e+01 -4.579748e+00 -6.912702e-01
## 2604
                                                                           0
         2.494961e+02 4.163563e+00 -7.919970e+01 6.427888e-01
## 2625
        -1.831677e+00 -7.494981e-01 -1.875848e+00 -4.307358e+00
## 2646
                                                                           0
## 2667
          3.524506e-02 1.372211e+00 -6.364311e-02 7.582609e+00
                                                                           Λ
## 2688
         5.162970e+00 2.907176e+00 5.557666e+00 1.533542e+00
                                                                           0
## 2709
        -2.232862e+00 -1.678093e+00 -2.242723e+00 -2.993550e+00
                                                                           0
                                                                           0
## 2730
        -2.119860e+00 -1.394450e+00 -2.145098e+00 -3.280103e+00
        -2.514121e+00 -2.609879e+00 -2.510328e+00 -2.413781e+00
                                                                           0
## 2751
        -1.913200e+00 -9.207983e-01 -1.954760e+00 -3.961250e+00
                                                                           0
       -4.854103e+00 2.787288e+01 -4.590098e+00 -6.875722e-01
## 2793
                                                                           0
## 2814
        -1.947044e+00 -9.890328e-01 -1.983939e+00 -3.837371e+00
                                                                           0
## 2835
        -2.114184e+00 -1.379219e+00 -2.139391e+00 -3.296749e+00
                                                                           0
## 2856
        -1.122428e+00 3.483695e-01 -1.199254e+00 -1.343307e+01
                                                                           0
        -3.060284e+00 -5.575390e+00 -3.014144e+00 -1.697186e+00
## 2877
                                                                           0
## 2898
        -2.590476e+00 -2.914548e+00 -2.582118e+00 -2.287458e+00
                                                                           0
## 2919
        -3.424142e+00 -9.416820e+00 -3.334265e+00 -1.385977e+00
                                                                           0
        -6.320404e+00 1.046853e+01 -5.809680e+00 -3.445131e-01
## 2961
        -2.210881e+00 -1.636133e+00 -2.230328e+00 -3.038326e+00
                                                                           0
        -2.254640e+00 -1.764520e+00 -2.273088e+00 -2.930401e+00
## 2982
## 3003
       -2.849496e+00 -4.161524e+00 -2.819238e+00 -1.930514e+00
                                                                           0
## 3024
        -5.446847e+00 1.525785e+01 -5.098569e+00 -5.220699e-01
                                                                           0
         7.986156e+00 3.210305e+00 9.187075e+00 1.236752e+00
                                                                           0
## 3045
## 3066
        -2.544010e+00 -2.717867e+00 -2.536060e+00 -2.364919e+00
                                                                           0
         1.073252e+00 1.918240e+00 9.948542e-01 3.593580e+00
                                                                           0
## 3087
## 3108
        -3.901128e+00 -2.449348e+01 -3.758980e+00 -1.082811e+00
                                                                           0
## 3129
        -3.035265e+00 -5.348355e+00 -2.985891e+00 -1.725189e+00
                                                                           0
## 3150
        -2.242092e+00 -1.736766e+00 -2.264785e+00 -2.956319e+00
                                                                           0
## 3171
        -7.796157e-01 7.198878e-01 -8.690362e-01 -1.297637e+02
                                                                           0
        -2.892680e+00 -4.417805e+00 -2.859449e+00 -1.878869e+00
## 3192
                                                                           0
         3.449851e+00 2.619295e+00 3.564841e+00 1.906913e+00
## 3213
                                                                           0
## 3234
        -1.619860e+00 -3.572538e-01 -1.672389e+00 -5.502496e+00
                                                                           0
## 3255
        -1.376271e-01 1.255410e+00 -2.354453e-01 9.580876e+00
                                                                           0
        -1.037773e+00 4.470340e-01 -1.118315e+00 -1.739760e+01
                                                                           0
## 3276
        -2.178858e+00 -1.546986e+00 -2.199591e+00 -3.120836e+00
## 3297
                                                                           0
        -4.019238e+00 -3.532904e+01 -3.863217e+00 -1.021365e+00
                                                                           Λ
## 3318
        -2.241748e+00 -1.717800e+00 -2.257076e+00 -2.965330e+00
        -2.580059e+00 -2.872198e+00 -2.572562e+00 -2.303897e+00
                                                                           0
## 3360
## 3381
        -2.018167e+00 -1.151286e+00 -2.051768e+00 -3.587706e+00
                                                                           0
       -7.345101e-01 7.650203e-01 -8.231507e-01 1.174136e+03
                                                                           0
## 3402
## 3423
       -1.498323e+00 -1.620937e-01 -1.557490e+00 -6.481768e+00
                                                                           0
        -1.509472e+00 -1.854988e-01 -1.573023e+00 -6.358953e+00
                                                                           0
## 3444
## 3465
        -7.169497e-01 7.811368e-01 -8.069356e-01 2.481615e+02
                                                                           0
## 3486
        -1.057950e+00 4.215299e-01 -1.140417e+00 -1.619895e+01
                                                                           0
## 3507
        -2.575757e+00 -2.846560e+00 -2.566265e+00 -2.312519e+00
                                                                           0
## 3528
        -2.149937e+00 -1.470743e+00 -2.172689e+00 -3.197505e+00
                                                                           0
        -1.220847e+00 2.252299e-01 -1.294835e+00 -1.055254e+01
## 3549
                                                                           0
        -2.614303e+00 -3.010984e+00 -2.603324e+00 -2.251006e+00
                                                                           0
## 3591 -1.616959e+00 -3.601375e-01 -1.675338e+00 -5.504873e+00
                                                                           0
         1.739475e+00 2.170072e+00 1.694320e+00 2.794408e+00
## 3612
```

```
-3.984029e+00 -3.237463e+01 -3.842619e+00 -1.036525e+00
## 3654
         3.809128e+00 2.689484e+00 3.971404e+00 1.805438e+00
                                                                           0
## 3675
        -4.723246e+00 3.478357e+01 -4.490365e+00 -7.283540e-01
                                                                           0
        -2.450715e+00 -2.371910e+00 -2.449225e+00 -2.528500e+00
                                                                           0
## 3696
## 3717
        -1.292624e+00 1.299807e-01 -1.364696e+00 -9.096802e+00
                                                                           0
        -2.463503e+00 -2.428223e+00 -2.464688e+00 -2.501998e+00
## 3738
                                                                           4
        -2.686634e+00 -3.331681e+00 -2.670396e+00 -2.143853e+00
## 3759
        -7.941613e-01 7.046737e-01 -8.843771e-01 -9.496644e+01
## 3780
                                                                           0
## 3801
        -1.097428e+00 3.788242e-01 -1.174505e+00 -1.442553e+01
                                                                           Λ
## 3822
        -7.441320e+00 8.231061e+00 -6.696693e+00 -1.839820e-01
                                                                           0
## 3843
        -2.249984e+01 4.895006e+00 -1.646448e+01 3.737014e-01
                                                                           0
        -2.438107e+00 -2.341706e+00 -2.442105e+00 -2.547919e+00
                                                                           0
## 3864
## 3885
         2.328506e+01 3.766084e+00 3.839336e+01 8.447311e-01
                                                                           0
        -2.034317e+00 -1.185472e+00 -2.065085e+00 -3.537908e+00
## 3906
                                                                           0
        -2.529592e+00 -2.677471e+00 -2.527277e+00 -2.385411e+00
## 3927
                                                                           0
## 3948
        -4.606771e+00 4.922790e+01 -4.376267e+00 -7.714975e-01
                                                                           0
## 3969
        -6.371851e-01 8.550885e-01 -7.291860e-01 5.373185e+01
                                                                           0
        -2.429896e+00 -2.311105e+00 -2.433758e+00 -2.563979e+00
                                                                           0
        -2.319482e+00 -1.949423e+00 -2.330243e+00 -2.787818e+00
                                                                           0
## 4011
## 4032
        -2.186141e+00 -1.569511e+00 -2.207669e+00 -3.100450e+00
                                                                           0
## 4053
        -2.604728e+00 -2.975581e+00 -2.595804e+00 -2.264810e+00
                                                                           0
        -2.515661e+00 -2.617107e+00 -2.512186e+00 -2.410795e+00
        -2.677396e+00 -3.277426e+00 -2.658911e+00 -2.159089e+00
                                                                           0
## 4095
        -2.287062e+00 -1.854788e+00 -2.301373e+00 -2.857969e+00
## 4116
## 4137
         8.226727e-01 1.806507e+00 7.353874e-01 4.071117e+00
                                                                           0
## 4158
        -2.894812e+00 -4.416702e+00 -2.858806e+00 -1.877837e+00
                                                                           0
         3.327285e+01 3.886651e+00 7.697523e+01 7.785972e-01
                                                                           0
## 4179
## 4200
        -2.149437e+00 -1.471673e+00 -2.173232e+00 -3.197592e+00
                                                                           0
                                                                           0
## 4221
        -5.876654e+00 1.225326e+01 -5.447498e+00 -4.275855e-01
## 4242
        -1.733623e-01 1.230403e+00 -2.700859e-01 1.014105e+01
                                                                           0
## 4263
        -1.047893e+01 6.229109e+00 -9.020845e+00 6.822554e-02
                                                                           0
## 4284
        -2.891974e+00 -4.400710e+00 -2.856412e+00 -1.881026e+00
                                                                           0
## 4305
        -1.968911e+00 -1.036455e+00 -2.004053e+00 -3.758751e+00
                                                                           0
        -1.508405e+00 -1.793508e-01 -1.568408e+00 -6.383203e+00
## 4326
                                                                           0
         -6.797499e+00 9.298321e+00 -6.178125e+00 -2.700201e-01
                                                                           0
## 4347
        -4.366981e+00 3.692652e+02 -4.166903e+00 -8.639195e-01
## 4368
                                                                           0
## 4389
        -6.749848e-01 8.205719e-01 -7.658631e-01 8.511452e+01
                                                                           0
        -2.032586e+00 -1.181391e+00 -2.063457e+00 -3.543486e+00
                                                                           0
## 4410
        -9.512821e+00 6.609102e+00 -8.303401e+00 7.018227e-03
## 4431
                                                                           0
        -2.065779e+00 -1.271324e+00 -2.099844e+00 -3.431752e+00
                                                                           Λ
## 4452
## 4473
         2.227619e+00 2.323082e+00 2.218656e+00 2.436030e+00
        -1.191240e+00 2.618762e-01 -1.267369e+00 -1.127237e+01
                                                                           0
## 4494
## 4515
        -3.222836e+01 4.657957e+00 -2.104151e+01 4.500141e-01
                                                                           0
        -5.522379e+00 1.464925e+01 -5.152162e+00 -5.052653e-01
                                                                           0
## 4536
## 4557
        -1.073554e+02 4.337157e+00 -3.810199e+01 5.698492e-01
                                                                           0
        -2.996112e+00 -5.077248e+00 -2.951833e+00 -1.765163e+00
                                                                           0
## 4578
## 4599
        -8.197950e+00 7.427432e+00 -7.302533e+00 -1.014227e-01
                                                                           0
## 4620
        -3.566735e+00 -1.206123e+01 -3.467250e+00 -1.282828e+00
                                                                           0
## 4641
        -6.329832e+00 1.041658e+01 -5.824151e+00 -3.422417e-01
                                                                           0
## 4662
        -2.338011e+00 -2.003915e+00 -2.346385e+00 -2.749324e+00
                                                                           0
         1.815078e+01 3.663386e+00 2.613398e+01 9.056718e-01
## 4683
                                                                           0
## 4704
         5.289076e+00 2.924064e+00 5.707269e+00 1.514573e+00
                                                                           0
       -1.931202e+00 -9.476590e-01 -1.965147e+00 -3.903433e+00
## 4725
                                                                           0
## 4746 -7.432029e+00 8.233890e+00 -6.695757e+00 -1.846574e-01
```

```
## 4767 -1.201320e+00 2.514550e-01 -1.274696e+00 -1.103939e+01
        -3.789543e+00 -1.871660e+01 -3.663320e+00 -1.144321e+00
## 4788
                                                                           0
## 4809
        -1.618605e+00 -3.598949e-01 -1.674686e+00 -5.500326e+00
                                                                           0
        -3.053723e+00 -5.505865e+00 -3.005442e+00 -1.705095e+00
                                                                           0
## 4830
## 4851
        -1.905571e+00 -8.971498e-01 -1.943326e+00 -3.998901e+00
                                                                           0
        -1.811686e+01 5.114107e+00 -1.399446e+01 3.109757e-01
## 4872
                                                                           0
        -1.165801e+00 2.947908e-01 -1.241692e+00 -1.199571e+01
        -2.866491e+00 -4.236844e+00 -2.830482e+00 -1.912561e+00
## 4914
                                                                           0
## 4935
        -1.863100e-01 1.220741e+00 -2.837166e-01 1.036926e+01
                                                                           Λ
## 4956
        -2.429763e+00 -2.310996e+00 -2.433752e+00 -2.564127e+00
                                                                           0
## 4977
         4.117962e+00 2.745389e+00 4.326931e+00 1.730004e+00
                                                                           0
                                                                           0
## 4998
        -2.617690e+00 -3.023964e+00 -2.606085e+00 -2.246081e+00
## 5019
        -2.374906e+00 -2.128155e+00 -2.383086e+00 -2.670873e+00
                                                                           0
## 5040
        -3.406439e+00 -9.188992e+00 -3.320830e+00 -1.398404e+00
                                                                           0
        -1.596265e+01 5.279304e+00 -1.270273e+01 2.673127e-01
## 5061
                                                                           0
         1.805529e+00 2.191576e+00 1.764046e+00 2.738374e+00
## 5082
                                                                           0
## 5103
        -3.779766e+00 -1.829531e+01 -3.654302e+00 -1.150103e+00
                                                                           0
        -5.882680e+00 1.222299e+01 -5.452308e+00 -4.263773e-01
                                                                           0
## 5145
        -7.966665e+00 7.625563e+00 -7.129328e+00 -1.241718e-01
                                                                           0
## 5166
        -2.286733e+00 -1.853364e+00 -2.300892e+00 -2.858892e+00
                                                                           0
## 5187
        -2.275516e+00 -1.818954e+00 -2.289961e+00 -2.884849e+00
                                                                           0
        -2.984803e+00 -4.984139e+00 -2.939126e+00 -1.778442e+00
        -1.912219e+01 5.054344e+00 -1.456245e+01 3.277239e-01
## 5229
                                                                           0
## 5250
        -2.058314e+00 -1.244671e+00 -2.088622e+00 -3.460686e+00
## 5271
        -2.444897e-01 1.178316e+00 -3.411244e-01 1.151323e+01
                                                                           0
## 5292
        -2.964162e+00 -4.842884e+00 -2.919949e+00 -1.800942e+00
                                                                           0
         4.829697e+00 2.862487e+00 5.181044e+00 1.586625e+00
                                                                           0
## 5313
## 5334
        -1.779804e+00 -6.450516e-01 -1.824698e+00 -4.558037e+00
                                                                           0
        7.408965e-02 1.397291e+00 -2.466577e-02 7.249637e+00
                                                                           0
## 5355
## 5376
         2.954008e+00 2.511027e+00 3.011819e+00 2.079402e+00
                                                                           0
## 5397
        -2.553738e+00 -2.761197e+00 -2.546600e+00 -2.347671e+00
                                                                           0
## 5418
         1.697664e+00 2.155951e+00 1.650010e+00 2.831665e+00
                                                                           0
## 5439
        -4.697695e+00 3.808323e+01 -4.454298e+00 -7.395599e-01
                                                                           0
        -2.111666e+00 -1.373990e+00 -2.137563e+00 -3.303247e+00
                                                                           0
## 5460
        -2.534422e+00 -2.697419e+00 -2.532141e+00 -2.376999e+00
                                                                           0
## 5481
        -4.697377e-01 1.000975e+00 -5.643399e-01 2.064188e+01
## 5502
                                                                           0
## 5523
        -1.033782e+00 4.538046e-01 -1.111886e+00 -1.771034e+01
                                                                           0
         2.878731e-01 1.528517e+00 1.932999e-01 5.863686e+00
                                                                           0
## 5544
        -3.851663e-01 1.070370e+00 -4.799226e-01 1.583577e+01
## 5565
                                                                           0
        -2.469030e+00 -2.444893e+00 -2.468810e+00 -2.492851e+00
## 5586
## 5607
         1.069641e+01 3.387758e+00 1.293012e+01 1.092147e+00
        -2.352265e+00 -2.056215e+00 -2.362357e+00 -2.716843e+00
                                                                           0
## 5628
## 5649
        -7.207202e+00 8.491340e+00 -6.552763e+00 -2.100967e-01
                                                                           0
         5.968714e+00 3.008849e+00 6.533131e+00 1.424178e+00
                                                                           0
## 5670
## 5691
        -4.807442e+00 3.028819e+01 -4.548234e+00 -7.029020e-01
                                                                           0
        -2.431064e+00 -2.316966e+00 -2.435457e+00 -2.561234e+00
                                                                           0
## 5712
## 5733
        -1.812038e+00 -7.105993e-01 -1.857220e+00 -4.397814e+00
                                                                           0
## 5754
        -2.425730e+00 -2.294602e+00 -2.429155e+00 -2.572517e+00
                                                                           0
## 5775
        -2.597191e+00 -2.942232e+00 -2.588307e+00 -2.276935e+00
                                                                           0
## 5796
        -1.806746e+00 -6.973079e-01 -1.850381e+00 -4.426662e+00
                                                                           0
## 5817
        -9.505099e+00 6.592387e+00 -8.334584e+00 8.056013e-03
                                                                           0
## 5838
        -6.445638e+00 1.007167e+01 -5.920494e+00 -3.225308e-01
                                                                           0
        -3.356129e+00 -8.556939e+00 -3.280629e+00 -1.435346e+00
                                                                           0
## 5859
## 5880 -3.090179e+00 -5.838200e+00 -3.044751e+00 -1.666057e+00
```

```
## 5901
         2.517699e+00 2.399674e+00 2.524472e+00 2.277026e+00
        -3.668036e+00 -1.449392e+01 -3.555001e+00 -1.217741e+00
## 5922
                                                                           0
## 5943
        -3.819112e+00 -1.983320e+01 -3.684762e+00 -1.128714e+00
                                                                           0
        -1.889459e+00 -8.652430e-01 -1.929222e+00 -4.061711e+00
                                                                           0
## 5964
## 5985
         1.016889e+01 3.358377e+00 1.217191e+01 1.114688e+00
                                                                           0
        -2.939992e+00 -4.702958e+00 -2.900965e+00 -1.825958e+00
## 6006
                                                                           0
        -2.976183e+00 -4.941018e+00 -2.933818e+00 -1.786384e+00
                                                                           0
        -1.496452e+00 -1.574718e-01 -1.554298e+00 -6.505265e+00
## 6048
                                                                           0
## 6069
        -1.542850e+01 5.320832e+00 -1.243579e+01 2.556827e-01
                                                                           Λ
## 6090
        -5.052514e-01 9.713791e-01 -5.989070e-01 2.367108e+01
                                                                           0
## 6111
        -1.854575e+00 -7.997778e-01 -1.900024e+00 -4.201062e+00
                                                                           0
        -2.559811e+00 -2.790002e+00 -2.553604e+00 -2.336678e+00
                                                                           0
## 6132
## 6153
         1.107232e+01 3.408633e+00 1.351318e+01 1.076893e+00
                                                                           0
        -5.709065e+00 1.323238e+01 -5.308257e+00 -4.629431e-01
## 6174
                                                                           0
        -3.099560e+00 -5.860140e+00 -3.045860e+00 -1.660434e+00
## 6195
                                                                           0
## 6216
         -2.077293e+00 -1.295458e+00 -2.108695e+00 -3.399575e+00
                                                                           0
        -2.155126e+00 -1.485195e+00 -2.177932e+00 -3.183001e+00
## 6237
                                                                           0
## 6258
        -3.017030e+00 -5.229443e+00 -2.971466e+00 -1.742919e+00
                                                                           0
        -2.551112e+00 -2.754997e+00 -2.545376e+00 -2.351050e+00
## 6279
                                                                           0
## 6300
        -1.506683e+00 -1.814617e-01 -1.570618e+00 -6.383260e+00
                                                                           0
## 6321
        -1.617373e+00 -3.558968e-01 -1.672107e+00 -5.513330e+00
                                                                           0
        -1.520669e+00 -2.003320e-01 -1.581526e+00 -6.267555e+00
        -2.370425e+00 -2.111008e+00 -2.377988e+00 -2.680816e+00
## 6363
                                                                           0
         7.235982e+00 3.151641e+00 8.283094e+00 1.291882e+00
## 6384
## 6405
        -2.452259e+00 -2.388814e+00 -2.454422e+00 -2.522397e+00
## 6426
        -2.225363e+00 -1.675834e+00 -2.243577e+00 -3.002920e+00
                                                                           0
        -1.646650e+00 -4.073779e-01 -1.701053e+00 -5.311876e+00
                                                                           0
## 6447
## 6468
        -4.140812e+00 -6.507274e+01 -3.983383e+00 -9.594490e-01
                                                                           0
        -1.169140e+00 2.899459e-01 -1.245647e+00 -1.188841e+01
                                                                           0
## 6489
        -1.431477e+00 -6.393703e-02 -1.496022e+00 -7.157172e+00
                                                                           0
## 6510
        -7.528829e+00 8.097744e+00 -6.782477e+00 -1.724717e-01
## 6531
                                                                           0
## 6552
        -2.717360e+00 -3.474408e+00 -2.698297e+00 -2.101072e+00
                                                                           0
## 6573
        -8.889220e+00 6.942712e+00 -7.826973e+00 -4.036162e-02
                                                                           0
        -5.966470e-01 8.919577e-01 -6.888051e-01 3.849226e+01
## 6594
                                                                           0
                       1.111236e+02 -4.238523e+00 -8.315868e-01
                                                                           0
## 6615
         -4.446258e+00
         8.448615e+00 3.243164e+00 9.752288e+00 1.207158e+00
## 6636
                                                                           0
## 6657
         5.713119e+00 2.979719e+00 6.233277e+00 1.455248e+00
                                                                           0
        -4.389084e+00 2.365185e+02 -4.183343e+00 -8.554973e-01
                                                                           0
## 6678
        -2.452627e+00 -2.393170e+00 -2.455763e+00 -2.520858e+00
## 6699
                                                                           4
        -8.087604e+00 7.526980e+00 -7.212087e+00 -1.125651e-01
                                                                           0
## 6720
## 6741
        -3.467299e+00 -1.019353e+01 -3.379225e+00 -1.351940e+00
        -1.883578e+00 -8.548544e-01 -1.924747e+00 -4.083798e+00
                                                                           0
## 6762
## 6783
        -1.413222e+00 -3.664592e-02 -1.478136e+00 -7.370211e+00
                                                                           0
        -3.299162e+00 -7.801552e+00 -3.225051e+00 -1.482858e+00
                                                                           0
## 6804
## 6825
        -2.617249e+00 -3.032298e+00 -2.608421e+00 -2.244769e+00
                                                                           0
        -2.190629e+00 -1.580512e+00 -2.211360e+00 -3.089524e+00
                                                                           0
## 6846
## 6867
        -2.499164e+00 -2.564098e+00 -2.499614e+00 -2.437058e+00
## 6888
        -9.310667e-01 5.666490e-01 -1.013231e+00 -2.751128e+01
                                                                           0
## 6909
         2.514790e-01 1.507248e+00 1.566781e-01 6.055957e+00
                                                                           0
## 6930
         4.293298e+00 2.775754e+00 4.533099e+00 1.691064e+00
                                                                           0
        -4.370040e+00 3.163846e+02 -4.172329e+00 -8.620884e-01
## 6951
                                                                           0
## 6972
        -9.200669e+00 6.755587e+00 -8.081640e+00 -1.510599e-02
                                                                           0
        -6.994983e-01 7.989763e-01 -7.878852e-01 1.351158e+02
                                                                           0
## 6993
## 7014 -1.682467e+00 -4.727355e-01 -1.736958e+00 -5.081266e+00
```

```
-4.737028e+00 3.482754e+01 -4.487707e+00 -7.262423e-01
         2.361587e+01 3.772082e+00 3.942834e+01 8.414961e-01
## 7056
                                                                           0
## 7077
         9.823538e-01 1.878947e+00 9.008461e-01 3.750547e+00
                                                                           0
## 7098
        -1.692474e+00 -4.859738e-01 -1.743296e+00 -5.029844e+00
                                                                           0
## 7119
        -2.113226e-01 1.202186e+00 -3.094002e-01 1.083782e+01
                                                                           0
        -2.906925e+00 -4.479908e+00 -2.867974e+00 -1.864896e+00
## 7140
                                                                           0
## 7161
        -1.006825e+00 4.823312e-01 -1.088112e+00 -1.948750e+01
         1.590928e+00 2.119866e+00 1.537074e+00 2.932264e+00
## 7182
                                                                           0
## 7203
        -4.823848e-01 9.905162e-01 -5.766214e-01 2.162377e+01
                                                                           Λ
## 7224
        -7.003053e+00 8.837640e+00 -6.377914e+00 -2.380474e-01
                                                                           0
## 7245
        -8.553895e+00 7.157529e+00 -7.574643e+00 -6.859758e-02
                                                                           0
        -2.251001e+00 -1.746060e+00 -2.266451e+00 -2.942517e+00
                                                                           0
## 7266
## 7287
        -2.925278e+00 -4.549740e+00 -2.876894e+00 -1.848254e+00
                                                                           0
## 7308
        -2.091704e+00 -1.331973e+00 -2.122644e+00 -3.356119e+00
                                                                           0
        -3.325588e+00 -8.124421e+00 -3.249424e+00 -1.461109e+00
                                                                           0
## 7329
## 7350
        -2.546073e+00 -2.734556e+00 -2.540513e+00 -2.359513e+00
                                                                           0
         1.076321e+00 1.919532e+00 9.982629e-01 3.588480e+00
## 7371
                                                                           0
## 7392
        -1.009336e+00 4.796570e-01 -1.090368e+00 -1.930621e+01
                                                                           0
        -3.204423e+00 -6.793469e+00 -3.140013e+00 -1.563619e+00
## 7413
                                                                           0
## 7434
        -1.635279e+00 -3.857832e-01 -1.688757e+00 -5.391718e+00
                                                                           0
## 7455
        -7.109738e-01 7.879524e-01 -7.994030e-01 1.899744e+02
                                                                           0
        -8.598051e-01 6.409699e-01 -9.446933e-01 -4.408419e+01
        -2.351083e-01 1.184862e+00 -3.326651e-01 1.131761e+01
## 7497
                                                                           0
        -7.522930e+00 8.108778e+00 -6.774993e+00 -1.733523e-01
## 7518
## 7539
        -5.108687e-01 9.672442e-01 -6.033525e-01 2.419299e+01
                                                                           0
## 7560
        -1.153573e+00 3.064571e-01 -1.233540e+00 -1.231865e+01
                                                                           0
        -2.211766e+00 -1.642350e+00 -2.232752e+00 -3.034280e+00
                                                                           0
## 7581
## 7602
        -1.226034e+01 5.787781e+00 -1.023522e+01 1.525070e-01
                                                                           0
        -1.706260e+00 -5.140142e-01 -1.758626e+00 -4.943322e+00
                                                                           0
## 7623
        -1.741838e+00 -5.779281e-01 -1.791539e+00 -4.747764e+00
                                                                           0
## 7644
## 7665
        -2.666161e+00 -3.239440e+00 -2.651778e+00 -2.173121e+00
                                                                           0
## 7686
        -2.942641e+00 -4.719161e+00 -2.903233e+00 -1.823092e+00
                                                                           0
## 7707
         9.422875e+01 4.091404e+00 -1.542861e+02 6.768695e-01
                                                                           0
        -3.079966e+00 -5.696052e+00 -3.027263e+00 -1.679946e+00
## 7728
                                                                           0
## 7749
        -2.236217e+00 -1.708845e+00 -2.254705e+00 -2.975488e+00
                                                                           0
        -4.729239e+00 3.461689e+01 -4.491707e+00 -7.269964e-01
## 7770
                                                                           0
        -2.888035e+00 -4.385812e+00 -2.854438e+00 -1.884709e+00
                                                                           0
## 7812
        -1.196542e+00 2.576169e-01 -1.269974e+00 -1.116272e+01
                                                                           0
         1.066316e+00 1.915243e+00 9.887327e-01 3.604641e+00
                                                                           0
## 7833
        -3.418986e+00 -9.331099e+00 -3.328998e+00 -1.390082e+00
                                                                           Λ
## 7854
        -4.914844e-01 9.847317e-01 -5.823643e-01 2.228104e+01
        -1.956475e+00 -1.010197e+00 -1.993060e+00 -3.802378e+00
                                                                           0
## 7896
## 7917
        -1.406323e+00 -3.077130e-02 -1.475164e+00 -7.433528e+00
                                                                           0
        -1.734281e+01 5.160043e+00 -1.360366e+01 2.975567e-01
                                                                           0
## 7938
## 7959
        -2.278699e+00 -1.839230e+00 -2.297234e+00 -2.873030e+00
                                                                           0
        -3.709892e+00 -1.573908e+01 -3.591635e+00 -1.191991e+00
                                                                           0
## 7980
## 8001
        -5.384874e+00 1.610142e+01 -5.029116e+00 -5.396136e-01
                                                                           0
## 8022
        -1.631495e+01 5.246381e+00 -1.293377e+01 2.755210e-01
                                                                           0
## 8043
         3.385034e+00 2.605981e+00 3.492220e+00 1.927072e+00
                                                                           0
## 8064
        -3.447466e+00 -1.018994e+01 -3.382651e+00 -1.358777e+00
                                                                           0
                                                                           0
## 8085
         5.470714e-01 1.670611e+00 4.542078e-01 4.809880e+00
## 8106
         7.497139e-01 1.771899e+00 6.603585e-01 4.240357e+00
                                                                           0
## 8127
        -1.164273e+01 5.922461e+00 -9.802920e+00 1.258277e-01
                                                                           0
         4.140942e-01 1.599347e+00 3.190175e-01 5.293048e+00
## 8148
```

```
-2.668138e+00 -3.251229e+00 -2.654328e+00 -2.169750e+00
        -2.293042e+00 -1.871906e+00 -2.306654e+00 -2.844861e+00
## 8190
                                                                           0
## 8211
        -2.885784e+00 -4.371284e+00 -2.852177e+00 -1.887455e+00
                                                                           0
## 8232
        -4.111554e+00 -5.246342e+01 -3.946798e+00 -9.757673e-01
                                                                           0
## 8253
         8.788384e-01 1.832575e+00 7.943954e-01 3.950611e+00
                                                                           0
## 8274
        -5.448517e+00 1.510949e+01 -5.113272e+00 -5.199488e-01
                                                                           0
        -2.359439e+00 -2.082733e+00 -2.370341e+00 -2.700781e+00
## 8295
        -2.278540e+00 -1.828785e+00 -2.293143e+00 -2.877565e+00
## 8316
                                                                           0
## 8337
        -4.307491e+00 -5.310327e+02 -4.117577e+00 -8.881607e-01
                                                                           Λ
## 8358
        -3.316250e+00 -7.992701e+00 -3.239398e+00 -1.469306e+00
                                                                           0
## 8379
        2.086952e-02 1.363079e+00 -7.737236e-02 7.712044e+00
                                                                           0
        -1.950830e+00 -9.979988e-01 -1.987869e+00 -3.822806e+00
                                                                           0
## 8400
## 8421
        -2.492983e+00 -2.536356e+00 -2.492380e+00 -2.449096e+00
                                                                           4
## 8442
        -7.451034e-01 7.549852e-01 -8.332749e-01 -9.103133e+02
                                                                           0
        -1.222413e+01 5.782731e+00 -1.025749e+01 1.523120e-01
## 8463
                                                                           0
## 8484
        -3.201492e+00 -6.768031e+00 -3.137723e+00 -1.566067e+00
                                                                           0
        -1.762345e+00 -6.180137e-01 -1.812085e+00 -4.637466e+00
## 8505
                                                                           0
## 8526
        2.350056e+01 3.769690e+00 3.900781e+01 8.427028e-01
                                                                           0
## 8547
        -1.844355e+00 -7.753265e-01 -1.888101e+00 -4.250208e+00
                                                                           0
## 8568
         2.368509e-01 1.498819e+00 1.426564e-01 6.135852e+00
                                                                           0
## 8589
        -1.859959e+00 -8.134407e-01 -1.906707e+00 -4.174781e+00
                                                                           0
        -1.018121e+01 6.338586e+00 -8.788618e+00 5.020391e-02
        -2.277528e+00 -1.828997e+00 -2.293468e+00 -2.878525e+00
## 8631
                                                                           0
        -3.709483e+00 -1.566545e+01 -3.589260e+00 -1.192854e+00
## 8652
## 8673
        -3.348581e+00 -8.379420e+00 -3.267197e+00 -1.443876e+00
                                                                           0
## 8694
        -4.986065e-01 9.776568e-01 -5.912374e-01 2.299050e+01
                                                                           0
         1.145239e+00 1.948447e+00 1.069566e+00 3.479983e+00
                                                                           0
## 8715
## 8736
        -2.355935e+01 4.861226e+00 -1.695403e+01 3.845991e-01
                                                                           0
                                                                           0
## 8757
        -1.878847e+00 -8.433131e-01 -1.919269e+00 -4.105271e+00
## 8778
        -2.376557e+00 -2.120905e+00 -2.380114e+00 -2.671798e+00
                                                                           0
         5.542783e+00 2.957508e+00 6.017012e+00 1.478328e+00
## 8799
                                                                           0
## 8820
        -1.921890e+00 -9.299218e-01 -1.957630e+00 -3.936933e+00
                                                                           0
## 8841
        -2.113791e+00 -1.382450e+00 -2.141001e+00 -3.295264e+00
                                                                           0
## 8862
        -2.713025e+00 -3.471391e+00 -2.698509e+00 -2.104299e+00
                                                                           0
## 8883
        -9.070200e-01 5.913172e-01 -9.910833e-01 -3.145505e+01
                                                                           0
        -2.197281e+00 -1.627327e+00 -2.229877e+00 -3.058175e+00
## 8904
                                                                           0
## 8925
        -7.860475e+00 7.755795e+00 -7.022121e+00 -1.367919e-01
                                                                           0
         1.450628e+01 3.555497e+00 1.909691e+01 9.741696e-01
                                                                           0
## 8946
        -2.146645e+00 -1.463196e+00 -2.170080e+00 -3.205857e+00
## 8967
                                                                           0
        -1.357178e+00 4.088028e-02 -1.426890e+00 -8.080605e+00
                                                                           Λ
## 8988
        -2.306929e+00 -1.915598e+00 -2.320284e+00 -2.813398e+00
        -9.232729e+00 6.743496e+00 -8.098309e+00 -1.304081e-02
                                                                           0
## 9030
## 9051
        -7.770139e+00 7.829375e+00 -6.968375e+00 -1.454720e-01
                                                                           0
        -2.060404e+00 -1.249267e+00 -2.090365e+00 -3.454531e+00
                                                                           0
## 9072
## 9093
       -1.269376e+01 5.698487e+00 -1.056293e+01 1.703087e-01
                                                                           0
        -3.187181e+00 -6.618635e+00 -3.123435e+00 -1.579459e+00
                                                                           0
## 9114
## 9135
        -1.281514e+00 1.426645e-01 -1.356158e+00 -9.278698e+00
                                                                           0
## 9156
        -2.208978e+00 -1.628607e+00 -2.227586e+00 -3.044189e+00
                                                                           0
## 9177
        -3.125685e+00 -6.072657e+00 -3.068717e+00 -1.635809e+00
                                                                           0
## 9198
        -1.602009e+00 -3.334905e-01 -1.659992e+00 -5.614609e+00
                                                                           0
                                                                           0
## 9219
        -1.226714e+00 2.218315e-01 -1.296313e+00 -1.045951e+01
## 9240
       -2.695484e+00 -3.378303e+00 -2.679910e+00 -2.130405e+00
                                                                           0
## 9261 -1.047543e+01 6.229254e+00 -9.020790e+00 6.811570e-02
                                                                           0
         1.410803e+00 2.053670e+00 1.346782e+00 3.126469e+00
## 9282
```

```
## 9303 -3.117352e+00 -5.998642e+00 -3.060740e+00 -1.643924e+00
## 9324 -2.147122e+00 -1.464697e+00 -2.170644e+00 -3.204412e+00
        -2.952406e+00 -4.785104e+00 -2.912561e+00 -1.812067e+00
                                                                           0
        -3.133901e+00 -6.144261e+00 -3.076270e+00 -1.628006e+00
                                                                           0
## 9366
## 9387
        -9.815245e-01 5.104925e-01 -1.063646e+00 -2.158410e+01
                                                                           0
## 9408
        -1.330089e+00 7.639013e-02 -1.402980e+00 -8.465279e+00
                                                                           0
        -1.921100e+00 -9.359317e-01 -1.961217e+00 -3.932348e+00
        -3.881199e+00 -2.297043e+01 -3.736900e+00 -1.094859e+00
## 9450
                                                                           0
## 9471
        -3.007188e+00 -5.150990e+00 -2.961256e+00 -1.753827e+00
                                                                           Λ
## 9492
       -2.425957e+00 -2.295898e+00 -2.429540e+00 -2.571931e+00
                                                                           0
## 9513
       -2.500091e+00 -2.578485e+00 -2.503849e+00 -2.432688e+00
                                                                           0
         4.699454e+00 2.840739e+00 5.010824e+00 1.610978e+00
                                                                           0
## 9534
## 9555
        -1.929395e+00 -9.503696e-01 -1.967132e+00 -3.903893e+00
                                                                           0
        -8.642422e+00 7.097420e+00 -7.641725e+00 -6.089978e-02
## 9576
                                                                           0
        -1.901518e+00 -8.896107e-01 -1.940079e+00 -4.013994e+00
## 9597
                                                                           0
        -6.300285e-01 8.615492e-01 -7.222300e-01 5.024110e+01
## 9618
                                                                           0
## 9639
        -5.499041e+00 1.491557e+01 -5.126508e+00 -5.115640e-01
                                                                           0
        -1.298555e+00 1.232830e-01 -1.369154e+00 -9.003170e+00
## 9660
## 9681
         6.667925e+00 3.087474e+00 7.431866e+00 1.347432e+00
                                                                           0
## 9702
        -3.006497e+00 -5.152254e+00 -2.961592e+00 -1.754063e+00
                                                                           0
## 9723
        -1.217927e+00 2.295187e-01 -1.291476e+00 -1.062632e+01
                                                                           0
        1.853780e+00 2.207966e+00 1.815994e+00 2.698485e+00
        -1.985571e+00 -1.076121e+00 -2.020932e+00 -3.698200e+00
## 9765
                                                                           0
## 9786
         1.103155e+02 4.109098e+00 -1.246068e+02 6.686549e-01
## 9807
        -1.896420e+00 -8.795743e-01 -1.935659e+00 -4.033737e+00
                                                                           0
## 9828
        -6.053737e+00 1.139286e+01 -5.601391e+00 -3.918636e-01
                                                                           0
        -8.495628e-01 6.483249e-01 -9.389290e-01 -4.746148e+01
                                                                           0
## 9849
## 9870
        -1.238215e+00 2.046086e-01 -1.309749e+00 -1.018068e+01
                                                                           0
        -2.540465e+00 -2.713560e+00 -2.535576e+00 -2.368615e+00
                                                                           0
## 9891
## 9912 -1.930732e+00 -9.525347e-01 -1.967991e+00 -3.899504e+00
                                                                           0
## 9933
        -2.341772e+00 -2.023329e+00 -2.352710e+00 -2.738620e+00
                                                                           0
## 9954
        -1.351076e+00 5.245002e-02 -1.418300e+00 -8.184691e+00
                                                                           0
        -2.355489e+00 -2.064525e+00 -2.364641e+00 -2.710864e+00
                                                                           0
         2.618007e-01 1.512997e+00 1.660246e-01 6.002033e+00
                                                                           0
## 10017 -1.813341e+00 -7.158590e-01 -1.860127e+00 -4.388169e+00
                                                                           0
## 10038 -9.421984e-01 5.547154e-01 -1.023978e+00 -2.596825e+01
                                                                           0
## 10059 -1.654262e+00 -4.200628e-01 -1.707940e+00 -5.263482e+00
## 10080 -4.150132e+00 -6.438929e+01 -3.980005e+00 -9.578411e-01
                                                                           0
## 10101 -1.708271e+00 -5.141435e-01 -1.758152e+00 -4.937934e+00
                                                                           0
## 10122 -2.291099e+00 -1.865220e+00 -2.304503e+00 -2.849563e+00
                                                                           Λ
## 10143 -3.391710e+00 -8.920240e+00 -3.303085e+00 -1.411337e+00
## 10164 -1.748711e+00 -5.917133e-01 -1.798705e+00 -4.709621e+00
                                                                           0
## 10185 -1.134929e+00 3.284806e-01 -1.216437e+00 -1.291288e+01
                                                                           0
## 10206 -8.951838e+00 6.885436e+00 -7.904129e+00 -3.388890e-02
                                                                           0
## 10227 1.362296e-01 1.436033e+00 3.643788e-02 6.782066e+00
                                                                           0
## 10248 -6.860884e+00 9.113678e+00 -6.255553e+00 -2.586428e-01
                                                                           0
## 10269 -1.557865e+00 -2.595899e-01 -1.616932e+00 -5.954580e+00
                                                                           0
## 10290 -1.860601e+00 -8.067817e-01 -1.902584e+00 -4.181242e+00
                                                                           0
## 10311 -2.631355e+00 -3.081582e+00 -2.618483e+00 -2.225480e+00
                                                                           0
## 10332 -3.799536e+00 -1.904518e+01 -3.669672e+00 -1.139273e+00
                                                                           0
## 10353 -3.691688e+00 -1.518046e+01 -3.575803e+00 -1.203072e+00
                                                                           0
## 10374 -5.838194e+00 1.243783e+01 -5.419270e+00 -4.350830e-01
                                                                           0
## 10395 -2.524228e+00 -2.652093e+00 -2.520862e+00 -2.395617e+00
                                                                           0
## 10416 -4.129096e+00 -5.686646e+01 -3.960320e+00 -9.679424e-01
```

```
## 10437 -1.829496e+00 -7.449460e-01 -1.873656e+00 -4.317497e+00
## 10458 3.553859e+00 2.639978e+00 3.680651e+00 1.875980e+00
## 10479 -1.410588e+00 -3.249216e-02 -1.475342e+00 -7.403047e+00
                                                                          0
## 10500 -2.804623e+00 -3.902836e+00 -2.775697e+00 -1.987514e+00
                                                                          0
## 10521 1.722143e-01 1.458939e+00 7.468473e-02 6.533493e+00
                                                                          0
## 10542 -4.967712e-02 1.317322e+00 -1.449444e-01 8.425082e+00
                                                                          0
## 10563 -2.369551e+00 -2.109984e+00 -2.377823e+00 -2.681974e+00
## 10584 2.467325e+00 2.389003e+00 2.476958e+00 2.300893e+00
                                                                          0
## 10605 -1.302693e+01 5.631617e+00 -1.083405e+01 1.836333e-01
                                                                          Λ
## 10626 -1.857022e+00 -8.020489e-01 -1.900723e+00 -4.193660e+00
                                                                          0
## 10647 -2.055649e+00 -1.234621e+00 -2.084319e+00 -3.471543e+00
                                                                          0
## 10668 -2.581133e-01 1.167584e+00 -3.558393e-01 1.183296e+01
                                                                          0
## 10689 -2.289399e+00 -1.862951e+00 -2.304018e+00 -2.852227e+00
                                                                          0
## 10710 -3.708816e+00 -1.589751e+01 -3.597028e+00 -1.190717e+00
                                                                          0
## 10731 -1.168859e+00 2.919307e-01 -1.243660e+00 -1.191836e+01
                                                                          0
## 10752 -2.184835e+00 -1.565242e+00 -2.206126e+00 -3.104203e+00
                                                                          0
## 10773 -4.510540e-01 1.016852e+00 -5.452068e-01 1.932245e+01
                                                                          0
## 10794 -4.016451e+00 -3.514712e+01 -3.862166e+00 -1.022408e+00
                                                                          0
## 10815 -2.332326e+00 -1.991224e+00 -2.342978e+00 -2.759506e+00
                                                                          0
## 10836 -2.611132e+00 -2.997778e+00 -2.600443e+00 -2.255848e+00
                                                                          0
## 10857 -1.806642e+00 -6.991246e-01 -1.851543e+00 -4.424446e+00
                                                                          0
## 10878 -1.214890e+02 4.317770e+00 -4.035220e+01 5.767499e-01
## 10899 -1.413958e+00 -3.937365e-02 -1.480274e+00 -7.353979e+00
                                                                          0
## 10920 -7.983559e+00 7.605204e+00 -7.146835e+00 -1.221736e-01
## 10941 -7.489519e-01 7.517045e-01 -8.364079e-01 -5.663884e+02
                                                                          0
## 10962 -1.293749e+00 1.286949e-01 -1.365558e+00 -9.078782e+00
                                                                          0
## 10983 -2.034575e+00 -1.196299e+00 -2.070486e+00 -3.529472e+00
                                                                          0
## 11004 -1.750684e+00 -5.892891e-01 -1.796572e+00 -4.708761e+00
                                                                          0
## 11025 -6.124127e-01 8.775015e-01 -7.048563e-01 4.329691e+01
                                                                          0
## 11046 -3.467785e+00 -1.014061e+01 -3.375717e+00 -1.352995e+00
                                                                          0
## 11067 -9.534670e+00 6.620938e+00 -8.280049e+00 6.845527e-03
                                                                          0
## 11088 1.322632e+00 2.019571e+00 1.254830e+00 3.233837e+00
                                                                          0
## 11109 -2.986541e+00 -5.004945e+00 -2.942152e+00 -1.775839e+00
                                                                          0
## 11130 -2.966027e+00 -4.868679e+00 -2.923891e+00 -1.797732e+00
                                                                          0
## 11151 -2.374956e+00 -2.124609e+00 -2.381808e+00 -2.672021e+00
                                                                          0
## 11172 -1.481054e+00 -1.388601e-01 -1.543718e+00 -6.635618e+00
                                                                          0
## 11193 -5.326690e+00 1.669554e+01 -4.988437e+00 -5.532103e-01
## 11214 -3.048636e+00 -5.468826e+00 -3.001062e+00 -1.710105e+00
                                                                          0
## 11235 -2.840851e+00 -4.093555e+00 -2.807470e+00 -1.943283e+00
                                                                          0
                                                                          Λ
## 11256 6.158790e+00 3.031594e+00 6.778174e+00 1.401612e+00
## 11277 1.217920e+01 3.462892e+00 1.523312e+01 1.037732e+00
## 11298 -9.900032e-01 5.005106e-01 -1.072557e+00 -2.080838e+01
                                                                          0
## 11319 -2.616659e+00 -3.021994e+00 -2.605779e+00 -2.247190e+00
                                                                          0
## 11340 -3.168112e+00 -6.467673e+00 -3.109398e+00 -1.595331e+00
                                                                          0
## 11361 3.098981e+00 2.543649e+00 3.170533e+00 2.024728e+00
                                                                          0
## 11382 -3.205420e+00 -6.801378e+00 -3.140706e+00 -1.562824e+00
                                                                          0
## 11403 -2.089154e+00 -1.317943e+00 -2.116566e+00 -3.368658e+00
                                                                          0
## 11424 -1.026675e+01 6.310985e+00 -8.843896e+00 5.506656e-02
                                                                          0
## 11445 -2.361485e+00 -2.083856e+00 -2.370273e+00 -2.698474e+00
                                                                          0
## 11466 -1.039985e+00 4.438517e-01 -1.121205e+00 -1.724601e+01
                                                                          0
## 11487 1.641222e+00 2.136474e+00 1.590242e+00 2.884113e+00
                                                                          0
## 11508 2.117930e+01 3.727320e+00 3.274678e+01 8.667462e-01
                                                                          0
## 11529 -1.950921e+00 -9.979727e-01 -1.987831e+00 -3.822680e+00
                                                                         0
## 11550 -2.492079e+00 -2.532175e+00 -2.491277e+00 -2.450902e+00
```

```
## 11571 -1.326673e+00 8.379209e-02 -1.397213e+00 -8.535030e+00
## 11592 -2.410183e+00 -2.234387e+00 -2.412189e+00 -2.604587e+00
## 11613 -5.258819e-01 9.544547e-01 -6.180926e-01 2.584953e+01
## 11634 -1.133779e+00 3.336384e-01 -1.211284e+00 -1.301242e+01
                                                                          0
## 11655 -5.797994e+00 1.266680e+01 -5.385254e+00 -4.435452e-01
                                                                          0
## 11676 9.082349e+00 3.289898e+00 1.064149e+01 1.168993e+00
                                                                          0
## 11697 -1.004564e+01 6.386348e+00 -8.695369e+00 4.211464e-02
## 11718 -1.171853e+00 2.886185e-01 -1.246119e+00 -1.183686e+01
                                                                          0
## 11739 4.058662e+00 2.735313e+00 4.260259e+00 1.743532e+00
                                                                          Λ
## 11760 2.786325e-01 1.522377e+00 1.814365e-01 5.916026e+00
                                                                          0
## 11781 -2.185904e+00 -1.568318e+00 -2.207207e+00 -3.101348e+00
                                                                          0
## 11802 -2.533923e+00 -2.699659e+00 -2.532917e+00 -2.376857e+00
                                                                          0
## 11823 -1.344356e+01 5.575977e+00 -1.106893e+01 1.969411e-01
                                                                          0
## 11844 -1.737591e+00 -5.721240e-01 -1.788880e+00 -4.767292e+00
                                                                          0
## 11865 -1.335780e+00 7.035877e-02 -1.406735e+00 -8.390094e+00
                                                                          0
## 11886 2.843118e+00 2.485707e+00 2.892546e+00 2.123827e+00
                                                                          0
## 11907 -3.976836e+00 -3.072025e+01 -3.827016e+00 -1.042603e+00
                                                                          0
## 11928 -1.106508e+00 3.687740e-01 -1.182445e+00 -1.406751e+01
## 11949 -3.089709e+00 -5.779248e+00 -3.036824e+00 -1.670055e+00
                                                                          0
## 11970 -3.112198e+00 -5.975643e+00 -3.058736e+00 -1.647611e+00
                                                                          0
## 11991 -7.823839e-01 7.187426e-01 -8.695222e-01 -1.242174e+02
                                                                          0
## 12012 -1.757693e+00 -6.047499e-01 -1.804750e+00 -4.668375e+00
## 12033 2.974098e+01 3.847759e+00 5.854318e+01 7.981881e-01
                                                                          0
## 12054 -1.325539e+00 8.767319e-02 -1.393968e+00 -8.567591e+00
## 12075 -9.299728e-01 5.666212e-01 -1.013677e+00 -2.757752e+01
                                                                          0
## 12096 -4.554838e+00 5.933076e+01 -4.332901e+00 -7.901726e-01
                                                                          0
## 12117 -9.129223e+00 6.801959e+00 -8.014392e+00 -2.114629e-02
                                                                          0
## 12138 -6.110944e-01 8.787779e-01 -7.034151e-01 4.283528e+01
                                                                          0
## 12159 -2.203053e+00 -1.615178e+00 -2.223284e+00 -3.057612e+00
                                                                          0
## 12180 -1.399493e+00 -1.672579e-02 -1.465007e+00 -7.536478e+00
## 12201 -1.066001e+00 4.159550e-01 -1.143902e+00 -1.587953e+01
                                                                          0
## 12222 -3.442558e+00 -9.706003e+00 -3.351272e+00 -1.372106e+00
                                                                          0
## 12243 -6.347933e+02 4.232433e+00 -5.487770e+01 6.126912e-01
                                                                          0
## 12264 -2.283686e+00 -1.838232e+00 -2.295658e+00 -2.868293e+00
                                                                          0
## 12285 -7.207648e-01 7.761555e-01 -8.126430e-01 3.153590e+02
                                                                          0
## 12306 -8.626087e-01 6.361347e-01 -9.499891e-01 -4.268407e+01
                                                                          0
## 12327 -2.058196e+00 -1.246580e+00 -2.089595e+00 -3.459508e+00
## 12348 -4.438823e+00 1.191983e+02 -4.231350e+00 -8.346529e-01
                                                                          0
## 12369 -3.391102e+00 -8.970384e+00 -3.307084e+00 -1.410088e+00
                                                                          0
                                                                          Λ
## 12390 -2.154777e+00 -1.484740e+00 -2.177813e+00 -3.183684e+00
## 12411 -2.750071e+00 -3.636254e+00 -2.728844e+00 -2.056405e+00
## 12432 9.014678e-03 1.355426e+00 -8.889568e-02 7.823211e+00
                                                                          0
## 12453 -1.587071e+00 -3.070233e-01 -1.644535e+00 -5.728645e+00
                                                                          0
## 12474 -3.304256e+00 -7.864973e+00 -3.229983e+00 -1.478537e+00
                                                                          0
## 12495 -1.543465e+00 -2.343851e-01 -1.601610e+00 -6.078342e+00
                                                                          0
## 12516 7.005491e+00 3.105124e+00 7.663447e+00 1.322830e+00
                                                                          0
## 12537 -2.097500e-01 1.202580e+00 -3.094567e-01 1.081978e+01
                                                                          0
## 12558 3.277932e+00 2.583726e+00 3.373566e+00 1.961645e+00
                                                                          0
## 12579 -1.022264e+00 4.659136e-01 -1.101884e+00 -1.842523e+01
                                                                          0
## 12600 9.461408e+00 3.314331e+00 1.115361e+01 1.148996e+00
                                                                          0
## 12621 -2.590242e+00 -2.910538e+00 -2.581054e+00 -2.288458e+00
                                                                          0
## 12642 -1.652187e+00 -4.157782e-01 -1.705478e+00 -5.278295e+00
                                                                          0
## 12663 -3.801211e+00 -1.918597e+01 -3.672775e+00 -1.137844e+00
                                                                          0
## 12684 -1.706745e+00 -5.129277e-01 -1.757752e+00 -4.943994e+00
```

```
## 12705 -1.201288e+00 2.499646e-01 -1.276232e+00 -1.102295e+01
## 12726 -2.021418e+00 -1.156961e+00 -2.053849e+00 -3.578489e+00
## 12747 -2.522117e+00 -2.642881e+00 -2.518556e+00 -2.399478e+00
## 12768 -2.003788e+00 -1.115652e+00 -2.037017e+00 -3.637527e+00
                                                                          0
## 12789 -7.760634e+00 7.815479e+00 -6.981183e+00 -1.452305e-01
                                                                          0
## 12810 -1.830311e+00 -7.453189e-01 -1.873665e+00 -4.315371e+00
                                                                          0
## 12831 -8.606312e-01 6.377513e-01 -9.486248e-01 -4.329876e+01
## 12852 2.902097e-01 1.529199e+00 1.933921e-01 5.855954e+00
                                                                          0
## 12873 -2.521231e+01 4.821532e+00 -1.757115e+01 3.987260e-01
                                                                          Λ
## 12894 1.515073e+00 2.091674e+00 1.457110e+00 3.010763e+00
                                                                          0
## 12915 -2.390238e+00 -2.174359e+00 -2.395901e+00 -2.641580e+00
                                                                          0
## 12936 -1.335098e+00 7.462392e-02 -1.403018e+00 -8.420830e+00
                                                                          0
## 12957 -1.384130e+00 5.586609e-03 -1.450093e+00 -7.732155e+00
                                                                          0
## 12978 -5.107702e+00 1.998281e+01 -4.814865e+00 -6.103398e-01
                                                                          0
## 12999 -4.950143e+00 2.424942e+01 -4.670921e+00 -6.579287e-01
                                                                          0
## 13020 1.630373e+00 2.132354e+00 1.578707e+00 2.894720e+00
                                                                          0
## 13041 1.891030e+00 2.220180e+00 1.855966e+00 2.668892e+00
                                                                          0
## 13062 2.556923e+00 2.411922e+00 2.572404e+00 2.255846e+00
## 13083 -5.533226e+00 1.450468e+01 -5.166946e+00 -5.020018e-01
                                                                          0
## 13104 -1.773872e+00 -6.373255e-01 -1.821371e+00 -4.582567e+00
                                                                          0
## 13125 -3.827503e+00 -2.037032e+01 -3.695218e+00 -1.123096e+00
                                                                          0
## 13146 -1.370593e+00 2.529781e-02 -1.436726e+00 -7.913845e+00
## 13167 2.430250e+00 2.378826e+00 2.436188e+00 2.320680e+00
                                                                          1
## 13188 -3.796982e+00 -1.882051e+01 -3.664613e+00 -1.141553e+00
## 13209 -8.852032e-01 6.140873e-01 -9.701034e-01 -3.622277e+01
                                                                          0
## 13230 -2.119591e+00 -1.396902e+00 -2.146306e+00 -3.278957e+00
                                                                          0
## 13251 -3.113944e+00 -5.961605e+00 -3.056546e+00 -1.647692e+00
                                                                          0
## 13272 -3.236118e+00 -7.108684e+00 -3.168209e+00 -1.536037e+00
                                                                          0
## 13293 -2.095636e+00 -1.329533e+00 -2.120499e+00 -3.352464e+00
                                                                          0
## 13314 -3.466528e+01 4.616606e+00 -2.222686e+01 4.632850e-01
## 13335 9.264264e-01 1.854085e+00 8.427211e-01 3.855841e+00
                                                                          0
## 13356 -1.899466e+00 -8.899513e-01 -1.940815e+00 -4.017328e+00
                                                                          0
## 13377 -3.963163e+00 -2.757356e+01 -3.792476e+00 -1.055575e+00
                                                                          0
## 13398 -2.308115e+00 -1.914050e+00 -2.319410e+00 -2.812820e+00
                                                                          0
## 13419 -3.726851e+00 -1.630003e+01 -3.606714e+00 -1.181687e+00
                                                                          0
## 13440 -8.002351e-01 6.996993e-01 -8.888226e-01 -8.653209e+01
                                                                          0
## 13461 -1.282705e+00 1.449067e-01 -1.353617e+00 -9.286437e+00
## 13482 -1.923568e+00 -9.382386e-01 -1.961866e+00 -3.925793e+00
                                                                          0
## 13503 -2.133479e+00 -1.430389e+00 -2.158351e+00 -3.241292e+00
                                                                          0
## 13524 -2.177300e+00 -1.543806e+00 -2.198573e+00 -3.124366e+00
                                                                          Λ
## 13545 -5.434569e+00 1.541609e+01 -5.084752e+00 -5.255123e-01
## 13566 -1.985446e+00 -1.072097e+00 -2.018833e+00 -3.701788e+00
                                                                          0
## 13587 -2.234439e+00 -1.710581e+00 -2.255849e+00 -2.976632e+00
                                                                          0
## 13608 -2.895382e+00 -4.424570e+00 -2.860149e+00 -1.876717e+00
                                                                          0
## 13629 -2.321509e+00 -1.957121e+00 -2.332684e+00 -2.782886e+00
                                                                          0
## 13650 -3.016027e+00 -5.220270e+00 -2.970253e+00 -1.744113e+00
                                                                          0
## 13671 -4.989663e+00 2.323209e+01 -4.698230e+00 -6.470384e-01
                                                                          0
## 13692 -1.424359e+01 5.461667e+00 -1.162085e+01 2.225783e-01
                                                                          0
## 13713 -2.233332e+00 -1.703711e+00 -2.253272e+00 -2.981029e+00
                                                                          0
## 13734 -2.275765e+00 -1.826607e+00 -2.292939e+00 -2.881360e+00
                                                                          0
## 13755 -1.302973e+00 1.174359e-01 -1.373273e+00 -8.928633e+00
                                                                          0
## 13776 -2.341942e+00 -2.018782e+00 -2.350987e+00 -2.740110e+00
                                                                          0
## 13797 -3.708203e+00 -1.573902e+01 -3.591930e+00 -1.192476e+00
                                                                          0
## 13818 -2.135006e+00 -1.433947e+00 -2.159607e+00 -3.237283e+00
```

```
## 13839 -5.973605e+00 1.176505e+01 -5.530445e+00 -4.078734e-01
## 13860 -1.621588e+00 -3.628722e-01 -1.676009e+00 -5.484319e+00
## 13881 -1.881214e+00 -8.502651e-01 -1.922701e+00 -4.093202e+00
                                                                          0
## 13902 1.116238e-01 1.421394e+00 1.384842e-02 6.954574e+00
                                                                          0
## 13923 -1.085204e+01 6.116139e+00 -9.283296e+00 8.840641e-02
                                                                          0
## 13944 6.195300e-01 1.707964e+00 5.288395e-01 4.585752e+00
                                                                          0
## 13965 -2.690525e+00 -3.347633e+00 -2.673482e+00 -2.138663e+00
## 13986 -3.703472e+00 -1.552988e+01 -3.585764e+00 -1.195972e+00
                                                                          0
## 14007 -4.916396e+00 2.545140e+01 -4.640825e+00 -6.684690e-01
                                                                          Λ
## 14028 -3.964182e+00 -2.902783e+01 -3.810201e+00 -1.050617e+00
                                                                          0
## 14049 -6.712427e+01 4.412432e+00 -3.160354e+01 5.396226e-01
                                                                          0
## 14070 -1.285136e+00 1.422940e-01 -1.355340e+00 -9.247167e+00
                                                                          0
## 14091 -2.272254e+00 -1.821050e+00 -2.291569e+00 -2.887362e+00
                                                                          0
## 14112 -3.301465e+00 -7.823427e+00 -3.226656e+00 -1.481153e+00
                                                                          0
## 14133 -1.785771e+00 -6.596279e-01 -1.832357e+00 -4.523959e+00
                                                                          0
## 14154 -2.071190e+00 -1.273420e+00 -2.099509e+00 -3.422850e+00
                                                                          0
## 14175 -3.235552e-01 1.116614e+00 -4.230658e-01 1.363137e+01
                                                                          0
## 14196 -1.710684e-01 1.231366e+00 -2.693128e-01 1.011253e+01
## 14217 6.086282e+01 4.024118e+00 -2.465342e+03 7.082480e-01
                                                                          0
## 14238 -2.659539e+00 -3.200325e+00 -2.643261e+00 -2.184452e+00
                                                                          0
## 14259 4.763800e-01 1.632988e+00 3.812941e-01 5.054778e+00
                                                                          0
## 14280 4.587016e+00 2.822078e+00 4.869356e+00 1.632629e+00
## 14301 -1.871741e+00 -8.284132e-01 -1.912413e+00 -4.135259e+00
                                                                          0
## 14322 -2.070193e+00 -1.275663e+00 -2.100854e+00 -3.422689e+00
## 14343 -1.908086e+00 -9.125510e-01 -1.951432e+00 -3.978625e+00
                                                                          0
## 14364 -7.742962e-01 7.256669e-01 -8.630737e-01 -1.504095e+02
                                                                          0
## 14385 -3.733575e+00 -1.633731e+01 -3.606702e+00 -1.179433e+00
                                                                          0
## 14406 4.431739e-01 1.615494e+00 3.494364e-01 5.176892e+00
                                                                          0
                                                                          0
## 14427 -2.152853e+00 -1.481064e+00 -2.176630e+00 -3.188098e+00
## 14448 -1.860137e+00 -8.055941e-01 -1.902002e+00 -4.183515e+00
                                                                          0
## 14469 -1.480137e+00 -1.370501e-01 -1.542508e+00 -6.646068e+00
                                                                          0
## 14490 6.856782e-01 1.740954e+00 5.962734e-01 4.401857e+00
                                                                          0
## 14511 -7.411390e-01 7.578340e-01 -8.308040e-01 -2.123274e+03
                                                                          0
## 14532 -2.768650e+00 -3.725461e+00 -2.744898e+00 -2.032482e+00
                                                                          0
## 14553 -1.879814e+00 -8.455600e-01 -1.920326e+00 -4.100985e+00
                                                                          0
## 14574 1.701534e+00 2.157656e+00 1.654307e+00 2.827870e+00
                                                                          0
## 14595 -6.006440e+00 1.160800e+01 -5.559533e+00 -4.012530e-01
## 14616 2.656714e+00 2.438433e+00 2.683769e+00 2.207210e+00
                                                                          0
## 14637 -4.464956e+00 9.967302e+01 -4.249835e+00 -8.252741e-01
                                                                          0
                                                                          Λ
## 14658 6.959793e-01 1.745743e+00 6.050575e-01 4.376148e+00
## 14679 4.438568e-02 1.378589e+00 -5.332204e-02 7.497430e+00
## 14700 -7.956850e+00 7.635722e+00 -7.120820e+00 -1.252371e-01
                                                                          0
## 14721 -8.722732e+00 7.047640e+00 -7.698886e+00 -5.424307e-02
                                                                          0
## 14742 -7.933186e-01 7.070947e-01 -8.813577e-01 -9.806717e+01
                                                                          0
## 14763 -1.387739e+00 -6.993773e-05 -1.453984e+00 -7.683163e+00
                                                                          0
## 14784 -1.217286e+00 2.284242e-01 -1.292795e+00 -1.062152e+01
                                                                          0
## 14805 -5.860049e-01 9.017609e-01 -6.777765e-01 3.579954e+01
                                                                          0
## 14826 -3.602745e+00 -1.279151e+01 -3.495801e+00 -1.260041e+00
                                                                          0
## 14847 1.805393e+00 2.191593e+00 1.763957e+00 2.738439e+00
                                                                          0
## 14868 -1.144638e+00 3.211688e-01 -1.220939e+00 -1.265915e+01
                                                                          0
## 14889 1.669504e+00 2.146447e+00 1.620236e+00 2.857402e+00
                                                                          0
## 14910 -3.866159e-01 1.068929e+00 -4.818902e-01 1.590774e+01
                                                                          0
## 14931 -3.085687e+00 -5.745269e+00 -3.032951e+00 -1.674093e+00
                                                                          0
## 14952 -2.695867e+00 -3.373387e+00 -2.678631e+00 -2.130958e+00
```

```
## 14973 -4.854956e+00 2.790651e+01 -4.589226e+00 -6.875671e-01
## 14994 -3.818556e+00 -2.016303e+01 -3.692229e+00 -1.126765e+00
## 15015 -1.529383e+00 -2.091523e-01 -1.585936e+00 -6.206593e+00
                                                                          0
## 15036 -2.060604e+00 -1.248719e+00 -2.090044e+00 -3.454636e+00
                                                                          0
## 15057 -2.321125e+00 -1.958354e+00 -2.333241e+00 -2.782794e+00
                                                                          0
## 15078 -2.293605e+01 4.887294e+00 -1.656309e+01 3.772916e-01
                                                                          0
## 15099 -1.841969e+00 -7.849544e-01 -1.894533e+00 -4.243347e+00
## 15120 -3.043996e+00 -5.417889e+00 -2.994502e+00 -1.715955e+00
                                                                          0
## 15141 -2.801394e+00 -3.863314e+00 -2.767981e+00 -1.994501e+00
                                                                          Λ
## 15162 -3.009898e+01 4.697038e+00 -2.006132e+01 4.372150e-01
                                                                          0
## 15183 -1.672850e+00 -4.511111e-01 -1.724596e+00 -5.148990e+00
                                                                          0
## 15204 1.246501e+00 1.989498e+00 1.175621e+00 3.334035e+00
                                                                          0
## 15225 -2.532063e+00 -2.693846e+00 -2.531605e+00 -2.379648e+00
                                                                          0
## 15246 -2.971438e+00 -4.927377e+00 -2.932533e+00 -1.789925e+00
                                                                          0
## 15267 -2.085880e+00 -1.301888e+00 -2.109657e+00 -3.383649e+00
                                                                          0
## 15288 -5.641007e+00 1.373637e+01 -5.246888e+00 -4.785500e-01
                                                                          0
## 15309 -1.531095e+00 -2.187042e-01 -1.592968e+00 -6.171072e+00
                                                                          0
## 15330 -1.284929e+01 5.675291e+00 -1.065125e+01 1.756681e-01
                                                                          0
## 15351 8.329733e+00 3.234670e+00 9.601797e+00 1.214592e+00
                                                                          0
## 15372 -8.767180e+00 7.011156e+00 -7.743589e+00 -4.995755e-02
                                                                          0
## 15393 1.948286e+00 2.237933e+00 1.916584e+00 2.625593e+00
                                                                          0
## 15414 -5.156623e+00 1.925597e+01 -4.845547e+00 -5.982920e-01
## 15435 -7.653928e+00 7.943891e+00 -6.886912e+00 -1.577280e-01
                                                                          0
## 15456 -5.996416e+00 1.165994e+01 -5.549656e+00 -4.033712e-01
## 15477 -2.306206e+00 -1.908523e+00 -2.317734e+00 -2.816908e+00
                                                                          0
## 15498 -4.194765e-01 1.042739e+00 -5.139152e-01 1.747127e+01
                                                                          0
## 15519 -2.625687e+00 -3.059318e+00 -2.613806e+00 -2.233655e+00
                                                                          0
## 15540 -2.560325e+00 -2.790344e+00 -2.553589e+00 -2.336218e+00
                                                                          0
                                                                          0
## 15561 -1.902676e+00 -8.941853e-01 -1.942393e+00 -4.007151e+00
## 15582 -3.263412e+00 -7.398849e+00 -3.192858e+00 -1.512677e+00
                                                                          0
## 15603 -2.366923e+00 -2.104500e+00 -2.376461e+00 -2.686286e+00
                                                                          0
## 15624 -3.977666e+00 -3.079243e+01 -3.827643e+00 -1.042203e+00
                                                                          0
## 15645 -3.340578e+00 -8.298761e+00 -3.261811e+00 -1.449529e+00
                                                                          0
## 15666 1.863950e+00 2.211420e+00 1.827013e+00 2.690239e+00
                                                                          0
## 15687 -1.158342e+00 3.030941e-01 -1.235473e+00 -1.220729e+01
                                                                          0
## 15708 -2.462607e+00 -2.425139e+00 -2.463894e+00 -2.503593e+00
                                                                          4
## 15729 -2.017162e+00 -1.146376e+00 -2.049502e+00 -3.593024e+00
## 15750 -2.453578e+00 -2.392000e+00 -2.455164e+00 -2.520388e+00
                                                                          4
## 15771 -2.134362e+00 -1.431942e+00 -2.158846e+00 -3.239269e+00
                                                                          0
                                                                          0
## 15792 -3.462137e+00 -9.923033e+00 -3.362425e+00 -1.360054e+00
## 15813 1.109248e+00 1.933412e+00 1.032581e+00 3.535560e+00
                                                                          0
## 15834 -3.610333e+00 -1.298282e+01 -3.503116e+00 -1.254887e+00
                                                                          0
## 15855 -1.054062e+01 6.206735e+00 -9.071435e+00 7.191499e-02
                                                                          0
## 15876 1.116368e-04 1.349408e+00 -9.816737e-02 7.911360e+00
                                                                          0
## 15897 -3.579106e+00 -1.228534e+01 -3.476107e+00 -1.275254e+00
                                                                          0
## 15918 -6.389120e+00 1.022337e+01 -5.877284e+00 -3.316982e-01
                                                                          0
## 15939 1.332192e+00 2.023253e+00 1.264900e+00 3.221773e+00
                                                                          0
## 15960 -2.956389e+00 -4.810247e+00 -2.916021e+00 -1.807780e+00
                                                                          0
## 15981 -1.446922e+00 -8.693313e-02 -1.510833e+00 -6.987099e+00
                                                                          0
## 16002 -1.005819e+03 4.224638e+00 -5.681741e+01 6.159364e-01
                                                                          0
## 16023 1.904917e-01 1.471162e+00 9.638045e-02 6.409601e+00
                                                                          0
## 16044 5.413055e-01 1.667589e+00 4.482723e-01 4.828815e+00
                                                                          0
## 16065 -3.625777e+00 -1.327825e+01 -3.513370e+00 -1.245970e+00
                                                                          0
## 16086 -2.731916e+00 -3.534664e+00 -2.709351e+00 -2.082660e+00
```

```
## 16107 -6.018672e+00 1.155688e+01 -5.569104e+00 -3.989408e-01
## 16128 -3.671341e+00 -1.452939e+01 -3.555752e+00 -1.216350e+00
## 16149 -2.166210e+00 -1.514444e+00 -2.188297e+00 -3.153410e+00
## 16170 3.419753e+00 2.612846e+00 3.529803e+00 1.916390e+00
                                                                          0
## 16191 -4.976804e+00 2.341152e+01 -4.694014e+00 -6.498263e-01
                                                                          0
## 16212 -3.961995e-01 1.060308e+00 -4.931436e-01 1.636848e+01
                                                                          0
## 16233 -4.816104e+00 2.994109e+01 -4.553401e+00 -7.004705e-01
## 16254 1.904068e+01 3.677014e+00 2.731708e+01 8.950478e-01
                                                                          0
## 16275 -9.883266e-01 5.021585e-01 -1.071192e+00 -2.094273e+01
## 16296 -2.405975e+00 -2.233488e+00 -2.412845e+00 -2.608596e+00
                                                                          0
## 16317 -1.969557e+00 -1.041914e+00 -2.006821e+00 -3.752927e+00
                                                                          0
## 16338 -3.534371e+00 -1.134850e+01 -3.435682e+00 -1.305790e+00
## 16359 -2.072886e+00 -1.277831e+00 -2.101236e+00 -3.417508e+00
                                                                          0
## 16380 -6.182950e+00 1.091080e+01 -5.703122e+00 -3.682927e-01
                                                                          0
## 16401 -2.469045e+00 -2.450363e+00 -2.470563e+00 -2.491349e+00
## 16422 1.355769e-01 1.436915e+00 3.948611e-02 6.776920e+00
                                                                          0
## 16443 -4.944477e+00 2.398161e+01 -4.680123e+00 -6.574180e-01
## 16464 2.768060e-01 1.521367e+00 1.797794e-01 5.925197e+00
## 16485 -2.435022e+00 -2.331158e+00 -2.439297e+00 -2.553646e+00
                                                                          0
## 16506 -1.744148e+01 5.154034e+00 -1.365287e+01 2.993176e-01
                                                                          0
## 16527 -2.522457e+00 -2.642740e+00 -2.518438e+00 -2.399247e+00
                                                                          0
## 16548 -3.510656e+00 -1.089120e+01 -3.414079e+00 -1.322432e+00
## 16569 -9.221604e+00 6.755500e+00 -8.079784e+00 -1.433479e-02
                                                                          0
## 16590 -2.234410e+00 -1.702936e+00 -2.252692e+00 -2.980206e+00
## 16611 -4.066007e+00 -4.252221e+01 -3.905839e+00 -9.978827e-01
                                                                          0
## 16632 -8.872762e-01 6.117241e-01 -9.723720e-01 -3.568104e+01
                                                                          0
## 16653 -1.805055e+00 -6.962451e-01 -1.850175e+00 -4.431682e+00
                                                                          0
## 16674 -2.059665e+00 -1.247623e+00 -2.089740e+00 -3.456717e+00
                                                                          0
## 16695 -2.525428e+00 -2.658234e+00 -2.522442e+00 -2.393214e+00
                                                                          0
## 16716 -2.438461e+00 -2.335461e+00 -2.439947e+00 -2.549439e+00
## 16737 -1.574117e+01 5.301294e+00 -1.255488e+01 2.619245e-01
                                                                          0
## 16758 1.516689e+00 2.092420e+00 1.458736e+00 3.008954e+00
                                                                          0
## 16779 -1.465185e+00 -1.148398e-01 -1.528664e+00 -6.793857e+00
                                                                          0
## 16800 -1.554508e+00 -2.582929e-01 -1.616918e+00 -5.970172e+00
                                                                          0
## 16821 1.336058e+00 2.024604e+00 1.269280e+00 3.216947e+00
                                                                          0
## 16842 -2.153618e+00 -1.477034e+00 -2.174627e+00 -3.189431e+00
                                                                          0
## 16863 -6.704472e+00 9.456662e+00 -6.120872e+00 -2.824235e-01
## 16884 6.192809e-01 1.706794e+00 5.229700e-01 4.591765e+00
                                                                          0
## 16905 -2.340971e+00 -2.022407e+00 -2.352556e+00 -2.739723e+00
                                                                          0
                                                                          Λ
## 16926 -2.074858e+00 -1.286359e+00 -2.104892e+00 -3.409021e+00
## 16947 7.343646e+00 3.151413e+00 8.284580e+00 1.287248e+00
## 16968 -1.247467e+02 4.322323e+00 -3.974480e+01 5.764066e-01
                                                                          0
## 16989 2.320288e+00 2.348349e+00 2.316559e+00 2.381891e+00
                                                                          1
## 17010 -3.590308e+00 -1.251887e+01 -3.485322e+00 -1.268054e+00
                                                                          0
## 17031 -2.116432e+00 -1.388782e+00 -2.143304e+00 -3.287970e+00
## 17052 -3.297570e-02 1.327738e+00 -1.303078e-01 8.249250e+00
                                                                          0
## 17073 -2.448682e+00 -2.378031e+00 -2.451700e+00 -2.528471e+00
## 17094 2.809528e-01 1.523827e+00 1.840994e-01 5.903375e+00
                                                                          0
## 17115 -3.437534e+00 -9.659423e+00 -3.348970e+00 -1.375018e+00
                                                                          0
## 17136 -1.419978e+00 -4.603327e-02 -1.484177e+00 -7.293012e+00
                                                                          0
## 17157 -7.001194e-01 7.975712e-01 -7.897135e-01 1.390299e+02
                                                                          0
## 17178 -6.200247e+00 1.089719e+01 -5.704527e+00 -3.664302e-01
                                                                          0
## 17199 -8.536561e+00 7.161559e+00 -7.571394e+00 -6.960397e-02
                                                                          0
## 17220 -6.335443e+00 1.041052e+01 -5.825300e+00 -3.416022e-01
```

```
## 17241 7.123297e+02 4.195684e+00 -6.547562e+01 6.286914e-01
## 17262 -2.369814e+00 -2.113150e+00 -2.378898e+00 -2.680653e+00
## 17283 -3.332755e+00 -8.199761e+00 -3.254700e+00 -1.455811e+00
                                                                          0
## 17304 -7.829873e+00 7.762863e+00 -7.019181e+00 -1.387594e-01
                                                                          0
## 17325 -3.701631e+01 4.590094e+00 -2.306042e+01 4.730736e-01
                                                                          0
## 17346 -1.685322e+00 -4.743224e-01 -1.737254e+00 -5.070597e+00
                                                                          0
## 17367 -3.430825e+00 -9.555754e+00 -3.342944e+00 -1.380002e+00
## 17388 -6.145902e+00 1.108826e+01 -5.662466e+00 -3.761024e-01
                                                                          0
## 17409 -2.624124e+00 -3.058599e+00 -2.613955e+00 -2.234883e+00
                                                                          Λ
## 17430 1.307750e+01 3.502052e+00 1.669863e+01 1.010498e+00
                                                                          0
## 17451 -8.019212e-02 1.294915e+00 -1.793038e-01 8.804814e+00
                                                                          0
                                                                          0
## 17472 -1.822668e+00 -7.306912e-01 -1.866759e+00 -4.349581e+00
## 17493 -4.952852e+00 2.439289e+01 -4.666132e+00 -6.582372e-01
                                                                          0
## 17514 3.800229e+00 2.688192e+00 3.963177e+00 1.807527e+00
                                                                          0
## 17535 -3.087573e+00 -5.760035e+00 -3.034610e+00 -1.672271e+00
                                                                          0
## 17556 -1.040945e+00 4.454298e-01 -1.119037e+00 -1.726826e+01
                                                                          0
## 17577 -3.268581e+00 -7.457599e+00 -3.197734e+00 -1.508223e+00
                                                                          0
## 17598 -1.845449e+00 -7.779760e-01 -1.889404e+00 -4.244845e+00
## 17619 -2.404848e+00 -2.228755e+00 -2.411473e+00 -2.611081e+00
                                                                          0
## 17640 -3.026692e+00 -5.288212e+00 -2.978523e+00 -1.733784e+00
                                                                          0
## 17661 -2.995765e+00 -5.094263e+00 -2.954608e+00 -1.763953e+00
                                                                          0
## 17682 -4.415598e+01 4.530511e+00 -2.524077e+01 4.959578e-01
## 17703 3.509493e+00 2.631394e+00 3.631990e+00 1.888878e+00
                                                                          0
## 17724 -3.010937e+00 -5.176973e+00 -2.964562e+00 -1.749955e+00
## 17745 -5.940978e+00 1.193034e+01 -5.501015e+00 -4.145910e-01
                                                                          0
## 17766 -2.118996e+00 -1.396846e+00 -2.146427e+00 -3.279755e+00
                                                                          0
## 17787 -6.645635e+00 9.571499e+00 -6.080797e+00 -2.907779e-01
                                                                          0
## 17808 -9.696474e-02 1.284043e+00 -1.944012e-01 9.010536e+00
                                                                          0
                                                                          0
## 17829 -1.783890e+01 5.134809e+00 -1.380958e+01 3.056389e-01
## 17850 -3.684352e+00 -1.498414e+01 -3.570140e+00 -1.207353e+00
## 17871 2.241176e-01 1.490646e+00 1.279570e-01 6.212650e+00
                                                                          0
## 17892 -1.490850e+00 -1.532491e-01 -1.552541e+00 -6.543245e+00
                                                                          0
## 17913 -2.277025e+00 -1.822299e+00 -2.290932e+00 -2.881866e+00
                                                                          0
## 17934 -1.273706e+01 5.692391e+00 -1.058568e+01 1.717665e-01
                                                                          0
## 17955 -9.240433e-01 5.735649e-01 -1.007171e+00 -2.853164e+01
                                                                          0
## 17976 -2.807588e+00 -3.927401e+00 -2.780251e+00 -1.982659e+00
                                                                          0
## 17997 -1.175236e+00 2.822426e-01 -1.251641e+00 -1.171220e+01
## 18018 -2.632557e+00 -3.072356e+00 -2.615776e+00 -2.226396e+00
                                                                          0
## 18039 -2.379743e+00 -2.144398e+00 -2.387746e+00 -2.660996e+00
                                                                          0
                                                                          Λ
## 18060 -7.166508e+00 8.572738e+00 -6.508117e+00 -2.162501e-01
## 18081 -1.559148e+01 5.310553e+00 -1.249798e+01 2.589653e-01
## 18102 -2.213583e+00 -1.642807e+00 -2.232507e+00 -3.032005e+00
                                                                          0
## 18123 -2.998403e+00 -5.072837e+00 -2.950670e+00 -1.764399e+00
                                                                          0
## 18144 -3.852840e+00 -2.157146e+01 -3.715663e+00 -1.109442e+00
                                                                          0
## 18165 -1.210227e+00 2.373896e-01 -1.286065e+00 -1.078909e+01
                                                                          0
## 18186 -8.201665e+00 7.413661e+00 -7.316709e+00 -1.004209e-01
                                                                          0
## 18207 2.428898e+00 2.379706e+00 2.437849e+00 2.320435e+00
                                                                          1
## 18228 -1.043051e+00 4.405845e-01 -1.123881e+00 -1.707330e+01
                                                                          0
## 18249 -2.309278e+00 -1.918971e+00 -2.321025e+00 -2.809727e+00
                                                                          0
## 18270 -1.481337e+00 -1.394955e-01 -1.544155e+00 -6.632127e+00
                                                                          0
## 18291 -1.515508e-01 1.245264e+00 -2.499623e-01 9.797344e+00
                                                                          0
## 18312 -4.715203e+00 3.672011e+01 -4.467176e+00 -7.339534e-01
                                                                          0
## 18333 -1.958549e+00 -1.010432e+00 -1.992651e+00 -3.798769e+00
                                                                          0
## 18354 -1.300653e+00 1.207413e-01 -1.370890e+00 -8.969290e+00
```

```
## 18375 -5.176249e+00 1.900840e+01 -4.856419e+00 -5.937328e-01
## 18396 9.951609e+00 3.345912e+00 1.187017e+01 1.124518e+00
## 18417 -6.422747e+00 1.014212e+01 -5.899706e+00 -3.265261e-01
                                                                          0
## 18438 -7.318542e+00 8.349016e+00 -6.630752e+00 -1.967975e-01
                                                                          0
## 18459 -1.520475e+00 -2.508347e-01 -1.621285e+00 -6.116622e+00
                                                                          0
## 18480 -5.232530e+00 1.800504e+01 -4.908721e+00 -5.778482e-01
                                                                          0
## 18501 -1.792551e+01 5.132478e+00 -1.382680e+01 3.067421e-01
## 18522 -4.231328e-01 1.038208e+00 -5.203740e-01 1.772900e+01
                                                                          0
## 18543 -2.898559e+01 4.713714e+00 -1.968854e+01 4.308313e-01
                                                                          Λ
## 18564 -1.297136e+00 1.247574e-01 -1.368211e+00 -9.024467e+00
                                                                          0
## 18585 -7.670479e+00 7.928763e+00 -6.897225e+00 -1.560429e-01
                                                                          0
                                                                          0
## 18606 -2.745573e+00 -3.611655e+00 -2.724203e+00 -2.062743e+00
## 18627 2.338666e+00 2.354456e+00 2.338704e+00 2.370613e+00
                                                                          1
## 18648 -2.155114e+00 -1.483920e+00 -2.177361e+00 -3.183730e+00
                                                                          0
## 18669 -2.682198e+00 -3.323248e+00 -2.669270e+00 -2.148171e+00
                                                                          0
## 18690 5.523176e+00 2.954571e+00 5.989310e+00 1.481231e+00
                                                                          0
## 18711 -1.241308e+00 1.985554e-01 -1.314746e+00 -1.009514e+01
                                                                          0
## 18732 -5.921531e+00 1.199796e+01 -5.490164e+00 -4.179063e-01
## 18753 8.369164e-01 1.813149e+00 7.500471e-01 4.039912e+00
                                                                          0
## 18774 -3.507709e-01 1.097445e+00 -4.460831e-01 1.449062e+01
                                                                          0
## 18795 -9.026104e-01 5.969719e-01 -9.855251e-01 -3.243022e+01
                                                                          0
## 18816 -3.207566e+00 -6.831651e+00 -3.143669e+00 -1.560482e+00
## 18837 -3.321444e+00 -8.079361e+00 -3.246202e+00 -1.464252e+00
                                                                          0
## 18858 7.684176e-01 1.781019e+00 6.807767e-01 4.194562e+00
## 18879 -4.475415e-01 1.019701e+00 -5.418198e-01 1.909905e+01
                                                                          0
## 18900 -1.884502e+00 -8.547411e-01 -1.924437e+00 -4.082213e+00
                                                                          0
## 18921 -3.747627e+00 -1.700486e+01 -3.624391e+00 -1.169455e+00
                                                                          0
## 18942 -1.716641e+00 -5.310198e-01 -1.767244e+00 -4.887321e+00
                                                                          0
## 18963 -2.772336e-02 1.331314e+00 -1.249220e-01 8.192367e+00
                                                                          0
## 18984 -1.677626e+00 -4.629237e-01 -1.731502e+00 -5.113048e+00
                                                                          0
## 19005 -1.040765e-01 1.279005e+00 -2.017495e-01 9.105850e+00
                                                                          0
## 19026 -2.487425e+00 -2.513212e+00 -2.486379e+00 -2.459582e+00
                                                                          4
## 19047 -2.490035e+00 -2.525511e+00 -2.489652e+00 -2.454272e+00
## 19068 1.013226e+02 4.093449e+00 -1.508872e+02 6.744127e-01
                                                                          0
## 19089 5.120477e+00 2.899883e+00 5.495572e+00 1.540902e+00
                                                                          0
## 19110 2.069457e+00 2.275343e+00 2.046366e+00 2.539094e+00
                                                                          0
## 19131 -2.978381e+00 -4.946133e+00 -2.934214e+00 -1.784851e+00
## 19152 -4.576261e+00 5.490274e+01 -4.349603e+00 -7.826345e-01
                                                                          0
## 19173 -8.556628e-01 6.440834e-01 -9.421815e-01 -4.542118e+01
                                                                          0
                                                                          Λ
## 19194 -3.525585e-01 1.097166e+00 -4.456956e-01 1.452348e+01
## 19215 -1.758459e+00 -6.086458e-01 -1.807074e+00 -4.660639e+00
## 19236 -8.489377e-01 6.528718e-01 -9.331173e-01 -4.870898e+01
                                                                          0
## 19257 -3.055599e+00 -5.495907e+00 -3.003624e+00 -1.704922e+00
                                                                          0
## 19278 -4.395938e+00 2.104870e+02 -4.189176e+00 -8.527526e-01
                                                                          0
## 19299 -4.003003e+00 -3.321686e+01 -3.847420e+00 -1.029928e+00
                                                                          0
## 19320 7.436519e-02 1.398203e+00 -2.239021e-02 7.241233e+00
                                                                          0
## 19341 -3.721718e+00 -1.613673e+01 -3.602462e+00 -1.184699e+00
                                                                          0
## 19362 -3.943591e+00 -2.749886e+01 -3.794802e+00 -1.060647e+00
                                                                          0
## 19383 -9.032551e-01 5.948841e-01 -9.879542e-01 -3.214597e+01
                                                                          0
## 19404 -1.954034e+00 -1.003607e+00 -1.990102e+00 -3.812382e+00
                                                                          0
## 19425 -2.240681e+00 -1.720919e+00 -2.258616e+00 -2.965062e+00
                                                                          0
## 19446 -1.740661e+00 -5.745650e-01 -1.789644e+00 -4.755973e+00
                                                                          0
## 19467 8.017789e-01 1.796674e+00 7.136807e-01 4.118076e+00
                                                                          0
## 19488 5.720149e+00 2.975445e+00 6.194243e+00 1.456868e+00
```

```
## 19509 7.539157e+00 3.167755e+00 8.523372e+00 1.272003e+00
## 19530 -2.568248e+00 -2.823745e+00 -2.561427e+00 -2.322989e+00
## 19551 2.480944e+00 2.393467e+00 2.493926e+00 2.293156e+00
                                                                          0
## 19572 3.322718e-01 1.553367e+00 2.357453e-01 5.650624e+00
                                                                          0
## 19593 -6.141772e-01 8.773281e-01 -7.043526e-01 4.358196e+01
                                                                          0
## 19614 -5.563956e-01 9.280441e-01 -6.481997e-01 3.006480e+01
                                                                          0
## 19635 -1.936812e+00 -9.670911e-01 -1.974498e+00 -3.875180e+00
## 19656 -1.255156e+00 1.802746e-01 -1.328238e+00 -9.806038e+00
                                                                          0
## 19677 -1.256899e+00 1.785849e-01 -1.329325e+00 -9.776120e+00
                                                                          Λ
## 19698 -6.147407e+00 1.106648e+01 -5.667716e+00 -3.754192e-01
                                                                          0
## 19719 3.749888e-01 1.577475e+00 2.788273e-01 5.457932e+00
                                                                          0
                                                                          0
## 19740 -1.921318e+00 -9.389460e-01 -1.962852e+00 -3.928993e+00
## 19761 -1.857232e+00 -7.680532e-01 -1.880284e+00 -4.233667e+00
                                                                          0
## 19782 -5.775997e+00 1.280432e+01 -5.365527e+00 -4.483590e-01
                                                                          0
## 19803 -1.504290e+00 -1.735486e-01 -1.564967e+00 -6.418938e+00
                                                                          0
## 19824 -3.224730e+00 -6.978049e+00 -3.156426e+00 -1.546572e+00
                                                                          0
## 19845 2.807616e+00 2.476588e+00 2.851633e+00 2.139255e+00
                                                                          0
## 19866 -3.410485e+00 -9.244291e+00 -3.324190e+00 -1.395443e+00
                                                                          0
## 19887 -1.960977e+00 -1.024564e+00 -1.999688e+00 -3.782111e+00
                                                                          0
## 19908 -8.458143e-01 6.545004e-01 -9.321637e-01 -4.974154e+01
                                                                          0
## 19929 -2.578459e+00 -2.863529e+00 -2.570471e+00 -2.306909e+00
                                                                          0
## 19950 -1.771151e+00 -6.300385e-01 -1.817433e+00 -4.599426e+00
## 19971 -1.621691e+00 -3.681649e-01 -1.679848e+00 -5.472004e+00
                                                                          0
## 19992 -1.832555e+00 -7.541054e-01 -1.878418e+00 -4.299835e+00
## 20013 -2.056359e+00 -1.238501e+00 -2.086063e+00 -3.467790e+00
                                                                          0
## 20034 -9.971478e+00 6.412054e+00 -8.647055e+00 3.770287e-02
                                                                          0
## 20055 -1.331991e+00 7.712916e-02 -1.401691e+00 -8.457119e+00
                                                                          0
## 20076 -2.988505e+00 -4.978879e+00 -2.937526e+00 -1.777051e+00
                                                                          0
## 20097 -6.787045e+00 9.268134e+00 -6.192818e+00 -2.696484e-01
                                                                          0
## 20118 -4.222461e+00 -1.059288e+02 -4.038913e+00 -9.260288e-01
                                                                          0
## 20139 -1.886079e+00 -8.600506e-01 -1.927105e+00 -4.073529e+00
                                                                          0
## 20160 -5.010227e-01 9.761630e-01 -5.926736e-01 2.318067e+01
                                                                          0
## 20181 -1.579924e+01 5.294089e+00 -1.260363e+01 2.635259e-01
                                                                          0
## 20202 3.981209e-01 1.590625e+00 3.032316e-01 5.358089e+00
                                                                          0
## 20223 -1.743825e+00 -5.793765e-01 -1.791945e+00 -4.740702e+00
                                                                          0
## 20244 9.093294e+00 3.289371e+00 1.063110e+01 1.168881e+00
                                                                          0
## 20265 5.559190e+00 2.961340e+00 6.052586e+00 1.475223e+00
## 20286 1.035610e-01 1.415953e+00 4.735471e-03 7.018103e+00
                                                                          0
## 20307 4.796126e+00 2.854403e+00 5.118805e+00 1.594165e+00
                                                                          0
                                                                          Λ
## 20328 -2.977664e+00 -4.953550e+00 -2.935574e+00 -1.784578e+00
## 20349 -1.804590e+00 -6.950030e-01 -1.849526e+00 -4.434343e+00
## 20370 -2.987976e+00 -5.018260e+00 -2.944014e+00 -1.774021e+00
                                                                          0
## 20391 -1.677066e+01 5.211215e+00 -1.319132e+01 2.849901e-01
                                                                          0
## 20412 -1.753493e+00 -5.992023e-01 -1.802287e+00 -4.686719e+00
                                                                          0
## 20433 -1.297377e+00 1.252591e-01 -1.367656e+00 -9.026271e+00
                                                                          0
## 20454 -4.293257e+00 -3.346314e+02 -4.106012e+00 -8.940242e-01
                                                                          0
## 20475 -2.434907e+00 -2.326546e+00 -2.437784e+00 -2.555100e+00
                                                                          0
## 20496 5.676484e-01 1.681274e+00 4.750882e-01 4.743998e+00
                                                                          0
## 20517 -1.128398e+00 3.417691e-01 -1.204356e+00 -1.322759e+01
                                                                          0
## 20538 -1.988923e+01 5.007178e+00 -1.506652e+01 3.402971e-01
                                                                          0
## 20559 -3.319742e+00 -8.055394e+00 -3.244382e+00 -1.465743e+00
                                                                          0
## 20580 -3.598304e+00 -1.270193e+01 -3.492467e+00 -1.262761e+00
                                                                          0
## 20601 -5.017579e-02 1.315995e+00 -1.478580e-01 8.441317e+00
                                                                          0
## 20622 -1.895950e+00 -8.789584e-01 -1.935428e+00 -4.035239e+00
```









