W_1(t)

W_2(t)

U(x, t)

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a = 1.000000
l = 1.000000
T = 0.200000

ε =
   1.0000e-10

n = 10
k = 10
hx = 0.100000
ht = 0.020000

Всего демпферов: 2

Демпфер # 1

x_1 = 0.250000

Верхнее предельное значение w_1(t) =
NaN

Нижнее предельное значение w_1(t) =
NaN

Управляющая функция w_1(t):
   1
   2
   3
   4
   5
   6
   7
   8

```
   9
  10
  11
```

Демпфер # 2

x_2 = 0.750000

Верхнее предельное значение w_2(t) =
NaN

Нижнее предельное значение w_2(t) =
NaN

Управляющая функция w_2(t):
```
  12
  13
  14
  15
  16
  17
  18
  19
  20
  21
  22
```

E(T) =
 1.7056

Using Marquardt minimization

Iteration 0/100 error:
 1.7056

Iteration 0/100 gradient:
```
 -0.0058627
 -0.0093817
 -0.0047147
  0.0057861
  0.0268427
  0.0467109
  0.0537315
  0.0439587
  0.0350220
  0.0318522
  0.0139073
  0.0078830
```

0.0209542
0.0238657
0.0193104
0.0173581
0.0192091
0.0236819
0.0219403
0.0383482
0.0587455
0.0290225

Iteration 0/100 gradient norm:
 0.13876

Iteration 1/100 Hessian matrix:
 Columns 1 through 6:

  3.6855e-04 6.9325e-04 4.6587e-04 7.8271e-05 -2.1390e-04 -2.6101e-04
  6.9325e-04 1.4615e-03 1.0754e-03 1.8734e-04 -3.9548e-04 -6.6434e-04
  4.6587e-04 1.0754e-03 1.0616e-03 5.1805e-04 -1.9305e-04 -7.4114e-04
  7.8271e-05 1.8734e-04 5.1805e-04 6.8683e-04 1.6831e-04 -4.4795e-04
 -2.1390e-04 -3.9548e-04 -1.9305e-04 1.6831e-04 4.1873e-04 3.9568e-04
 -2.6101e-04 -6.6434e-04 -7.4114e-04 -4.4795e-04 3.9568e-04 1.3082e-03
 -3.4035e-04 -8.0638e-04 -9.0423e-04 -5.2036e-04 4.2026e-04 1.4490e-03
 -4.8599e-04 -9.5659e-04 -6.7195e-04 -1.9829e-05 5.7008e-04 8.4011e-04
 -1.5585e-04 -2.8775e-04 8.6020e-05 4.7176e-04 3.6640e-04 9.8299e-05
  3.1406e-04 8.1035e-04 8.5980e-04 4.9281e-04 8.2379e-06 -2.9079e-04
  2.5835e-04 5.9961e-04 5.3020e-04 2.1401e-04 -1.5876e-05 -1.1240e-04
 -6.3594e-05 -1.7872e-04 -3.3640e-04 -3.2312e-04 8.2268e-05 5.5476e-04
 -1.8749e-04 -5.3328e-04 -8.1775e-04 -6.9291e-04 2.3270e-04 1.1571e-03
 -3.4859e-04 -8.4373e-04 -8.3746e-04 -3.5867e-04 3.3986e-04 9.6128e-04
 -3.2137e-04 -6.8490e-04 -3.5132e-04 2.2744e-04 3.7788e-04 3.3489e-04
  5.6688e-05 2.1618e-04 3.3062e-04 3.8203e-04 1.6944e-04 -1.6802e-04
  5.2351e-04 1.1412e-03 9.6705e-04 3.3151e-04 -1.6935e-04 -3.2276e-04
  5.3106e-04 1.1906e-03 1.0937e-03 4.0612e-04 -1.3294e-04 -3.4448e-04
  1.6511e-04 5.1854e-04 7.6514e-04 7.1290e-04 1.9451e-04 -4.3172e-04
 -2.8006e-04 -4.7036e-04 -6.2550e-05 4.5439e-04 4.8639e-04 3.0547e-04
 -4.6438e-04 -9.4744e-04 -8.0329e-04 -2.5775e-04 5.8193e-04 1.3396e-03
 -1.4522e-04 -4.0214e-04 -4.5488e-04 -2.1847e-04 2.5875e-04 7.9048e-04

 Columns 7 through 12:

 -3.4035e-04 -4.8599e-04 -1.5585e-04 3.1406e-04 2.5835e-04 -6.3594e-05
 -8.0638e-04 -9.5659e-04 -2.8775e-04 8.1035e-04 5.9961e-04 -1.7872e-04
 -9.0423e-04 -6.7195e-04 8.6020e-05 8.5980e-04 5.3020e-04 -3.3640e-04
 -5.2036e-04 -1.9829e-05 4.7176e-04 4.9281e-04 2.1401e-04 -3.2312e-04
  4.2026e-04 5.7008e-04 3.6640e-04 8.2379e-06 -1.5876e-05 8.2268e-05
  1.4490e-03 8.4011e-04 9.8299e-05 -2.9079e-04 -1.1240e-04 5.5476e-04
  1.6643e-03 9.9936e-04 2.3623e-04 -2.1445e-04 -1.4437e-04 5.0613e-04

```
 9.9936e-04   1.1334e-03   6.3474e-04  -8.2889e-05  -1.2124e-04   1.5195e-04
 2.3623e-04   6.3474e-04   9.6905e-04   7.8899e-04   2.8995e-04  -2.7576e-04
-2.1445e-04  -8.2889e-05   7.8899e-04   1.6288e-03   8.6853e-04  -4.6114e-04
-1.4437e-04  -1.2124e-04   2.8995e-04   8.6853e-04   5.3064e-04  -1.6591e-04
 5.0613e-04   1.5195e-04  -2.7576e-04  -4.6114e-04  -1.6591e-04   3.7894e-04
 1.1767e-03   4.8115e-04  -4.8634e-04  -9.5652e-04  -3.9897e-04   6.9993e-04
 1.0690e-03   7.1834e-04  -4.1522e-05  -8.2578e-04  -4.4684e-04   4.4875e-04
 3.7788e-04   6.9442e-04   4.4111e-04  -2.6856e-04  -2.1882e-04   8.0957e-05
-1.5552e-04   1.5790e-04   4.8659e-04   5.7327e-04   2.7078e-04  -2.0599e-04
-3.6207e-04  -4.4815e-04   3.1672e-04   1.3219e-03   7.8830e-04  -2.5515e-04
-3.8300e-04  -4.3929e-04   4.1560e-04   1.5181e-03   8.9848e-04  -3.0220e-04
-4.2888e-04   3.8458e-05   7.6077e-04   1.1945e-03   6.0125e-04  -4.5119e-04
 4.1198e-04   7.4054e-04   8.9113e-04   5.7225e-04   2.0737e-04  -1.5270e-04
 1.5228e-03   1.1840e-03   5.8094e-04   9.8832e-05  -5.5511e-07   3.3302e-04
 8.7732e-04   5.7037e-04   1.8965e-04  -1.6498e-05   1.7031e-05   2.5080e-04
```

Columns 13 through 18:

```
-1.8749e-04  -3.4859e-04  -3.2137e-04   5.6688e-05   5.2351e-04   5.3106e-04
-5.3328e-04  -8.4373e-04  -6.8490e-04   2.1618e-04   1.1412e-03   1.1906e-03
-8.1775e-04  -8.3746e-04  -3.5132e-04   3.3062e-04   9.6705e-04   1.0937e-03
-6.9291e-04  -3.5867e-04   2.2744e-04   3.8203e-04   3.3151e-04   4.0612e-04
 2.3270e-04   3.3986e-04   3.7788e-04   1.6944e-04  -1.6935e-04  -1.3294e-04
 1.1571e-03   9.6128e-04   3.3489e-04  -1.6802e-04  -3.2276e-04  -3.4448e-04
 1.1767e-03   1.0690e-03   3.7788e-04  -1.5552e-04  -3.6207e-04  -3.8300e-04
 4.8115e-04   7.1834e-04   6.9442e-04   1.5790e-04  -4.4815e-04  -4.3929e-04
-4.8634e-04  -4.1522e-05   4.4111e-04   4.8659e-04   3.1672e-04   4.1560e-04
-9.5652e-04  -8.2578e-04  -2.6856e-04   5.7327e-04   1.3219e-03   1.5181e-03
-3.9897e-04  -4.4684e-04  -2.1882e-04   2.7078e-04   7.8830e-04   8.9848e-04
 6.9993e-04   4.4875e-04   8.0957e-05  -2.0599e-04  -2.5515e-04  -3.0220e-04
 1.4545e-03   1.0664e-03   1.9402e-04  -4.1798e-04  -6.6027e-04  -7.8462e-04
 1.0664e-03   1.0385e-03   5.1121e-04  -2.1194e-04  -7.5246e-04  -9.1318e-04
 1.9402e-04   5.1121e-04   6.8141e-04   1.6049e-04  -4.6514e-04  -4.9971e-04
-4.1798e-04  -2.1194e-04   1.6049e-04   3.9910e-04   3.7548e-04   4.1560e-04
-6.6027e-04  -7.5246e-04  -4.6514e-04   3.7548e-04   1.2985e-03   1.4639e-03
-7.8462e-04  -9.1318e-04  -4.9971e-04   4.1560e-04   1.4639e-03   1.6989e-03
-9.3612e-04  -6.7086e-04  -1.9118e-05   5.9341e-04   8.5856e-04   1.0296e-03
-2.7685e-04   9.2770e-05   4.7684e-04   3.7124e-04   1.2867e-04   2.4984e-04
 8.2017e-04   8.5261e-04   4.9853e-04   3.5971e-06  -2.8315e-04  -2.0965e-04
 5.9261e-04   5.2829e-04   1.9311e-04  -3.6082e-05  -1.4539e-04  -1.3374e-04
```

Columns 19 through 22:

```
 1.6511e-04  -2.8006e-04  -4.6438e-04  -1.4522e-04
 5.1854e-04  -4.7036e-04  -9.4744e-04  -4.0214e-04
 7.6514e-04  -6.2550e-05  -8.0329e-04  -4.5488e-04
 7.1290e-04   4.5439e-04  -2.5775e-04  -2.1847e-04
 1.9451e-04   4.8639e-04   5.8193e-04   2.5875e-04
-4.3172e-04   3.0547e-04   1.3396e-03   7.9048e-04
```

```
-4.2888e-04   4.1198e-04   1.5228e-03   8.7732e-04
 3.8458e-05   7.4054e-04   1.1840e-03   5.7037e-04
 7.6077e-04   8.9113e-04   5.8094e-04   1.8965e-04
 1.1945e-03   5.7225e-04   9.8832e-05  -1.6498e-05
 6.0125e-04   2.0737e-04  -5.5511e-07   1.7031e-05
-4.5119e-04  -1.5270e-04   3.3302e-04   2.5080e-04
-9.3612e-04  -2.7685e-04   8.2017e-04   5.9261e-04
-6.7086e-04   9.2770e-05   8.5261e-04   5.2829e-04
-1.9118e-05   4.7684e-04   4.9853e-04   1.9311e-04
 5.9341e-04   3.7124e-04   3.5971e-06  -3.6082e-05
 8.5856e-04   1.2867e-04  -2.8315e-04  -1.4539e-04
 1.0296e-03   2.4984e-04  -2.0965e-04  -1.3374e-04
 1.1812e-03   6.7519e-04  -4.6985e-05  -1.0769e-04
 6.7519e-04   9.7824e-04   7.9643e-04   3.0689e-04
-4.6985e-05   7.9643e-04   1.6701e-03   8.7388e-04
-1.0769e-04   3.0689e-04   8.7388e-04   5.2953e-04
```

Positive Hessian matrix

Iteration 1/100 μ:
 1.6989

Iteration 1/100 d:
  0.0034186
  0.0054566
  0.0027280
 -0.0034050
 -0.0157384
 -0.0273804
 -0.0314942
 -0.0257607
 -0.0205339
 -0.0187043
 -0.0081666
 -0.0046186
 -0.0122795
 -0.0139804
 -0.0113125
 -0.0101929
 -0.0113014
 -0.0139256
 -0.0128837
 -0.0224792
 -0.0344265
 -0.0170046

μ = 1.698885 / 2 -> 0.849443

Iteration 1/100 w(t):

```
 1.0034   11.9954
 2.0055   12.9877
 3.0027   13.9860
 3.9966   14.9887
 4.9843   15.9898
 5.9726   16.9887
 6.9685   17.9861
 7.9742   18.9871
 8.9795   19.9775
 9.9813   20.9656
10.9918   21.9830
```

Iteration 1/100 error:
 1.6944

Iteration 1/100 gradient:
```
 -0.0058051
 -0.0092680
 -0.0046311
  0.0057911
  0.0267414
  0.0465184
  0.0535027
  0.0437612
  0.0348859
  0.0317733
  0.0138820
  0.0078517
  0.0208646
  0.0237522
  0.0192232
  0.0173176
  0.0192006
  0.0236593
  0.0218922
  0.0381929
  0.0584875
  0.0288944
```

Iteration 1/100 gradient norm:
 0.13821

Iteration 2/100 Hessian matrix:
 Columns 1 through 6:

```
 3.2079e-04   6.8103e-04   4.5608e-04   2.7089e-05  -2.2349e-04  -2.7884e-04
 6.8103e-04   1.4603e-03   1.0584e-03   1.7686e-04  -3.8183e-04  -6.3687e-04
 4.5608e-04   1.0584e-03   1.0324e-03   4.8364e-04  -1.9078e-04  -7.2520e-04
 2.7089e-05   1.7686e-04   4.8364e-04   6.7513e-04   1.3742e-04  -4.5941e-04
```

```
 -2.2349e-04  -3.8183e-04  -1.9078e-04   1.3742e-04   4.1580e-04   4.0461e-04
 -2.7884e-04  -6.3687e-04  -7.2520e-04  -4.5941e-04   4.0461e-04   1.3391e-03
 -3.5416e-04  -8.0553e-04  -8.9924e-04  -5.2474e-04   4.2422e-04   1.4491e-03
 -5.0608e-04  -9.5186e-04  -6.8714e-04  -5.7110e-05   5.7332e-04   8.7572e-04
 -2.0617e-04  -3.0329e-04   6.4837e-05   4.5626e-04   3.6302e-04   9.3126e-05
  3.4246e-04   8.4404e-04   8.5654e-04   5.0511e-04   3.4084e-05  -2.4729e-04
  2.1776e-04   5.8897e-04   5.0344e-04   1.7857e-04  -4.5630e-05  -1.0889e-04
 -1.0223e-04  -2.0783e-04  -3.2701e-04  -3.3578e-04   7.5762e-05   5.3686e-04
 -2.3681e-04  -5.3550e-04  -8.3697e-04  -7.1168e-04   2.0395e-04   1.1701e-03
 -3.5765e-04  -7.9809e-04  -8.7679e-04  -3.6653e-04   3.2843e-04   9.8916e-04
 -3.6036e-04  -6.9715e-04  -3.7357e-04   2.3721e-04   3.9881e-04   3.5048e-04
  4.1900e-05   2.0450e-04   3.1706e-04   3.5318e-04   1.5439e-04  -1.7777e-04
  5.0662e-04   1.1420e-03   9.7033e-04   3.2014e-04  -1.7051e-04  -3.1941e-04
  5.1064e-04   1.2013e-03   1.1041e-03   4.1167e-04  -1.3041e-04  -3.2578e-04
  1.6307e-04   5.2582e-04   7.6070e-04   7.0255e-04   2.0108e-04  -4.0332e-04
 -2.9732e-04  -4.8208e-04  -7.6139e-05   4.4980e-04   4.8810e-04   3.0993e-04
 -4.4218e-04  -9.0301e-04  -7.9328e-04  -2.6008e-04   5.8398e-04   1.3692e-03
 -2.1434e-04  -4.2282e-04  -4.7562e-04  -2.6406e-04   2.5233e-04   7.5766e-04
```

Columns 7 through 12:

```
 -3.5416e-04  -5.0608e-04  -2.0617e-04   3.4246e-04   2.1776e-04  -1.0223e-04
 -8.0553e-04  -9.5186e-04  -3.0329e-04   8.4404e-04   5.8897e-04  -2.0783e-04
 -8.9924e-04  -6.8714e-04   6.4837e-05   8.5654e-04   5.0344e-04  -3.2701e-04
 -5.2474e-04  -5.7110e-05   4.5626e-04   5.0511e-04   1.7857e-04  -3.3578e-04
  4.2422e-04   5.7332e-04   3.6302e-04   3.4084e-05  -4.5630e-05   7.5762e-05
  1.4491e-03   8.7572e-04   9.3126e-05  -2.4729e-04  -1.0889e-04   5.3686e-04
  1.6886e-03   1.0166e-03   2.2000e-04  -1.9007e-04  -1.6995e-04   5.1072e-04
  1.0166e-03   1.1460e-03   6.4231e-04  -4.7251e-05  -1.3094e-04   1.7839e-04
  2.2000e-04   6.4231e-04   9.1915e-04   7.8650e-04   2.4805e-04  -3.0331e-04
 -1.9007e-04  -4.7251e-05   7.8650e-04   1.6772e-03   8.7308e-04  -4.2841e-04
 -1.6995e-04  -1.3094e-04   2.4805e-04   8.7308e-04   4.9292e-04  -1.8532e-04
  5.1072e-04   1.7839e-04  -3.0331e-04  -4.2841e-04  -1.8532e-04   3.6520e-04
  1.1827e-03   5.0697e-04  -5.0311e-04  -9.1147e-04  -4.2304e-04   6.8576e-04
  1.0723e-03   7.4596e-04  -5.0382e-05  -7.9643e-04  -4.6594e-04   4.6974e-04
  3.8893e-04   6.8932e-04   4.3776e-04  -2.4289e-04  -2.6836e-04   7.0632e-05
 -1.6729e-04   1.6926e-04   4.5299e-04   5.7634e-04   2.3928e-04  -2.0661e-04
 -3.5381e-04  -4.5481e-04   2.7929e-04   1.3433e-03   7.7824e-04  -2.8928e-04
 -3.7370e-04  -4.1140e-04   4.0405e-04   1.5701e-03   8.8618e-04  -3.1608e-04
 -4.4011e-04   6.6569e-05   7.5022e-04   1.2092e-03   5.8356e-04  -4.5266e-04
  3.8010e-04   7.5915e-04   8.5727e-04   5.7261e-04   1.6793e-04  -1.6644e-04
  1.5540e-03   1.2280e-03   5.7312e-04   1.2852e-04   1.8741e-05   3.7423e-04
  8.7081e-04   5.7150e-04   1.5765e-04  -2.3737e-05  -1.9895e-05   2.4256e-04
```

Columns 13 through 18:

```
 -2.3681e-04  -3.5765e-04  -3.6036e-04   4.1900e-05   5.0662e-04   5.1064e-04
 -5.3550e-04  -7.9809e-04  -6.9715e-04   2.0450e-04   1.1420e-03   1.2013e-03
 -8.3697e-04  -8.7679e-04  -3.7357e-04   3.1706e-04   9.7033e-04   1.1041e-03
```

```
-7.1168e-04  -3.6653e-04   2.3721e-04   3.5318e-04   3.2014e-04   4.1167e-04
 2.0395e-04   3.2843e-04   3.9881e-04   1.5439e-04  -1.7051e-04  -1.3041e-04
 1.1701e-03   9.8916e-04   3.5048e-04  -1.7777e-04  -3.1941e-04  -3.2578e-04
 1.1827e-03   1.0723e-03   3.8893e-04  -1.6729e-04  -3.5381e-04  -3.7370e-04
 5.0697e-04   7.4596e-04   6.8932e-04   1.6926e-04  -4.5481e-04  -4.1140e-04
-5.0311e-04  -5.0382e-05   4.3776e-04   4.5299e-04   2.7929e-04   4.0405e-04
-9.1147e-04  -7.9643e-04  -2.4289e-04   5.7634e-04   1.3433e-03   1.5701e-03
-4.2304e-04  -4.6594e-04  -2.6836e-04   2.3928e-04   7.7824e-04   8.8618e-04
 6.8576e-04   4.6974e-04   7.0632e-05  -2.0661e-04  -2.8928e-04  -3.1608e-04
 1.4402e-03   1.0663e-03   1.9007e-04  -4.0274e-04  -6.8225e-04  -7.8897e-04
 1.0663e-03   1.0515e-03   5.0495e-04  -2.0766e-04  -7.3019e-04  -8.8847e-04
 1.9007e-04   5.0495e-04   6.9706e-04   1.6120e-04  -4.5592e-04  -4.9059e-04
-4.0274e-04  -2.0766e-04   1.6120e-04   3.7721e-04   3.7335e-04   4.2848e-04
-6.8225e-04  -7.3019e-04  -4.5592e-04   3.7335e-04   1.3139e-03   1.4622e-03
-7.8897e-04  -8.8847e-04  -4.9059e-04   4.2848e-04   1.4622e-03   1.6955e-03
-9.1602e-04  -6.6103e-04  -8.5709e-06   5.9053e-04   8.9015e-04   1.0477e-03
-2.9146e-04   7.6539e-05   4.8102e-04   3.7064e-04   8.1202e-05   2.4301e-04
 8.5949e-04   8.8407e-04   5.3009e-04   2.0450e-05  -2.5460e-04  -1.6172e-04
 5.8480e-04   5.3253e-04   1.7948e-04  -5.5600e-05  -1.5037e-04  -1.2901e-04
```

Columns 19 through 22:

```
 1.6307e-04  -2.9732e-04  -4.4218e-04  -2.1434e-04
 5.2582e-04  -4.8208e-04  -9.0301e-04  -4.2282e-04
 7.6070e-04  -7.6139e-05  -7.9328e-04  -4.7562e-04
 7.0255e-04   4.4980e-04  -2.6008e-04  -2.6406e-04
 2.0108e-04   4.8810e-04   5.8398e-04   2.5233e-04
-4.0332e-04   3.0993e-04   1.3692e-03   7.5766e-04
-4.4011e-04   3.8010e-04   1.5540e-03   8.7081e-04
 6.6569e-05   7.5915e-04   1.2280e-03   5.7150e-04
 7.5022e-04   8.5727e-04   5.7312e-04   1.5765e-04
 1.2092e-03   5.7261e-04   1.2852e-04  -2.3737e-05
 5.8356e-04   1.6793e-04   1.8741e-05  -1.9895e-05
-4.5266e-04  -1.6644e-04   3.7423e-04   2.4256e-04
-9.1602e-04  -2.9146e-04   8.5949e-04   5.8480e-04
-6.6103e-04   7.6539e-05   8.8407e-04   5.3253e-04
-8.5709e-06   4.8102e-04   5.3009e-04   1.7948e-04
 5.9053e-04   3.7064e-04   2.0450e-05  -5.5600e-05
 8.9015e-04   8.1202e-05  -2.5460e-04  -1.5037e-04
 1.0477e-03   2.4301e-04  -1.6172e-04  -1.2901e-04
 1.1845e-03   6.5969e-04  -3.0975e-05  -1.3558e-04
 6.5969e-04   9.4140e-04   8.2310e-04   2.7884e-04
-3.0975e-05   8.2310e-04   1.6976e-03   8.9582e-04
-1.3558e-04   2.7884e-04   8.9582e-04   5.0295e-04
```

Iteration 2/100 μ:
 0.84944

Iteration 2/100 d:

0.0066945
  0.0106582
  0.0052620
 -0.0068222
 -0.0312361
 -0.0542997
 -0.0624539
 -0.0510502
 -0.0407595
 -0.0372091
 -0.0162765
 -0.0091571
 -0.0243430
 -0.0276880
 -0.0224108
 -0.0202919
 -0.0225805
 -0.0277851
 -0.0256443
 -0.0445986
 -0.0682317
 -0.0337113

μ = 0.849443 / 2 -> 0.424721

Iteration 2/100 w(t):
    1.0101   11.9862
    2.0161   12.9634
    3.0080   13.9583
    3.9898   14.9663
    4.9530   15.9695
    5.9183   16.9661
    6.9061   17.9583
    7.9232   18.9615
    8.9387   19.9329
    9.9441   20.8973
   10.9756   21.9493

Iteration 2/100 error:
 1.6722

Iteration 2/100 gradient:
 -0.0056913
 -0.0090437
 -0.0044664
  0.0058003
  0.0265407
  0.0461374
  0.0530495

0.0433700
0.0346157
0.0316154
0.0138311
0.0077901
0.0206880
0.0235279
0.0190509
0.0172368
0.0191825
0.0236130
0.0217957
0.0378848
0.0579763
0.0286407

Iteration 2/100 gradient norm:
 0.13713

Iteration 3/100 Hessian matrix:
 Columns 1 through 6:

  3.6988e-04   7.0317e-04   4.6587e-04   9.9387e-05 -1.8705e-04 -2.9665e-04
  7.0317e-04   1.4569e-03   1.0630e-03   2.2178e-04 -3.6824e-04 -6.7040e-04
  4.6587e-04   1.0630e-03   1.0288e-03   5.1845e-04 -1.8370e-04 -7.6537e-04
  9.9387e-05   2.2178e-04   5.1845e-04   7.1441e-04   1.7808e-04 -4.7351e-04
 -1.8705e-04 -3.6824e-04 -1.8370e-04   1.7808e-04   4.5965e-04   3.9240e-04
 -2.9665e-04 -6.7040e-04 -7.6537e-04 -4.7351e-04   3.9240e-04   1.2688e-03
 -3.1917e-04 -7.9892e-04 -9.1835e-04 -5.0255e-04   4.4429e-04   1.4427e-03
 -4.7469e-04 -9.2804e-04 -6.5672e-04 -1.1902e-05   5.9772e-04   8.5099e-04
 -1.5383e-04 -2.6552e-04   8.7130e-05   5.1092e-04   3.6990e-04   1.1167e-04
  3.4122e-04   8.2365e-04   8.5791e-04   4.9536e-04   2.1716e-05 -2.8761e-04
  2.6628e-04   5.9093e-04   5.2296e-04   2.0512e-04 -2.2338e-05 -1.6560e-04
 -6.1440e-05 -2.0961e-04 -3.4726e-04 -3.3056e-04   7.5606e-05   4.9922e-04
 -2.0564e-04 -5.4114e-04 -8.3000e-04 -7.1170e-04   2.1632e-04   1.1061e-03
 -3.2265e-04 -8.4006e-04 -8.6002e-04 -3.7812e-04   3.5316e-04   9.2903e-04
 -3.0953e-04 -7.0037e-04 -3.8394e-04   2.0528e-04   3.8611e-04   2.9883e-04
  6.2217e-05   1.9180e-04   3.1124e-04   3.8249e-04   1.9331e-04 -1.7815e-04
  5.3939e-04   1.1440e-03   9.6241e-04   3.5798e-04 -1.3374e-04 -3.4077e-04
  4.9585e-04   1.1828e-03   1.0655e-03   3.9200e-04 -1.5354e-04 -3.7086e-04
  1.7679e-04   4.9942e-04   7.3079e-04   6.8805e-04   1.9311e-04 -4.7713e-04
 -2.7549e-04 -4.7951e-04 -8.9284e-05   4.4595e-04   4.7813e-04   2.8400e-04
 -4.5388e-04 -9.4011e-04 -8.2099e-04 -2.8082e-04   5.6919e-04   1.3076e-03
 -1.8185e-04 -4.0141e-04 -4.7620e-04 -2.5671e-04   2.5970e-04   7.2693e-04

 Columns 7 through 12:

 -3.1917e-04 -4.7469e-04 -1.5383e-04   3.4122e-04   2.6628e-04 -6.1440e-05
 -7.9892e-04 -9.2804e-04 -2.6552e-04   8.2365e-04   5.9093e-04 -2.0961e-04

```
-9.1835e-04  -6.5672e-04   8.7130e-05   8.5791e-04   5.2296e-04  -3.4726e-04
-5.0255e-04  -1.1902e-05   5.1092e-04   4.9536e-04   2.0512e-04  -3.3056e-04
 4.4429e-04   5.9772e-04   3.6990e-04   2.1716e-05  -2.2338e-05   7.5606e-05
 1.4427e-03   8.5099e-04   1.1167e-04  -2.8761e-04  -1.6560e-04   4.9922e-04
 1.7043e-03   1.0197e-03   2.6603e-04  -1.9138e-04  -1.3749e-04   5.0404e-04
 1.0197e-03   1.1368e-03   6.5956e-04  -7.3785e-05  -1.3511e-04   1.4078e-04
 2.6603e-04   6.5956e-04   9.7755e-04   7.9849e-04   2.8324e-04  -2.5788e-04
-1.9138e-04  -7.3785e-05   7.9849e-04   1.6804e-03   8.7568e-04  -4.3747e-04
-1.3749e-04  -1.3511e-04   2.8324e-04   8.7568e-04   5.0764e-04  -1.9975e-04
 5.0404e-04   1.4078e-04  -2.5788e-04  -4.3747e-04  -1.9975e-04   3.2339e-04
 1.1862e-03   4.7415e-04  -4.8022e-04  -9.3803e-04  -4.2921e-04   6.4890e-04
 1.0790e-03   7.3761e-04  -5.6044e-05  -7.9765e-04  -4.5344e-04   4.3197e-04
 3.9395e-04   6.6940e-04   4.5317e-04  -2.6459e-04  -2.5013e-04   3.7215e-05
-1.4653e-04   1.8070e-04   4.8583e-04   5.6661e-04   2.5193e-04  -2.3779e-04
-3.3300e-04  -4.1389e-04   3.2503e-04   1.3216e-03   7.7851e-04  -2.7693e-04
-3.9477e-04  -4.6958e-04   3.9573e-04   1.5203e-03   8.8336e-04  -3.2621e-04
-4.3376e-04   2.8777e-05   7.6064e-04   1.2133e-03   5.8009e-04  -4.7533e-04
 4.3034e-04   7.2093e-04   8.8947e-04   5.8584e-04   1.8163e-04  -1.7257e-04
 1.5314e-03   1.1649e-03   5.8014e-04   1.0119e-04  -4.5741e-05   3.1271e-04
 8.7934e-04   5.6612e-04   1.9231e-04  -1.0303e-05  -2.5979e-05   2.1962e-04

Columns 13 through 18:

-2.0564e-04  -3.2265e-04  -3.0953e-04   6.2217e-05   5.3939e-04   4.9585e-04
-5.4114e-04  -8.4006e-04  -7.0037e-04   1.9180e-04   1.1440e-03   1.1828e-03
-8.3000e-04  -8.6002e-04  -3.8394e-04   3.1124e-04   9.6241e-04   1.0655e-03
-7.1170e-04  -3.7812e-04   2.0528e-04   3.8249e-04   3.5798e-04   3.9200e-04
 2.1632e-04   3.5316e-04   3.8611e-04   1.9331e-04  -1.3374e-04  -1.5354e-04
 1.1061e-03   9.2903e-04   2.9883e-04  -1.7815e-04  -3.4077e-04  -3.7086e-04
 1.1862e-03   1.0790e-03   3.9395e-04  -1.4653e-04  -3.3300e-04  -3.9477e-04
 4.7415e-04   7.3761e-04   6.6940e-04   1.8070e-04  -4.1389e-04  -4.6958e-04
-4.8022e-04  -5.6044e-05   4.5317e-04   4.8583e-04   3.2503e-04   3.9573e-04
-9.3803e-04  -7.9765e-04  -2.6459e-04   5.6661e-04   1.3216e-03   1.5203e-03
-4.2921e-04  -4.5344e-04  -2.5013e-04   2.5193e-04   7.7851e-04   8.8336e-04
 6.4890e-04   4.3197e-04   3.7215e-05  -2.3779e-04  -2.7693e-04  -3.2621e-04
 1.4228e-03   1.0420e-03   1.5119e-04  -4.2810e-04  -6.4895e-04  -8.1151e-04
 1.0420e-03   1.0386e-03   4.6791e-04  -2.2413e-04  -7.5642e-04  -9.0810e-04
 1.5119e-04   4.6791e-04   6.4018e-04   1.2148e-04  -4.7000e-04  -5.1539e-04
-4.2810e-04  -2.2413e-04   1.2148e-04   4.1094e-04   4.1060e-04   4.0468e-04
-6.4895e-04  -7.5642e-04  -4.7000e-04   4.1060e-04   1.3181e-03   1.4473e-03
-8.1151e-04  -9.0810e-04  -5.1539e-04   4.0468e-04   1.4473e-03   1.6557e-03
-9.5819e-04  -6.7855e-04  -5.4223e-05   5.7343e-04   8.5161e-04   1.0210e-03
-3.0085e-04   7.6872e-05   4.7231e-04   3.5469e-04   1.1122e-04   2.1589e-04
 7.8859e-04   8.3202e-04   4.5808e-04   5.9952e-06  -2.6796e-04  -2.3206e-04
 5.6377e-04   4.7882e-04   1.6085e-04  -5.3779e-05  -1.4562e-04  -1.5654e-04

Columns 19 through 22:

 1.7679e-04  -2.7549e-04  -4.5388e-04  -1.8185e-04
```

```
 4.9942e-04  -4.7951e-04  -9.4011e-04  -4.0141e-04
 7.3079e-04  -8.9284e-05  -8.2099e-04  -4.7620e-04
 6.8805e-04   4.4595e-04  -2.8082e-04  -2.5671e-04
 1.9311e-04   4.7813e-04   5.6919e-04   2.5970e-04
-4.7713e-04   2.8400e-04   1.3076e-03   7.2693e-04
-4.3376e-04   4.3034e-04   1.5314e-03   8.7934e-04
 2.8777e-05   7.2093e-04   1.1649e-03   5.6612e-04
 7.6064e-04   8.8947e-04   5.8014e-04   1.9231e-04
 1.2133e-03   5.8584e-04   1.0119e-04  -1.0303e-05
 5.8009e-04   1.8163e-04  -4.5741e-05  -2.5979e-05
-4.7533e-04  -1.7257e-04   3.1271e-04   2.1962e-04
-9.5819e-04  -3.0085e-04   7.8859e-04   5.6377e-04
-6.7855e-04   7.6872e-05   8.3202e-04   4.7882e-04
-5.4223e-05   4.7231e-04   4.5808e-04   1.6085e-04
 5.7343e-04   3.5469e-04   5.9952e-06  -5.3779e-05
 8.5161e-04   1.1122e-04  -2.6796e-04  -1.4562e-04
 1.0210e-03   2.1589e-04  -2.3206e-04  -1.5654e-04
 1.1658e-03   6.6456e-04  -8.7907e-05  -1.3682e-04
 6.6456e-04   9.4378e-04   7.6001e-04   2.6428e-04
-8.7907e-05   7.6001e-04   1.6327e-03   8.3562e-04
-1.3682e-04   2.6428e-04   8.3562e-04   4.7524e-04
```

Iteration 3/100 μ:
 0.42472

Iteration 3/100 d:
  0.0129129
  0.0202950
  0.0097569
 -0.0136532
 -0.0615101
 -0.1069107
 -0.1227920
 -0.1003306
 -0.0802163
 -0.0736897
 -0.0323102
 -0.0180646
 -0.0479205
 -0.0543810
 -0.0440726
 -0.0402008
 -0.0450414
 -0.0554130
 -0.0508692
 -0.0877855
 -0.1341917
 -0.0662792

μ = 0.424721 / 2 -> 0.212361

Iteration 3/100 w(t):
   1.0230 11.9682
   2.0364 12.9155
   3.0177 13.9040
   3.9761 14.9222
   4.8915 15.9293
   5.8114 16.9211
   6.7833 17.9029
   7.8229 18.9106
   8.8585 19.8451
   9.8704 20.7632
  10.9432 21.8830

Iteration 3/100 error:
 1.6289

Iteration 3/100 gradient:
 -0.0054693
 -0.0086068
 -0.0041465
  0.0058168
  0.0261463
  0.0453899
  0.0521603
  0.0426022
  0.0340829
  0.0312998
  0.0137282
  0.0076704
  0.0203438
  0.0230902
  0.0187136
  0.0170762
  0.0191421
  0.0235164
  0.0216022
  0.0372781
  0.0569724
  0.0281427

Iteration 3/100 gradient norm:
 0.13500

Iteration 4/100 Hessian matrix:
 Columns 1 through 6:

  3.3378e-04 6.5181e-04 4.3356e-04 3.3618e-05 -2.6288e-04 -3.1148e-04

```
 6.5181e-04   1.4586e-03   1.0346e-03   1.5195e-04  -4.1582e-04  -6.7364e-04
 4.3356e-04   1.0346e-03   1.0254e-03   4.5983e-04  -2.0717e-04  -7.8380e-04
 3.3618e-05   1.5195e-04   4.5983e-04   6.2990e-04   1.2419e-04  -5.1135e-04
-2.6288e-04  -4.1582e-04  -2.0717e-04   1.2419e-04   3.9793e-04   3.6162e-04
-3.1148e-04  -6.7364e-04  -7.8380e-04  -5.1135e-04   3.6162e-04   1.2799e-03
-3.3162e-04  -7.9314e-04  -9.0092e-04  -5.1048e-04   4.5270e-04   1.4547e-03
-5.1625e-04  -9.6541e-04  -6.8254e-04  -7.1765e-05   5.5771e-04   8.2363e-04
-1.5135e-04  -2.6401e-04   9.9742e-05   4.8990e-04   3.9599e-04   1.2315e-04
 3.4119e-04   8.2268e-04   8.6855e-04   4.8872e-04   6.9056e-06  -2.8264e-04
 2.1445e-04   5.5664e-04   4.9323e-04   1.3460e-04  -7.4318e-05  -1.9251e-04
-8.5354e-05  -2.2622e-04  -3.5634e-04  -3.6779e-04   4.1722e-05   4.7344e-04
-2.3948e-04  -5.7854e-04  -8.5925e-04  -7.6341e-04   1.6951e-04   1.0691e-03
-3.6280e-04  -8.5794e-04  -8.7812e-04  -4.3485e-04   3.1462e-04   9.1269e-04
-3.3344e-04  -7.1307e-04  -3.8967e-04   1.7295e-04   3.5973e-04   3.0453e-04
 4.2566e-05   1.9380e-04   3.3584e-04   3.4497e-04   1.6396e-04  -2.0677e-04
 4.9623e-04   1.0927e-03   9.5488e-04   3.0203e-04  -1.7524e-04  -3.2243e-04
 4.9190e-04   1.1878e-03   1.0686e-03   3.8998e-04  -1.6642e-04  -3.5727e-04
 1.5887e-04   4.9369e-04   7.4905e-04   6.5661e-04   1.7097e-04  -4.7569e-04
-2.6610e-04  -4.6696e-04  -5.5844e-05   4.2815e-04   4.8306e-04   3.0900e-04
-4.5031e-04  -9.3590e-04  -7.9976e-04  -2.9179e-04   5.6763e-04   1.3162e-03
-2.1665e-04  -4.4977e-04  -4.9591e-04  -3.0502e-04   2.3685e-04   7.1538e-04

Columns 7 through 12:

-3.3162e-04  -5.1625e-04  -1.5135e-04   3.4119e-04   2.1445e-04  -8.5354e-05
-7.9314e-04  -9.6541e-04  -2.6401e-04   8.2268e-04   5.5664e-04  -2.2622e-04
-9.0092e-04  -6.8254e-04   9.9742e-05   8.6855e-04   4.9323e-04  -3.5634e-04
-5.1048e-04  -7.1765e-05   4.8990e-04   4.8872e-04   1.3460e-04  -3.6779e-04
 4.5270e-04   5.5771e-04   3.9599e-04   6.9056e-06  -7.4318e-05   4.1722e-05
 1.4547e-03   8.2363e-04   1.2315e-04  -2.8264e-04  -1.9251e-04   4.7344e-04
 1.7118e-03   1.0487e-03   2.7605e-04  -1.9855e-04  -1.4784e-04   4.8144e-04
 1.0487e-03   1.1347e-03   6.8445e-04  -5.4090e-05  -1.8106e-04   1.3254e-04
 2.7605e-04   6.8445e-04   9.8643e-04   8.0400e-04   2.9594e-04  -2.5009e-04
-1.9855e-04  -5.4090e-05   8.0400e-04   1.6812e-03   8.5649e-04  -4.4991e-04
-1.4784e-04  -1.8106e-04   2.9594e-04   8.5649e-04   4.6740e-04  -2.0672e-04
 4.8144e-04   1.3254e-04  -2.5009e-04  -4.4991e-04  -2.0672e-04   3.1610e-04
 1.1794e-03   4.6296e-04  -4.7518e-04  -9.3787e-04  -4.8450e-04   6.3187e-04
 1.0848e-03   7.1558e-04  -5.4690e-05  -7.9778e-04  -4.9014e-04   4.2657e-04
 4.1471e-04   6.7066e-04   4.7140e-04  -2.4938e-04  -2.8035e-04   4.9916e-05
-1.5228e-04   1.7608e-04   4.9991e-04   5.4583e-04   2.2813e-04  -2.4525e-04
-3.3296e-04  -4.5015e-04   3.3706e-04   1.3372e-03   7.2873e-04  -3.0043e-04
-3.6982e-04  -4.3332e-04   4.2479e-04   1.5400e-03   8.6111e-04  -3.2856e-04
-4.2701e-04   3.2219e-05   7.6668e-04   1.2031e-03   5.7567e-04  -5.0069e-04
 4.3041e-04   7.5346e-04   8.9544e-04   5.9721e-04   1.8368e-04  -1.6143e-04
 1.5448e-03   1.1825e-03   5.9770e-04   1.1062e-04  -5.1603e-05   3.1295e-04
 8.6655e-04   5.4214e-04   1.9234e-04  -4.5408e-05  -6.7191e-05   1.9038e-04

Columns 13 through 18:
```

```
 -2.3948e-04  -3.6280e-04  -3.3344e-04   4.2566e-05   4.9623e-04   4.9190e-04
 -5.7854e-04  -8.5794e-04  -7.1307e-04   1.9380e-04   1.0927e-03   1.1878e-03
 -8.5925e-04  -8.7812e-04  -3.8967e-04   3.3584e-04   9.5488e-04   1.0686e-03
 -7.6341e-04  -4.3485e-04   1.7295e-04   3.4497e-04   3.0203e-04   3.8998e-04
  1.6951e-04   3.1462e-04   3.5973e-04   1.6396e-04  -1.7524e-04  -1.6642e-04
  1.0691e-03   9.1269e-04   3.0453e-04  -2.0677e-04  -3.2243e-04  -3.5727e-04
  1.1794e-03   1.0848e-03   4.1471e-04  -1.5228e-04  -3.3296e-04  -3.6982e-04
  4.6296e-04   7.1558e-04   6.7066e-04   1.7608e-04  -4.5015e-04  -4.3332e-04
 -4.7518e-04  -5.4690e-05   4.7140e-04   4.9991e-04   3.3706e-04   4.2479e-04
 -9.3787e-04  -7.9778e-04  -2.4938e-04   5.4583e-04   1.3372e-03   1.5400e-03
 -4.8450e-04  -4.9014e-04  -2.8035e-04   2.2813e-04   7.2873e-04   8.6111e-04
  6.3187e-04   4.2657e-04   4.9916e-05  -2.4525e-04  -3.0043e-04  -3.2856e-04
  1.3777e-03   1.0022e-03   1.3916e-04  -4.4813e-04  -6.9051e-04  -8.0984e-04
  1.0022e-03   1.0299e-03   4.7284e-04  -2.3477e-04  -7.8673e-04  -9.1334e-04
  1.3916e-04   4.7284e-04   6.6736e-04   1.3007e-04  -4.6478e-04  -5.0455e-04
 -4.4813e-04  -2.3477e-04   1.3007e-04   3.7801e-04   3.8129e-04   4.1422e-04
 -6.9051e-04  -7.8673e-04  -4.6478e-04   3.8129e-04   1.3177e-03   1.4420e-03
 -8.0984e-04  -9.1334e-04  -5.0455e-04   4.1422e-04   1.4420e-03   1.6741e-03
 -9.6323e-04  -6.6864e-04  -2.7667e-05   5.5083e-04   8.4566e-04   1.0378e-03
 -2.7307e-04   9.6412e-05   4.9998e-04   3.6302e-04   1.3713e-04   2.6050e-04
  7.9081e-04   8.6240e-04   4.8819e-04  -4.1300e-06  -2.5862e-04  -1.9458e-04
  5.1810e-04   4.6074e-04   1.4002e-04  -7.8160e-05  -1.7695e-04  -1.7151e-04
```

Columns 19 through 22:

```
  1.5887e-04  -2.6610e-04  -4.5031e-04  -2.1665e-04
  4.9369e-04  -4.6696e-04  -9.3590e-04  -4.4977e-04
  7.4905e-04  -5.5844e-05  -7.9976e-04  -4.9591e-04
  6.5661e-04   4.2815e-04  -2.9179e-04  -3.0502e-04
  1.7097e-04   4.8306e-04   5.6763e-04   2.3685e-04
 -4.7569e-04   3.0900e-04   1.3162e-03   7.1538e-04
 -4.2701e-04   4.3041e-04   1.5448e-03   8.6655e-04
  3.2219e-05   7.5346e-04   1.1825e-03   5.4214e-04
  7.6668e-04   8.9544e-04   5.9770e-04   1.9234e-04
  1.2031e-03   5.9721e-04   1.1062e-04  -4.5408e-05
  5.7567e-04   1.8368e-04  -5.1603e-05  -6.7191e-05
 -5.0069e-04  -1.6143e-04   3.1295e-04   1.9038e-04
 -9.6323e-04  -2.7307e-04   7.9081e-04   5.1810e-04
 -6.6864e-04   9.6412e-05   8.6240e-04   4.6074e-04
 -2.7667e-05   4.9998e-04   4.8819e-04   1.4002e-04
  5.5083e-04   3.6302e-04  -4.1300e-06  -7.8160e-05
  8.4566e-04   1.3713e-04  -2.5862e-04  -1.7695e-04
  1.0378e-03   2.6050e-04  -1.9458e-04  -1.7151e-04
  1.1443e-03   6.6918e-04  -5.3224e-05  -1.6369e-04
  6.6918e-04   9.7897e-04   7.8544e-04   2.4627e-04
 -5.3224e-05   7.8544e-04   1.6463e-03   8.4137e-04
 -1.6369e-04   2.4627e-04   8.4137e-04   4.3305e-04
```

Iteration 4/100 μ:

0.21236

Iteration 4/100 d:
  0.023697
  0.036610
  0.016666
 -0.027681
 -0.119541
 -0.207140
 -0.237414
 -0.193723
 -0.155361
 -0.144393
 -0.063856
 -0.035194
 -0.092967
 -0.104918
 -0.085014
 -0.079032
 -0.089638
 -0.109744
 -0.099902
 -0.169878
 -0.259210
 -0.128280

μ = 0.212361 / 2 -> 0.106180

Iteration 4/100 w(t):
    1.0467   11.9330
    2.0730   12.8225
    3.0344   13.7990
    3.9484   14.8372
    4.7720   15.8503
    5.6043   16.8314
    6.5458   17.7931
    7.6291   18.8107
    8.7031   19.6753
    9.7260   20.5039
   10.8794   21.7547

Iteration 4/100 error:
 1.5469

Iteration 4/100 gradient:
 -0.0050472
 -0.0077782
 -0.0035430
  0.0058419

0.0253857
0.0439518
0.0504489
0.0411244
0.0330473
0.0306703
0.0135184
0.0074444
0.0196905
0.0222563
0.0180676
0.0167591
0.0190453
0.0233087
0.0212136
0.0361023
0.0550371
0.0271833

Iteration 4/100 gradient norm:
 0.13090

Iteration 5/100 Hessian matrix:
 Columns 1 through 6:

  3.0498e-04   6.6309e-04   4.2288e-04   4.2988e-05 -2.5624e-04 -3.1080e-04
  6.6309e-04   1.4273e-03   1.0437e-03   1.7597e-04 -4.2706e-04 -6.9484e-04
  4.2288e-04   1.0437e-03   1.0205e-03   4.7620e-04 -2.3952e-04 -7.8362e-04
  4.2988e-05   1.7597e-04   4.7620e-04   6.5492e-04   1.3052e-04 -4.9947e-04
 -2.5624e-04 -4.2706e-04 -2.3952e-04   1.3052e-04   3.7732e-04   3.6318e-04
 -3.1080e-04 -6.9484e-04 -7.8362e-04 -4.9947e-04   3.6318e-04   1.2800e-03
 -3.3189e-04 -7.9501e-04 -9.1609e-04 -5.0875e-04   4.4136e-04   1.4533e-03
 -4.8450e-04 -9.3603e-04 -6.7926e-04 -2.2271e-05   5.9146e-04   8.5618e-04
 -1.6989e-04 -2.8062e-04   7.7827e-05   4.9052e-04   3.7255e-04   1.0005e-04
  3.4885e-04   8.4031e-04   8.3971e-04   4.7644e-04 -1.6165e-05 -2.7414e-04
  2.1876e-04   5.8158e-04   4.9993e-04   1.7855e-04 -3.7970e-05 -1.5070e-04
 -9.7011e-05 -2.1108e-04 -3.3147e-04 -3.2061e-04   7.6827e-05   5.1088e-04
 -2.4110e-04 -5.6339e-04 -8.6486e-04 -7.3141e-04   1.9391e-04   1.1126e-03
 -3.6742e-04 -8.5296e-04 -8.7454e-04 -3.8605e-04   3.0749e-04   9.4031e-04
 -3.4956e-04 -7.1971e-04 -3.7674e-04   2.0319e-04   3.6917e-04   3.0400e-04
  6.1773e-05   2.0364e-04   3.2596e-04   3.7863e-04   1.6751e-04 -1.7295e-04
  4.8046e-04   1.1020e-03   9.3399e-04   2.8950e-04 -1.9245e-04 -3.4168e-04
  4.7593e-04   1.1659e-03   1.0468e-03   3.7712e-04 -1.6576e-04 -3.6602e-04
  1.3098e-04   5.0508e-04   7.1307e-04   6.6347e-04   1.6196e-04 -4.4620e-04
 -2.8171e-04 -4.6196e-04 -5.4312e-05   4.6145e-04   4.9800e-04   3.1182e-04
 -4.5133e-04 -9.1809e-04 -8.1850e-04 -2.3750e-04   5.7125e-04   1.3560e-03
 -1.8689e-04 -4.0403e-04 -4.5328e-04 -2.3996e-04   2.8055e-04   7.7558e-04

 Columns 7 through 12:

```
-3.3189e-04  -4.8450e-04  -1.6989e-04   3.4885e-04   2.1876e-04  -9.7011e-05
-7.9501e-04  -9.3603e-04  -2.8062e-04   8.4031e-04   5.8158e-04  -2.1108e-04
-9.1609e-04  -6.7926e-04   7.7827e-05   8.3971e-04   4.9993e-04  -3.3147e-04
-5.0875e-04  -2.2271e-05   4.9052e-04   4.7644e-04   1.7855e-04  -3.2061e-04
 4.4136e-04   5.9146e-04   3.7255e-04  -1.6165e-05  -3.7970e-05   7.6827e-05
 1.4533e-03   8.5618e-04   1.0005e-04  -2.7414e-04  -1.5070e-04   5.1088e-04
 1.6915e-03   1.0328e-03   2.4836e-04  -1.9451e-04  -1.3753e-04   4.9674e-04
 1.0328e-03   1.1897e-03   6.5903e-04  -6.1107e-05  -1.1242e-04   1.8943e-04
 2.4836e-04   6.5903e-04   9.8166e-04   8.0829e-04   2.9610e-04  -2.8513e-04
-1.9451e-04  -6.1107e-05   8.0829e-04   1.6735e-03   8.6369e-04  -4.5313e-04
-1.3753e-04  -1.1242e-04   2.9610e-04   8.6369e-04   5.0415e-04  -1.7457e-04
 4.9674e-04   1.8943e-04  -2.8513e-04  -4.5313e-04  -1.7457e-04   3.3544e-04
 1.1980e-03   5.2411e-04  -4.9678e-04  -9.5610e-04  -4.1802e-04   6.7879e-04
 1.0927e-03   7.3515e-04  -8.2112e-05  -8.2765e-04  -4.6911e-04   4.5819e-04
 3.8625e-04   7.0268e-04   4.5355e-04  -2.8850e-04  -2.6388e-04   7.3275e-05
-1.3809e-04   1.8137e-04   4.9616e-04   5.6712e-04   2.7378e-04  -2.1669e-04
-3.4479e-04  -4.4935e-04   3.0111e-04   1.3243e-03   7.4170e-04  -2.7334e-04
-3.7252e-04  -4.4393e-04   4.0441e-04   1.5431e-03   8.6620e-04  -3.3793e-04
-4.2826e-04   3.7703e-05   7.5782e-04   1.1845e-03   5.7490e-04  -4.8466e-04
 4.1642e-04   7.6692e-04   9.0317e-04   5.9213e-04   1.7599e-04  -1.6565e-04
 1.5483e-03   1.2100e-03   5.9521e-04   1.2237e-04  -5.7510e-06   3.5152e-04
 8.8545e-04   6.2410e-04   1.9462e-04  -5.7510e-06   1.2612e-05   2.4827e-04
```

Columns 13 through 18:

```
-2.4110e-04  -3.6742e-04  -3.4956e-04   6.1773e-05   4.8046e-04   4.7593e-04
-5.6339e-04  -8.5296e-04  -7.1971e-04   2.0364e-04   1.1020e-03   1.1659e-03
-8.6486e-04  -8.7454e-04  -3.7674e-04   3.2596e-04   9.3399e-04   1.0468e-03
-7.3141e-04  -3.8605e-04   2.0319e-04   3.7863e-04   2.8950e-04   3.7712e-04
 1.9391e-04   3.0749e-04   3.6917e-04   1.6751e-04  -1.9245e-04  -1.6576e-04
 1.1126e-03   9.4031e-04   3.0400e-04  -1.7295e-04  -3.4168e-04  -3.6602e-04
 1.1980e-03   1.0927e-03   3.8625e-04  -1.3809e-04  -3.4479e-04  -3.7252e-04
 5.2411e-04   7.3515e-04   7.0268e-04   1.8137e-04  -4.4935e-04  -4.4393e-04
-4.9678e-04  -8.2112e-05   4.5355e-04   4.9616e-04   3.0111e-04   4.0441e-04
-9.5610e-04  -8.2765e-04  -2.8850e-04   5.6712e-04   1.3243e-03   1.5431e-03
-4.1802e-04  -4.6911e-04  -2.6388e-04   2.7378e-04   7.4170e-04   8.6620e-04
 6.7879e-04   4.5819e-04   7.3275e-05  -2.1669e-04  -2.7334e-04  -3.3793e-04
 1.4315e-03   1.0420e-03   1.7597e-04  -4.0368e-04  -6.9458e-04  -8.2416e-04
 1.0420e-03   1.0122e-03   4.7622e-04  -2.0570e-04  -7.7360e-04  -9.2877e-04
 1.7597e-04   4.7622e-04   6.6200e-04   1.6047e-04  -4.8719e-04  -5.3437e-04
-4.0368e-04  -2.0570e-04   1.6047e-04   3.8776e-04   3.8249e-04   4.3261e-04
-6.9458e-04  -7.7360e-04  -4.8719e-04   3.8249e-04   1.2703e-03   1.4273e-03
-8.2416e-04  -9.2877e-04  -5.3437e-04   4.3261e-04   1.4273e-03   1.6612e-03
-9.7016e-04  -6.9373e-04  -4.6074e-05   5.6375e-04   8.2570e-04   1.0246e-03
-2.9681e-04   9.9964e-05   4.9265e-04   3.8205e-04   1.1355e-04   2.3579e-04
 8.4814e-04   8.5498e-04   5.1394e-04   2.0495e-05  -2.6139e-04  -2.0517e-04
 5.9146e-04   5.3222e-04   1.8836e-04  -4.6452e-05  -1.3973e-04  -1.4613e-04
```

Columns 19 through 22:

```
 1.3098e-04 -2.8171e-04 -4.5133e-04 -1.8689e-04
 5.0508e-04 -4.6196e-04 -9.1809e-04 -4.0403e-04
 7.1307e-04 -5.4312e-05 -8.1850e-04 -4.5328e-04
 6.6347e-04  4.6145e-04 -2.3750e-04 -2.3996e-04
 1.6196e-04  4.9800e-04  5.7125e-04  2.8055e-04
-4.4620e-04  3.1182e-04  1.3560e-03  7.7558e-04
-4.2826e-04  4.1642e-04  1.5483e-03  8.8545e-04
 3.7703e-05  7.6692e-04  1.2100e-03  6.2410e-04
 7.5782e-04  9.0317e-04  5.9521e-04  1.9462e-04
 1.1845e-03  5.9213e-04  1.2237e-04 -5.7510e-06
 5.7490e-04  1.7599e-04 -5.7510e-06  1.2612e-05
-4.8466e-04 -1.6565e-04  3.5152e-04  2.4827e-04
-9.7016e-04 -2.9681e-04  8.4814e-04  5.9146e-04
-6.9373e-04  9.9964e-05  8.5498e-04  5.3222e-04
-4.6074e-05  4.9265e-04  5.1394e-04  1.8836e-04
 5.6375e-04  3.8205e-04  2.0495e-05 -4.6452e-05
 8.2570e-04  1.1355e-04 -2.6139e-04 -1.3973e-04
 1.0246e-03  2.3579e-04 -2.0517e-04 -1.4613e-04
 1.1427e-03  6.5450e-04 -4.4276e-05 -1.2315e-04
 6.5450e-04  9.7808e-04  8.1610e-04  2.9925e-04
-4.4276e-05  8.1610e-04  1.6912e-03  8.9133e-04
-1.2315e-04  2.9925e-04  8.9133e-04  5.3160e-04
```

Iteration 5/100 μ:
 0.10618

Iteration 5/100 d:
  0.040072
  0.059435
  0.022843
 -0.054906
 -0.225611
 -0.388862
 -0.444898
 -0.360907
 -0.292389
 -0.277043
 -0.122771
 -0.065854
 -0.174204
 -0.195527
 -0.158653
 -0.151633
 -0.177273
 -0.215401
 -0.192465
 -0.318554

-0.483667
  -0.238220

μ = 0.106180 / 2 -> 0.053090

Iteration 5/100 w(t):
   1.0868   11.8671
   2.1325   12.6483
   3.0573   13.6035
   3.8935   14.6785
   4.5464   15.6986
   5.2154   16.6542
   6.1009   17.5777
   7.2682   18.6182
   8.4107   19.3567
   9.4490   20.0203
  10.7566   21.5165

Iteration 5/100 error:
 1.3996

Iteration 5/100 gradient:
 -0.0042832
 -0.0062880
 -0.0024700
  0.0058638
  0.0239703
  0.0412895
  0.0472780
  0.0383851
  0.0310909
  0.0294221
  0.0130863
  0.0070419
  0.0185142
  0.0207430
  0.0168819
  0.0161417
  0.0187967
  0.0228436
  0.0204343
  0.0338935
  0.0514391
  0.0254025

Iteration 5/100 gradient norm:
 0.12325

Iteration 6/100 Hessian matrix:

Columns 1 through 6:

```
 3.7010e-04  6.9336e-04  4.5675e-04  6.0352e-05 -2.1585e-04 -2.4822e-04
 6.9336e-04  1.4685e-03  1.0759e-03  1.7899e-04 -3.8909e-04 -6.3090e-04
 4.5675e-04  1.0759e-03  1.0314e-03  4.9563e-04 -1.9857e-04 -7.5124e-04
 6.0352e-05  1.7899e-04  4.9563e-04  6.6560e-04  1.6664e-04 -4.5985e-04
-2.1585e-04 -3.8909e-04 -1.9857e-04  1.6664e-04  4.0457e-04  3.9422e-04
-2.4822e-04 -6.3090e-04 -7.5124e-04 -4.5985e-04  3.9422e-04  1.3342e-03
-3.2532e-04 -7.8595e-04 -8.9166e-04 -5.1292e-04  4.2775e-04  1.4692e-03
-4.9432e-04 -9.4118e-04 -6.8467e-04 -3.2863e-05  5.9757e-04  8.6677e-04
-1.9291e-04 -2.8724e-04  6.9833e-05  4.3876e-04  3.5714e-04  1.0725e-04
 3.3900e-04  8.3247e-04  8.5874e-04  4.9272e-04  1.8607e-05 -2.4398e-04
 2.5915e-04  6.1526e-04  5.4545e-04  1.9107e-04 -1.7764e-05 -9.0883e-05
-8.8130e-05 -2.2038e-04 -3.4157e-04 -3.4905e-04  4.7118e-05  5.1590e-04
-1.8161e-04 -5.1108e-04 -8.3369e-04 -6.9404e-04  2.2298e-04  1.1655e-03
-3.2390e-04 -7.9914e-04 -8.5141e-04 -3.5163e-04  3.5014e-04  9.7720e-04
-3.2339e-04 -6.7732e-04 -3.5232e-04  2.0430e-04  3.9013e-04  3.5700e-04
 6.0330e-05  2.0977e-04  3.3096e-04  3.6484e-04  1.7704e-04 -1.7060e-04
 5.4394e-04  1.1663e-03  9.6494e-04  3.3529e-04 -1.6247e-04 -2.9339e-04
 5.2711e-04  1.2319e-03  1.0988e-03  4.0077e-04 -1.3283e-04 -3.0804e-04
 1.4155e-04  5.0484e-04  7.4771e-04  6.7546e-04  1.7779e-04 -4.3263e-04
-2.8384e-04 -4.6199e-04 -4.1789e-05  4.3818e-04  4.9754e-04  3.2623e-04
-4.5299e-04 -9.3594e-04 -8.0611e-04 -2.5329e-04  5.7927e-04  1.3403e-03
-1.9762e-04 -4.1431e-04 -4.8768e-04 -2.7642e-04  2.5449e-04  7.9459e-04
```

Columns 7 through 12:

```
-3.2532e-04 -4.9432e-04 -1.9291e-04  3.3900e-04  2.5915e-04 -8.8130e-05
-7.8595e-04 -9.4118e-04 -2.8724e-04  8.3247e-04  6.1526e-04 -2.2038e-04
-8.9166e-04 -6.8467e-04  6.9833e-05  8.5874e-04  5.4545e-04 -3.4157e-04
-5.1292e-04 -3.2863e-05  4.3876e-04  4.9272e-04  1.9107e-04 -3.4905e-04
 4.2775e-04  5.9757e-04  3.5714e-04  1.8607e-05 -1.7764e-05  4.7118e-05
 1.4692e-03  8.6677e-04  1.0725e-04 -2.4398e-04 -9.0883e-05  5.1590e-04
 1.6978e-03  1.0298e-03  2.3372e-04 -2.0139e-04 -1.1782e-04  4.9731e-04
 1.0298e-03  1.1767e-03  6.4992e-04 -5.1159e-05 -1.3081e-04  1.6540e-04
 2.3372e-04  6.4992e-04  9.2530e-04  7.7596e-04  2.8888e-04 -2.8351e-04
-2.0139e-04 -5.1159e-05  7.7596e-04  1.6673e-03  8.7166e-04 -4.6174e-04
-1.1782e-04 -1.3081e-04  2.8888e-04  8.7166e-04  5.4969e-04 -1.8179e-04
 4.9731e-04  1.6540e-04 -2.8351e-04 -4.6174e-04 -1.8179e-04  3.3893e-04
 1.1922e-03  5.0298e-04 -4.9598e-04 -9.2075e-04 -3.7257e-04  6.7633e-04
 1.1000e-03  7.4658e-04 -5.4023e-05 -7.9066e-04 -4.4067e-04  4.3530e-04
 4.0163e-04  6.9751e-04  4.3736e-04 -2.5127e-04 -2.2962e-04  5.7820e-05
-1.4613e-04  1.8079e-04  4.7551e-04  5.7996e-04  2.8439e-04 -2.3015e-04
-3.3160e-04 -4.2508e-04  2.9035e-04  1.3397e-03  7.9459e-04 -2.8113e-04
-3.7690e-04 -4.1429e-04  4.0616e-04  1.5487e-03  9.1578e-04 -3.3167e-04
-4.3590e-04  3.6415e-05  7.4534e-04  1.1940e-03  5.9162e-04 -5.0155e-04
 4.1078e-04  7.7300e-04  8.6404e-04  5.8322e-04  2.0135e-04 -1.8030e-04
 1.5488e-03  1.2065e-03  5.8036e-04  1.1726e-04 -1.1213e-05  3.3549e-04
 8.8096e-04  5.7236e-04  1.5024e-04 -2.7289e-05 -6.3727e-06  2.3284e-04
```

Columns 13 through 18:

```
 -1.8161e-04  -3.2390e-04  -3.2339e-04   6.0330e-05   5.4394e-04   5.2711e-04
 -5.1108e-04  -7.9914e-04  -6.7732e-04   2.0977e-04   1.1663e-03   1.2319e-03
 -8.3369e-04  -8.5141e-04  -3.5232e-04   3.3096e-04   9.6494e-04   1.0988e-03
 -6.9404e-04  -3.5163e-04   2.0430e-04   3.6484e-04   3.3529e-04   4.0077e-04
  2.2298e-04   3.5014e-04   3.9013e-04   1.7704e-04  -1.6247e-04  -1.3283e-04
  1.1655e-03   9.7720e-04   3.5700e-04  -1.7060e-04  -2.9339e-04  -3.0804e-04
  1.1922e-03   1.1000e-03   4.0163e-04  -1.4613e-04  -3.3160e-04  -3.7690e-04
  5.0298e-04   7.4658e-04   6.9751e-04   1.8079e-04  -4.2508e-04  -4.1429e-04
 -4.9598e-04  -5.4023e-05   4.3736e-04   4.7551e-04   2.9035e-04   4.0616e-04
 -9.2075e-04  -7.9066e-04  -2.5127e-04   5.7996e-04   1.3397e-03   1.5487e-03
 -3.7257e-04  -4.4067e-04  -2.2962e-04   2.8439e-04   7.9459e-04   9.1578e-04
  6.7633e-04   4.3530e-04   5.7820e-05  -2.3015e-04  -2.8113e-04  -3.3167e-04
  1.4681e-03   1.0585e-03   2.0490e-04  -4.1283e-04  -6.2801e-04  -7.7018e-04
  1.0585e-03   1.0719e-03   5.2081e-04  -1.8912e-04  -7.3681e-04  -8.8729e-04
  2.0490e-04   5.2081e-04   7.0930e-04   1.7115e-04  -4.3250e-04  -4.9198e-04
 -4.1283e-04  -1.8912e-04   1.7115e-04   4.0850e-04   3.8607e-04   4.2699e-04
 -6.2801e-04  -7.3681e-04  -4.3250e-04   3.8607e-04   1.3417e-03   1.4811e-03
 -7.7018e-04  -8.8729e-04  -4.9198e-04   4.2699e-04   1.4811e-03   1.7120e-03
 -9.5302e-04  -6.6733e-04  -3.0953e-05   5.8487e-04   8.5805e-04   1.0181e-03
 -2.6794e-04   1.0478e-04   4.8759e-04   3.8491e-04   1.2168e-04   2.4047e-04
  8.2903e-04   8.6937e-04   5.0726e-04   2.6823e-05  -2.4600e-04  -1.9993e-04
  5.9055e-04   5.0671e-04   1.7391e-04  -4.4986e-05  -1.3853e-04  -1.4442e-04
```

Columns 19 through 22:

```
  1.4155e-04  -2.8384e-04  -4.5299e-04  -1.9762e-04
  5.0484e-04  -4.6199e-04  -9.3594e-04  -4.1431e-04
  7.4771e-04  -4.1789e-05  -8.0611e-04  -4.8768e-04
  6.7546e-04   4.3818e-04  -2.5329e-04  -2.7642e-04
  1.7779e-04   4.9754e-04   5.7927e-04   2.5449e-04
 -4.3263e-04   3.2623e-04   1.3403e-03   7.9459e-04
 -4.3590e-04   4.1078e-04   1.5488e-03   8.8096e-04
  3.6415e-05   7.7300e-04   1.2065e-03   5.7236e-04
  7.4534e-04   8.6404e-04   5.8036e-04   1.5024e-04
  1.1940e-03   5.8322e-04   1.1726e-04  -2.7289e-05
  5.9162e-04   2.0135e-04  -1.1213e-05  -6.3727e-06
 -5.0155e-04  -1.8030e-04   3.3549e-04   2.3284e-04
 -9.5302e-04  -2.6794e-04   8.2903e-04   5.9055e-04
 -6.6733e-04   1.0478e-04   8.6937e-04   5.0671e-04
 -3.0953e-05   4.8759e-04   5.0726e-04   1.7391e-04
  5.8487e-04   3.8491e-04   2.6823e-05  -4.4986e-05
  8.5805e-04   1.2168e-04  -2.4600e-04  -1.3853e-04
  1.0181e-03   2.4047e-04  -1.9993e-04  -1.4442e-04
  1.1319e-03   6.5057e-04  -6.6391e-05  -1.4659e-04
  6.5057e-04   9.6194e-04   8.0458e-04   2.8351e-04
 -6.6391e-05   8.0458e-04   1.6835e-03   8.6673e-04
```

-1.4659e-04   2.8351e-04   8.6673e-04   4.8739e-04

Iteration 6/100 μ:
 0.053090

Iteration 6/100 d:
   0.058149
   0.075618
   0.015122
  -0.108330
  -0.402800
  -0.687422
  -0.785745
  -0.631656
  -0.520602
  -0.507736
  -0.225631
  -0.120284
  -0.309317
  -0.340445
  -0.276258
  -0.280480
  -0.339109
  -0.408483
  -0.356092
  -0.562792
  -0.848883
  -0.419226

μ = 0.053090 / 2 -> 0.026545

Iteration 6/100 w(t):
    1.1449   11.7468
    2.2081   12.3390
    3.0724   13.2631
    3.7852   14.4023
    4.1436   15.4182
    4.5280   16.3151
    5.3152   17.1692
    6.6366   18.2621
    7.8901   18.7939
    8.9412   19.1714
   10.5310   21.0973

Iteration 6/100 error:
 1.1592

Iteration 6/100 gradient:
  -3.0141e-03

-3.8405e-03
-7.4507e-04
 5.8294e-03
 2.1499e-02
 3.6681e-02
 4.1782e-02
 3.3635e-02
 2.7589e-02
 2.7015e-02
 1.2209e-02
 6.3923e-03
 1.6576e-02
 1.8215e-02
 1.4862e-02
 1.4984e-02
 1.8159e-02
 2.1798e-02
 1.8907e-02
 2.9976e-02
 4.5167e-02
 2.2306e-02

Iteration 6/100 gradient norm:
 0.10988

Iteration 7/100 Hessian matrix:
 Columns 1 through 6:

  3.2674e-04 6.5143e-04 4.4389e-04 4.3898e-05 -2.3732e-04 -3.1017e-04
  6.5143e-04 1.4271e-03 1.0680e-03 1.7446e-04 -3.9937e-04 -6.8159e-04
  4.4389e-04 1.0680e-03 1.0459e-03 4.9729e-04 -1.9174e-04 -7.6577e-04
  4.3898e-05 1.7446e-04 4.9729e-04 6.7395e-04 1.4659e-04 -4.8543e-04
 -2.3732e-04 -3.9937e-04 -1.9174e-04 1.4659e-04 4.0505e-04 3.7081e-04
 -3.1017e-04 -6.8159e-04 -7.6577e-04 -4.8543e-04 3.7081e-04 1.2925e-03
 -3.3049e-04 -7.9579e-04 -8.9815e-04 -4.9676e-04 4.3767e-04 1.4522e-03
 -4.8912e-04 -9.4467e-04 -6.6911e-04 -4.0923e-05 5.6586e-04 8.3298e-04
 -1.8765e-04 -2.9385e-04 7.7138e-05 4.8135e-04 3.6933e-04 9.9831e-05
  3.1715e-04 8.1719e-04 8.6435e-04 4.9449e-04 -1.7542e-06 -2.7633e-04
  2.1516e-04 5.6686e-04 5.1339e-04 1.5852e-04 -7.0166e-05 -1.5643e-04
 -9.5834e-05 -2.2082e-04 -3.3304e-04 -3.5583e-04 4.3165e-05 4.8379e-04
 -2.3048e-04 -5.5045e-04 -8.4504e-04 -7.3195e-04 2.0504e-04 1.1066e-03
 -3.3489e-04 -8.1970e-04 -8.5953e-04 -3.8485e-04 3.3675e-04 9.4238e-04
 -3.6993e-04 -7.3554e-04 -3.9004e-04 1.8012e-04 3.5503e-04 2.8895e-04
  4.8472e-05 2.0164e-04 3.4668e-04 3.7486e-04 1.7855e-04 -1.6291e-04
  4.7906e-04 1.1053e-03 9.3350e-04 3.0924e-04 -1.8383e-04 -3.3535e-04
  4.9616e-04 1.1906e-03 1.0828e-03 3.8780e-04 -1.4477e-04 -3.4466e-04
  1.4486e-04 4.9738e-04 7.4953e-04 6.7624e-04 1.7619e-04 -4.6068e-04
 -2.9881e-04 -4.8965e-04 -4.8539e-05 4.3161e-04 4.7553e-04 2.9097e-04
 -4.5226e-04 -9.3177e-04 -8.0467e-04 -2.6723e-04 5.5784e-04 1.3076e-03

-1.9855e-04 -4.2988e-04 -4.7247e-04 -2.8326e-04   2.4072e-04   7.3341e-04

Columns 7 through 12:

 -3.3049e-04 -4.8912e-04 -1.8765e-04   3.1715e-04   2.1516e-04 -9.5834e-05
 -7.9579e-04 -9.4467e-04 -2.9385e-04   8.1719e-04   5.6686e-04 -2.2082e-04
 -8.9815e-04 -6.6911e-04   7.7138e-05   8.6435e-04   5.1339e-04 -3.3304e-04
 -4.9676e-04 -4.0923e-05   4.8135e-04   4.9449e-04   1.5852e-04 -3.5583e-04
  4.3767e-04   5.6586e-04   3.6933e-04 -1.7542e-06 -7.0166e-05   4.3165e-05
  1.4522e-03   8.3298e-04   9.9831e-05 -2.7633e-04 -1.5643e-04   4.8379e-04
  1.6872e-03   1.0373e-03   2.3239e-04 -2.0457e-04 -1.4277e-04   5.0646e-04
  1.0373e-03   1.1527e-03   6.5601e-04 -5.8464e-05 -1.6587e-04   1.5021e-04
  2.3239e-04   6.5601e-04   9.4298e-04   7.8009e-04   2.6925e-04 -2.9881e-04
 -2.0457e-04 -5.8464e-05   7.8009e-04   1.6467e-03   8.4608e-04 -4.5020e-04
 -1.4277e-04 -1.6587e-04   2.6925e-04   8.4608e-04   4.7309e-04 -1.9751e-04
  5.0646e-04   1.5021e-04 -2.9881e-04 -4.5020e-04 -1.9751e-04   3.1841e-04
  1.1917e-03   4.8439e-04 -4.9787e-04 -9.3026e-04 -4.4251e-04   6.4759e-04
  1.0862e-03   7.3337e-04 -5.9908e-05 -7.9845e-04 -4.6385e-04   4.5812e-04
  3.8527e-04   6.6334e-04   4.2000e-04 -2.8377e-04 -2.9781e-04   4.2721e-05
 -1.3720e-04   1.8365e-04   4.9036e-04   5.6410e-04   2.4423e-04 -2.3204e-04
 -3.5352e-04 -4.4773e-04   2.8342e-04   1.3173e-03   7.4734e-04 -3.0946e-04
 -3.7474e-04 -4.2781e-04   3.9664e-04   1.5477e-03   8.8352e-04 -3.2687e-04
 -4.2766e-04   3.0531e-05   7.4294e-04   1.1836e-03   5.7818e-04 -4.8295e-04
  4.0272e-04   7.4207e-04   8.6318e-04   5.9224e-04   1.6924e-04 -1.9700e-04
  1.5419e-03   1.1729e-03   5.8622e-04   9.9476e-05 -4.4542e-05   3.1519e-04
  8.7472e-04   5.6632e-04   1.5710e-04 -2.9066e-05 -4.0656e-05   2.0892e-04

Columns 13 through 18:

 -2.3048e-04 -3.3489e-04 -3.6993e-04   4.8472e-05   4.7906e-04   4.9616e-04
 -5.5045e-04 -8.1970e-04 -7.3554e-04   2.0164e-04   1.1053e-03   1.1906e-03
 -8.4504e-04 -8.5953e-04 -3.9004e-04   3.4668e-04   9.3350e-04   1.0828e-03
 -7.3195e-04 -3.8485e-04   1.8012e-04   3.7486e-04   3.0924e-04   3.8780e-04
  2.0504e-04   3.3675e-04   3.5503e-04   1.7855e-04 -1.8383e-04 -1.4477e-04
  1.1066e-03   9.4238e-04   2.8895e-04 -1.6291e-04 -3.3535e-04 -3.4466e-04
  1.1917e-03   1.0862e-03   3.8527e-04 -1.3720e-04 -3.5352e-04 -3.7474e-04
  4.8439e-04   7.3337e-04   6.6334e-04   1.8365e-04 -4.4773e-04 -4.2781e-04
 -4.9787e-04 -5.9908e-05   4.2000e-04   4.9036e-04   2.8342e-04   3.9664e-04
 -9.3026e-04 -7.9845e-04 -2.8377e-04   5.6410e-04   1.3173e-03   1.5477e-03
 -4.4251e-04 -4.6385e-04 -2.9781e-04   2.4423e-04   7.4734e-04   8.8352e-04
  6.4759e-04   4.5812e-04   4.2721e-05 -2.3204e-04 -3.0946e-04 -3.2687e-04
  1.4156e-03   1.0604e-03   1.4506e-04 -4.0252e-04 -6.7673e-04 -7.9574e-04
  1.0604e-03   1.0636e-03   4.9145e-04 -1.9045e-04 -7.6612e-04 -8.9768e-04
  1.4506e-04   4.9145e-04   6.4215e-04   1.3778e-04 -4.9687e-04 -5.1428e-04
 -4.0252e-04 -1.9045e-04   1.3778e-04   4.1906e-04   3.8571e-04   4.3154e-04
 -6.7673e-04 -7.6612e-04 -4.9687e-04   3.8571e-04   1.2780e-03   1.4441e-03
 -7.9574e-04 -8.9768e-04 -5.1428e-04   4.3154e-04   1.4441e-03   1.6827e-03
 -9.5193e-04 -6.6356e-04 -4.2077e-05   5.7645e-04   8.4781e-04   1.0423e-03
 -3.0649e-04   9.9831e-05   4.5761e-04   3.7601e-04   9.8233e-05   2.3541e-04

```
8.0420e-04   8.4472e-04   4.7589e-04   9.9476e-06  -2.8184e-04  -1.9511e-04
5.5183e-04   4.9754e-04   1.2594e-04  -5.9686e-05  -1.6156e-04  -1.4966e-04
```

Columns 19 through 22:

```
 1.4486e-04  -2.9881e-04  -4.5226e-04  -1.9855e-04
 4.9738e-04  -4.8965e-04  -9.3177e-04  -4.2988e-04
 7.4953e-04  -4.8539e-05  -8.0467e-04  -4.7247e-04
 6.7624e-04   4.3161e-04  -2.6723e-04  -2.8326e-04
 1.7619e-04   4.7553e-04   5.5784e-04   2.4072e-04
-4.6068e-04   2.9097e-04   1.3076e-03   7.3341e-04
-4.2766e-04   4.0272e-04   1.5419e-03   8.7472e-04
 3.0531e-05   7.4207e-04   1.1729e-03   5.6632e-04
 7.4294e-04   8.6318e-04   5.8622e-04   1.5710e-04
 1.1836e-03   5.9224e-04   9.9476e-05  -2.9066e-05
 5.7818e-04   1.6924e-04  -4.4542e-05  -4.0656e-05
-4.8295e-04  -1.9700e-04   3.1519e-04   2.0892e-04
-9.5193e-04  -3.0649e-04   8.0420e-04   5.5183e-04
-6.6356e-04   9.9831e-05   8.4472e-04   4.9754e-04
-4.2077e-05   4.5761e-04   4.7589e-04   1.2594e-04
 5.7645e-04   3.7601e-04   9.9476e-06  -5.9686e-05
 8.4781e-04   9.8233e-05  -2.8184e-04  -1.6156e-04
 1.0423e-03   2.3541e-04  -1.9511e-04  -1.4966e-04
 1.1574e-03   6.6687e-04  -6.1195e-05  -1.5330e-04
 6.6687e-04   9.5457e-04   7.8311e-04   2.5222e-04
-6.1195e-05   7.8311e-04   1.6511e-03   8.3322e-04
-1.5330e-04   2.5222e-04   8.3322e-04   4.7202e-04
```

Iteration 7/100 μ:
 0.026545

Iteration 7/100 d:
  0.041501
  0.018304
 -0.055904
 -0.209665
 -0.664122
 -1.118080
 -1.251209
 -0.993046
 -0.827552
 -0.854228
 -0.399578
 -0.211528
 -0.523065
 -0.546105
 -0.452304
 -0.483689
 -0.629272

-0.732592
-0.605632
-0.894676
-1.336605
-0.665602

μ = 0.026545 / 2 -> 0.013273

Iteration 7/100 w(t):
   1.1864   11.5353
   2.2264   11.8159
   3.0165   12.7170
   3.5755   13.9500
   3.4794   14.9345
   3.4099   15.6858
   4.0640   16.4367
   5.6435   17.6565
   7.0626   17.8992
   8.0870   17.8348
  10.1314   20.4317

Iteration 7/100 error:
 0.82627

Iteration 7/100 gradient:
 -1.2234e-03
 -4.6779e-04
 1.5389e-03
 5.5962e-03
 1.7634e-02
 2.9547e-02
 3.3262e-02
 2.6298e-02
 2.1900e-02
 2.2628e-02
 1.0490e-02
 5.4969e-03
 1.3812e-02
 1.4550e-02
 1.1851e-02
 1.2956e-02
 1.6579e-02
 1.9501e-02
 1.6080e-02
 2.3704e-02
 3.5372e-02
 1.7485e-02

Iteration 7/100 gradient norm:

0.088839

Iteration 8/100 Hessian matrix:
 Columns 1 through 6:

  3.3723e-04 6.6737e-04 4.3412e-04 5.1015e-05 -2.3087e-04 -2.7653e-04
  6.6737e-04 1.4277e-03 1.0380e-03 1.6085e-04 -4.0580e-04 -6.7303e-04
  4.3412e-04 1.0380e-03 1.0270e-03 4.8426e-04 -2.1206e-04 -7.7158e-04
  5.1015e-05 1.6085e-04 4.8426e-04 6.5706e-04 1.5352e-04 -4.6815e-04
 -2.3087e-04 -4.0580e-04 -2.1206e-04 1.5352e-04 4.1064e-04 3.9230e-04
 -2.7653e-04 -6.7303e-04 -7.7158e-04 -4.6815e-04 3.9230e-04 1.3158e-03
 -3.2018e-04 -7.9392e-04 -9.1057e-04 -5.0725e-04 4.2161e-04 1.4577e-03
 -4.9283e-04 -9.4810e-04 -6.6573e-04 -3.0387e-05 5.8114e-04 8.6054e-04
 -1.8522e-04 -2.9694e-04 7.1132e-05 4.5181e-04 3.6960e-04 1.0041e-04
  3.2637e-04 8.0747e-04 8.3517e-04 4.7796e-04 4.9294e-06 -2.7586e-04
  2.1432e-04 5.6507e-04 4.8924e-04 1.5357e-04 -5.6377e-05 -1.4476e-04
 -8.8052e-05 -2.0568e-04 -3.4527e-04 -3.4297e-04 5.8464e-05 5.1447e-04
 -2.1787e-04 -5.4755e-04 -8.4491e-04 -7.2151e-04 2.0256e-04 1.1308e-03
 -3.4115e-04 -8.4340e-04 -8.7149e-04 -3.8496e-04 3.2990e-04 9.4418e-04
 -3.4865e-04 -7.3415e-04 -3.9788e-04 1.7546e-04 3.6463e-04 3.1103e-04
  4.8517e-05 1.8584e-04 3.1184e-04 3.6785e-04 1.7174e-04 -1.7881e-04
  5.1098e-04 1.1298e-03 9.4923e-04 3.2347e-04 -1.6719e-04 -3.1514e-04
  5.1059e-04 1.1906e-03 1.0664e-03 3.8555e-04 -1.5407e-04 -3.4666e-04
  1.5355e-04 4.8694e-04 7.2988e-04 6.7418e-04 1.7187e-04 -4.4315e-04
 -2.8231e-04 -4.9722e-04 -7.0233e-05 4.2917e-04 4.7533e-04 2.9633e-04
 -4.4885e-04 -9.2223e-04 -7.9362e-04 -2.5703e-04 5.7768e-04 1.3335e-03
 -1.9413e-04 -4.1176e-04 -4.6988e-04 -2.6609e-04 2.5953e-04 7.6810e-04

 Columns 7 through 12:

 -3.2018e-04 -4.9283e-04 -1.8522e-04 3.2637e-04 2.1432e-04 -8.8052e-05
 -7.9392e-04 -9.4810e-04 -2.9694e-04 8.0747e-04 5.6507e-04 -2.0568e-04
 -9.1057e-04 -6.6573e-04 7.1132e-05 8.3517e-04 4.8924e-04 -3.4527e-04
 -5.0725e-04 -3.0387e-05 4.5181e-04 4.7796e-04 1.5357e-04 -3.4297e-04
  4.2161e-04 5.8114e-04 3.6960e-04 4.9294e-06 -5.6377e-05 5.8464e-05
  1.4577e-03 8.6054e-04 1.0041e-04 -2.7586e-04 -1.4476e-04 5.1447e-04
  1.6807e-03 1.0356e-03 2.3922e-04 -2.0314e-04 -1.5735e-04 5.1473e-04
  1.0356e-03 1.1739e-03 6.6502e-04 -7.4507e-05 -1.5116e-04 1.5812e-04
  2.3922e-04 6.6502e-04 9.4103e-04 7.8175e-04 2.6239e-04 -2.8488e-04
 -2.0314e-04 -7.4507e-05 7.8175e-04 1.6512e-03 8.5025e-04 -4.7241e-04
 -1.5735e-04 -1.5116e-04 2.6239e-04 8.5025e-04 4.6290e-04 -2.0280e-04
  5.1473e-04 1.5812e-04 -2.8488e-04 -4.7241e-04 -2.0280e-04 3.4750e-04
  1.1929e-03 4.9841e-04 -4.8925e-04 -9.5679e-04 -4.3399e-04 6.6298e-04
  1.0728e-03 7.3834e-04 -6.0241e-05 -8.1017e-04 -4.8543e-04 4.3059e-04
  3.8159e-04 6.6923e-04 4.2237e-04 -2.7388e-04 -2.8688e-04 3.5683e-05
 -1.5676e-04 1.8960e-04 4.7889e-04 5.5879e-04 2.4104e-04 -2.3737e-04
 -3.3902e-04 -4.2405e-04 3.0713e-04 1.3238e-03 7.6203e-04 -2.8286e-04
 -3.8288e-04 -4.3823e-04 4.0471e-04 1.5354e-03 8.6273e-04 -3.3277e-04
 -4.4160e-04 3.0509e-05 7.4162e-04 1.1818e-03 5.5286e-04 -5.0144e-04

```
  4.0878e-04   7.3977e-04   8.6282e-04   5.7631e-04   1.5717e-04  -1.9119e-04
  1.5503e-03   1.2076e-03   5.9731e-04   1.0104e-04  -2.5735e-05   3.3757e-04
  8.9289e-04   5.8128e-04   1.7997e-04  -2.9010e-05  -3.3695e-05   2.3725e-04
```

Columns 13 through 18:

```
 -2.1787e-04  -3.4115e-04  -3.4865e-04   4.8517e-05   5.1098e-04   5.1059e-04
 -5.4755e-04  -8.4340e-04  -7.3415e-04   1.8584e-04   1.1298e-03   1.1906e-03
 -8.4491e-04  -8.7149e-04  -3.9788e-04   3.1184e-04   9.4923e-04   1.0664e-03
 -7.2151e-04  -3.8496e-04   1.7546e-04   3.6785e-04   3.2347e-04   3.8555e-04
  2.0256e-04   3.2990e-04   3.6463e-04   1.7174e-04  -1.6719e-04  -1.5407e-04
  1.1308e-03   9.4418e-04   3.1103e-04  -1.7881e-04  -3.1514e-04  -3.4666e-04
  1.1929e-03   1.0728e-03   3.8159e-04  -1.5676e-04  -3.3902e-04  -3.8288e-04
  4.9841e-04   7.3834e-04   6.6923e-04   1.8960e-04  -4.2405e-04  -4.3823e-04
 -4.8925e-04  -6.0241e-05   4.2237e-04   4.7889e-04   3.0713e-04   4.0471e-04
 -9.5679e-04  -8.1017e-04  -2.7388e-04   5.5879e-04   1.3238e-03   1.5354e-03
 -4.3399e-04  -4.8543e-04  -2.8688e-04   2.4104e-04   7.6203e-04   8.6273e-04
  6.6298e-04   4.3059e-04   3.5683e-05  -2.3737e-04  -2.8286e-04  -3.3277e-04
  1.4318e-03   1.0396e-03   1.5626e-04  -4.1377e-04  -6.6009e-04  -8.0762e-04
  1.0396e-03   1.0227e-03   4.8029e-04  -2.1440e-04  -7.5867e-04  -9.0974e-04
  1.5626e-04   4.8029e-04   6.3980e-04   1.4236e-04  -4.7650e-04  -5.1532e-04
 -4.1377e-04  -2.1440e-04   1.4236e-04   3.9118e-04   3.8430e-04   4.1779e-04
 -6.6009e-04  -7.5867e-04  -4.7650e-04   3.8430e-04   1.3140e-03   1.4564e-03
 -8.0762e-04  -9.0974e-04  -5.1532e-04   4.1779e-04   1.4564e-03   1.6906e-03
 -9.6779e-04  -6.6660e-04  -4.3843e-05   5.6325e-04   8.4908e-04   1.0189e-03
 -2.9778e-04   7.0988e-05   4.5124e-04   3.5503e-04   1.0560e-04   2.3093e-04
  8.1697e-04   8.5794e-04   4.8362e-04   1.3800e-05  -2.5265e-04  -2.0967e-04
  5.6996e-04   5.1202e-04   1.5730e-04  -4.5008e-05  -1.3577e-04  -1.4909e-04
```

Columns 19 through 22:

```
  1.5355e-04  -2.8231e-04  -4.4885e-04  -1.9413e-04
  4.8694e-04  -4.9722e-04  -9.2223e-04  -4.1176e-04
  7.2988e-04  -7.0233e-05  -7.9362e-04  -4.6988e-04
  6.7418e-04   4.2917e-04  -2.5703e-04  -2.6609e-04
  1.7187e-04   4.7533e-04   5.7768e-04   2.5953e-04
 -4.4315e-04   2.9633e-04   1.3335e-03   7.6810e-04
 -4.4160e-04   4.0878e-04   1.5503e-03   8.9289e-04
  3.0509e-05   7.3977e-04   1.2076e-03   5.8128e-04
  7.4162e-04   8.6282e-04   5.9731e-04   1.7997e-04
  1.1818e-03   5.7631e-04   1.0104e-04  -2.9010e-05
  5.5286e-04   1.5717e-04  -2.5735e-05  -3.3695e-05
 -5.0144e-04  -1.9119e-04   3.3757e-04   2.3725e-04
 -9.6779e-04  -2.9778e-04   8.1697e-04   5.6996e-04
 -6.6660e-04   7.0988e-05   8.5794e-04   5.1202e-04
 -4.3843e-05   4.5124e-04   4.8362e-04   1.5730e-04
  5.6325e-04   3.5503e-04   1.3800e-05  -4.5008e-05
  8.4908e-04   1.0560e-04  -2.5265e-04  -1.3577e-04
  1.0189e-03   2.3093e-04  -2.0967e-04  -1.4909e-04
```

```
 1.1463e-03   6.3610e-04  -6.2728e-05  -1.4354e-04
 6.3610e-04   9.3321e-04   7.8605e-04   2.7501e-04
-6.2728e-05   7.8605e-04   1.6767e-03   8.7154e-04
-1.4354e-04   2.7501e-04   8.7154e-04   4.9520e-04
```

Iteration 8/100 μ:
 0.013273

Iteration 8/100 d:
 -0.049197
 -0.218370
 -0.282285
 -0.370242
 -0.945648
 -1.536618
 -1.684876
 -1.277455
 -1.072388
 -1.200401
 -0.585517
 -0.343852
 -0.808020
 -0.785468
 -0.632285
 -0.748632
 -0.997165
 -1.151396
 -0.883825
 -1.170681
 -1.708734
 -0.843795

μ = 0.013273 / 2 -> 0.006636

Iteration 8/100 w(t):
    1.1372   11.1914
    2.0080   11.0079
    2.7342   11.9315
    3.2053   13.3177
    2.5338   14.1858
    1.8733   14.6886
    2.3791   15.2853
    4.3661   16.7727
    5.9902   16.7286
    6.8866   16.1261
    9.5459   19.5879

Iteration 8/100 error:
 0.47998

Iteration 8/100 gradient:
  6.6641e-04
  2.9163e-03
  3.6433e-03
  4.9655e-03
  1.2660e-02
  2.0471e-02
  2.2416e-02
  1.7064e-02
  1.4217e-02
  1.5791e-02
  7.6056e-03
  4.5408e-03
  1.0703e-02
  1.0367e-02
  8.2838e-03
  9.9319e-03
  1.3382e-02
  1.5235e-02
  1.1614e-02
  1.5400e-02
  2.2810e-02
  1.1318e-02

Iteration 8/100 gradient norm:
 0.061407

Iteration 9/100 Hessian matrix:
 Columns 1 through 6:

  3.3937e-04   6.6126e-04   4.3818e-04   5.1770e-05 -2.3624e-04 -2.8960e-04
  6.6126e-04   1.4272e-03   1.0445e-03   1.5782e-04 -4.2093e-04 -6.7401e-04
  4.3818e-04   1.0445e-03   1.0238e-03   4.7082e-04 -2.2485e-04 -7.7311e-04
  5.1770e-05   1.5782e-04   4.7082e-04   6.4601e-04   1.3162e-04 -4.8097e-04
 -2.3624e-04 -4.2093e-04 -2.2485e-04   1.3162e-04   3.8528e-04   3.7305e-04
 -2.8960e-04 -6.7401e-04 -7.7311e-04 -4.8097e-04   3.7305e-04   1.2986e-03
 -3.2919e-04 -7.9608e-04 -9.0423e-04 -5.1662e-04   4.2672e-04   1.4585e-03
 -4.8596e-04 -9.6020e-04 -6.8215e-04 -4.9588e-05   5.6612e-04   8.4767e-04
 -1.8000e-04 -2.9384e-04   7.4657e-05   4.5546e-04   3.5651e-04   1.0265e-04
  3.3004e-04   8.1036e-04   8.4967e-04   4.8587e-04   7.6494e-06 -2.5834e-04
  2.2765e-04   5.6588e-04   4.9968e-04   1.5267e-04 -6.1467e-05 -1.5444e-04
 -8.6664e-05 -2.1527e-04 -3.4849e-04 -3.5307e-04   4.5586e-05   5.0641e-04
 -2.1120e-04 -5.4517e-04 -8.4672e-04 -7.3107e-04   1.8754e-04   1.1196e-03
 -3.4194e-04 -8.4533e-04 -8.7386e-04 -3.8983e-04   3.2215e-04   9.4575e-04
 -3.5292e-04 -7.2851e-04 -4.0000e-04   1.7064e-04   3.5307e-04   3.0139e-04
  5.1720e-05   1.8910e-04   3.1212e-04   3.5519e-04   1.5581e-04 -1.8527e-04
  5.0456e-04   1.1173e-03   9.4410e-04   3.0261e-04 -1.8232e-04 -3.2817e-04
  5.0407e-04   1.1851e-03   1.0748e-03   3.8243e-04 -1.5001e-04 -3.4572e-04

```
 1.4944e-04   4.8571e-04   7.2620e-04   6.6863e-04   1.7364e-04  -4.5118e-04
-2.8557e-04  -4.9019e-04  -7.3752e-05   4.2378e-04   4.7643e-04   2.9947e-04
-4.5547e-04  -9.4098e-04  -8.1844e-04  -2.7986e-04   5.5642e-04   1.3155e-03
-1.8870e-04  -4.2250e-04  -4.6881e-04  -2.7476e-04   2.4862e-04   7.5562e-04
```

Columns 7 through 12:

```
-3.2919e-04  -4.8596e-04  -1.8000e-04   3.3004e-04   2.2765e-04  -8.6664e-05
-7.9608e-04  -9.6020e-04  -2.9384e-04   8.1036e-04   5.6588e-04  -2.1527e-04
-9.0423e-04  -6.8215e-04   7.4657e-05   8.4967e-04   4.9968e-04  -3.4849e-04
-5.1662e-04  -4.9588e-05   4.5546e-04   4.8587e-04   1.5267e-04  -3.5307e-04
 4.2672e-04   5.6612e-04   3.5651e-04   7.6494e-06  -6.1467e-05   4.5586e-05
 1.4585e-03   8.4767e-04   1.0265e-04  -2.5834e-04  -1.5444e-04   5.0641e-04
 1.6900e-03   1.0323e-03   2.3974e-04  -1.9543e-04  -1.4507e-04   5.0671e-04
 1.0323e-03   1.1610e-03   6.5228e-04  -5.4029e-05  -1.4741e-04   1.5420e-04
 2.3974e-04   6.5228e-04   9.4784e-04   7.9182e-04   2.6987e-04  -2.8565e-04
-1.9543e-04  -5.4029e-05   7.9182e-04   1.6709e-03   8.5869e-04  -4.4333e-04
-1.4507e-04  -1.4741e-04   2.6987e-04   8.5869e-04   4.8918e-04  -1.9406e-04
 5.0671e-04   1.5420e-04  -2.8565e-04  -4.4333e-04  -1.9406e-04   3.4136e-04
 1.1893e-03   4.9629e-04  -4.9472e-04  -9.3295e-04  -4.2880e-04   6.6863e-04
 1.0851e-03   7.3605e-04  -6.6053e-05  -7.9818e-04  -4.7305e-04   4.4541e-04
 3.8367e-04   6.7385e-04   4.2303e-04  -2.7352e-04  -2.7044e-04   5.0987e-05
-1.4587e-04   1.7804e-04   4.7122e-04   5.6814e-04   2.4496e-04  -2.3766e-04
-3.4054e-04  -4.4649e-04   2.9932e-04   1.3229e-03   7.5057e-04  -2.9055e-04
-3.8063e-04  -4.3046e-04   4.0556e-04   1.5466e-03   8.7768e-04  -3.2951e-04
-4.3174e-04   3.9196e-05   7.4346e-04   1.1911e-03   5.7082e-04  -4.8935e-04
 4.0962e-04   7.4561e-04   8.7229e-04   5.9144e-04   1.7180e-04  -1.8033e-04
 1.5362e-03   1.1867e-03   5.8192e-04   1.0599e-04  -2.5174e-05   3.2599e-04
 8.7859e-04   5.7603e-04   1.7625e-04  -1.4500e-05  -2.1616e-05   2.3217e-04
```

Columns 13 through 18:

```
-2.1120e-04  -3.4194e-04  -3.5292e-04   5.1720e-05   5.0456e-04   5.0407e-04
-5.4517e-04  -8.4533e-04  -7.2851e-04   1.8910e-04   1.1173e-03   1.1851e-03
-8.4672e-04  -8.7386e-04  -4.0000e-04   3.1212e-04   9.4410e-04   1.0748e-03
-7.3107e-04  -3.8983e-04   1.7064e-04   3.5519e-04   3.0261e-04   3.8243e-04
 1.8754e-04   3.2215e-04   3.5307e-04   1.5581e-04  -1.8232e-04  -1.5001e-04
 1.1196e-03   9.4575e-04   3.0139e-04  -1.8527e-04  -3.2817e-04  -3.4572e-04
 1.1893e-03   1.0851e-03   3.8367e-04  -1.4587e-04  -3.4054e-04  -3.8063e-04
 4.9629e-04   7.3605e-04   6.7385e-04   1.7804e-04  -4.4649e-04  -4.3046e-04
-4.9472e-04  -6.6053e-05   4.2303e-04   4.7122e-04   2.9932e-04   4.0556e-04
-9.3295e-04  -7.9818e-04  -2.7352e-04   5.6814e-04   1.3229e-03   1.5466e-03
-4.2880e-04  -4.7305e-04  -2.7044e-04   2.4496e-04   7.5057e-04   8.7768e-04
 6.6863e-04   4.4541e-04   5.0987e-05  -2.3766e-04  -2.9055e-04  -3.2951e-04
 1.4348e-03   1.0522e-03   1.6136e-04  -4.1609e-04  -6.6824e-04  -7.9294e-04
 1.0522e-03   1.0373e-03   4.7439e-04  -2.1088e-04  -7.6210e-04  -8.9772e-04
 1.6136e-04   4.7439e-04   6.4654e-04   1.3740e-04  -4.8104e-04  -5.1464e-04
-4.1609e-04  -2.1088e-04   1.3740e-04   3.9164e-04   3.7287e-04   4.2646e-04
-6.6824e-04  -7.6210e-04  -4.8104e-04   3.7287e-04   1.3031e-03   1.4542e-03
```

```
-7.9294e-04  -8.9772e-04  -5.1464e-04   4.2646e-04   1.4542e-03   1.6871e-03
-9.5504e-04  -6.7533e-04  -4.6868e-05   5.6687e-04   8.4538e-04   1.0342e-03
-2.9052e-04   8.2162e-05   4.5526e-04   3.6295e-04   1.0399e-04   2.4000e-04
 8.1222e-04   8.4619e-04   4.8312e-04  -1.5543e-07  -2.7050e-04  -2.1065e-04
 5.7599e-04   5.1034e-04   1.5777e-04  -5.3108e-05  -1.4503e-04  -1.4325e-04
```

Columns 19 through 22:

```
 1.4944e-04  -2.8557e-04  -4.5547e-04  -1.8870e-04
 4.8571e-04  -4.9019e-04  -9.4098e-04  -4.2250e-04
 7.2620e-04  -7.3752e-05  -8.1844e-04  -4.6881e-04
 6.6863e-04   4.2378e-04  -2.7986e-04  -2.7476e-04
 1.7364e-04   4.7643e-04   5.5642e-04   2.4862e-04
-4.5118e-04   2.9947e-04   1.3155e-03   7.5562e-04
-4.3174e-04   4.0962e-04   1.5362e-03   8.7859e-04
 3.9196e-05   7.4561e-04   1.1867e-03   5.7603e-04
 7.4346e-04   8.7229e-04   5.8192e-04   1.7625e-04
 1.1911e-03   5.9144e-04   1.0599e-04  -1.4500e-05
 5.7082e-04   1.7180e-04  -2.5174e-05  -2.1616e-05
-4.8935e-04  -1.8033e-04   3.2599e-04   2.3217e-04
-9.5504e-04  -2.9052e-04   8.1222e-04   5.7599e-04
-6.7533e-04   8.2162e-05   8.4619e-04   5.1034e-04
-4.6868e-05   4.5526e-04   4.8312e-04   1.5777e-04
 5.6687e-04   3.6295e-04  -1.5543e-07  -5.3108e-05
 8.4538e-04   1.0399e-04  -2.7050e-04  -1.4503e-04
 1.0342e-03   2.4000e-04  -2.1065e-04  -1.4325e-04
 1.1581e-03   6.5202e-04  -6.7263e-05  -1.4214e-04
 6.5202e-04   9.4808e-04   7.8562e-04   2.7842e-04
-6.7263e-05   7.8562e-04   1.6532e-03   8.5424e-04
-1.4214e-04   2.7842e-04   8.5424e-04   4.9198e-04
```

Iteration 9/100 μ:
 0.0066363

Iteration 9/100 d:
 -0.28818
 -0.73705
 -0.72314
 -0.63443
 -1.18756
 -1.74266
 -1.75942
 -1.25949
 -0.98829
 -1.16077
 -0.60869
 -0.55312
 -1.17819
 -1.01579

-0.80619
-0.98863
-1.32319
-1.41069
-0.97267
-1.08948
-1.61358
-0.78843

μ = 0.006636 / 2 -> 0.003318

Iteration 9/100 w(t):
   0.84906 10.63833
   1.27096   9.82970
   2.01105 10.91570
   2.57086 12.51150
   1.34623 13.19722
   0.13063 13.36543
   0.61970 13.87457
   3.10658 15.80002
   5.00191 15.63907
   5.72582 14.51247
   8.93720 18.79945

Iteration 9/100 error:
 0.23542

Iteration 9/100 gradient:
  0.0018795
  0.0048162
  0.0046124
  0.0040479
  0.0077750
  0.0114998
  0.0117609
  0.0083515
  0.0064903
  0.0077854
  0.0039828
  0.0036474
  0.0078185
  0.0067219
  0.0052128
  0.0064959
  0.0087441
  0.0094128
  0.0064035
  0.0072016
  0.0105815

0.0052809

Iteration 9/100 gradient norm:
 0.034213

Iteration 10/100 Hessian matrix:
 Columns 1 through 6:

  3.3593e-04   6.6139e-04   4.4403e-04   4.7540e-05 -2.3474e-04 -2.9199e-04
  6.6139e-04   1.4298e-03   1.0483e-03   1.6213e-04 -4.1276e-04 -6.7198e-04
  4.4403e-04   1.0483e-03   1.0331e-03   4.7864e-04 -2.1196e-04 -7.6721e-04
  4.7540e-05   1.6213e-04   4.7864e-04   6.5580e-04   1.3747e-04 -4.8049e-04
 -2.3474e-04 -4.1276e-04 -2.1196e-04   1.3747e-04   3.9672e-04   3.7910e-04
 -2.9199e-04 -6.7198e-04 -7.6721e-04 -4.8049e-04   3.7910e-04   1.3039e-03
 -3.3457e-04 -8.0522e-04 -9.0882e-04 -5.1583e-04   4.2375e-04   1.4495e-03
 -4.8758e-04 -9.5513e-04 -6.7442e-04 -4.7862e-05   5.6891e-04   8.4838e-04
 -1.8107e-04 -2.9295e-04   7.6850e-05   4.6420e-04   3.6468e-04   1.0638e-04
  3.2957e-04   8.1481e-04   8.5283e-04   4.8425e-04   6.3921e-06 -2.6918e-04
  2.2723e-04   5.6777e-04   5.0664e-04   1.6291e-04 -5.2802e-05 -1.4891e-04
 -8.8687e-05 -2.1600e-04 -3.4892e-04 -3.4841e-04   5.1859e-05   5.0766e-04
 -2.1562e-04 -5.4739e-04 -8.4416e-04 -7.2653e-04   1.9482e-04   1.1212e-03
 -3.4223e-04 -8.4324e-04 -8.6792e-04 -3.8748e-04   3.2681e-04   9.4718e-04
 -3.4975e-04 -7.2511e-04 -3.8805e-04   1.8229e-04   3.5945e-04   3.1031e-04
  4.8500e-05   1.9239e-04   3.2439e-04   3.5917e-04   1.6533e-04 -1.7870e-04
  5.0305e-04   1.1172e-03   9.3970e-04   3.0422e-04 -1.8119e-04 -3.2275e-04
  4.9988e-04   1.1842e-03   1.0733e-03   3.8337e-04 -1.5106e-04 -3.4611e-04
  1.4997e-04   4.9193e-04   7.3711e-04   6.7287e-04   1.7767e-04 -4.4411e-04
 -2.8819e-04 -4.9346e-04 -6.5942e-05   4.3106e-04   4.7440e-04   3.0103e-04
 -4.5379e-04 -9.3915e-04 -8.0498e-04 -2.7407e-04   5.6059e-04   1.3221e-03
 -1.9248e-04 -4.2506e-04 -4.7424e-04 -2.7072e-04   2.4795e-04   7.5825e-04

 Columns 7 through 12:

 -3.3457e-04 -4.8758e-04 -1.8107e-04   3.2957e-04   2.2723e-04 -8.8687e-05
 -8.0522e-04 -9.5513e-04 -2.9295e-04   8.1481e-04   5.6777e-04 -2.1600e-04
 -9.0882e-04 -6.7442e-04   7.6850e-05   8.5283e-04   5.0664e-04 -3.4892e-04
 -5.1583e-04 -4.7862e-05   4.6420e-04   4.8425e-04   1.6291e-04 -3.4841e-04
  4.2375e-04   5.6891e-04   3.6468e-04   6.3921e-06 -5.2802e-05   5.1859e-05
  1.4495e-03   8.4838e-04   1.0638e-04 -2.6918e-04 -1.4891e-04   5.0766e-04
  1.6819e-03   1.0282e-03   2.3616e-04 -2.0637e-04 -1.4695e-04   5.0454e-04
  1.0282e-03   1.1587e-03   6.5494e-04 -6.1789e-05 -1.4605e-04   1.5397e-04
  2.3616e-04   6.5494e-04   9.5113e-04   7.9155e-04   2.7585e-04 -2.8491e-04
 -2.0637e-04 -6.1789e-05   7.9155e-04   1.6637e-03   8.5877e-04 -4.4965e-04
 -1.4695e-04 -1.4605e-04   2.7585e-04   8.5877e-04   4.9050e-04 -1.9550e-04
  5.0454e-04   1.5397e-04 -2.8491e-04 -4.4965e-04 -1.9550e-04   3.3956e-04
  1.1858e-03   4.9287e-04 -4.9100e-04 -9.3422e-04 -4.2522e-04   6.6581e-04
  1.0774e-03   7.3950e-04 -6.1165e-05 -8.0087e-04 -4.6933e-04   4.4288e-04
  3.8332e-04   6.7541e-04   4.3114e-04 -2.7038e-04 -2.7056e-04   5.2230e-05
 -1.5257e-04   1.7449e-04   4.7355e-04   5.6332e-04   2.5099e-04 -2.3470e-04

```
-3.4884e-04  -4.4652e-04   2.9651e-04   1.3204e-03   7.5178e-04  -2.9300e-04
-3.8323e-04  -4.3653e-04   4.0548e-04   1.5392e-03   8.7583e-04  -3.3319e-04
-4.4025e-04   3.3515e-05   7.4624e-04   1.1870e-03   5.7736e-04  -4.8558e-04
 4.0426e-04   7.4470e-04   8.7401e-04   5.8614e-04   1.7309e-04  -1.8303e-04
 1.5373e-03   1.1889e-03   5.8481e-04   1.0799e-04  -2.5371e-05   3.3117e-04
 8.7592e-04   5.7395e-04   1.7408e-04  -1.9604e-05  -2.3734e-05   2.2795e-04
```

Columns 13 through 18:

```
-2.1562e-04  -3.4223e-04  -3.4975e-04   4.8500e-05   5.0305e-04   4.9988e-04
-5.4739e-04  -8.4324e-04  -7.2511e-04   1.9239e-04   1.1172e-03   1.1842e-03
-8.4416e-04  -8.6792e-04  -3.8805e-04   3.2439e-04   9.3970e-04   1.0733e-03
-7.2653e-04  -3.8748e-04   1.8229e-04   3.5917e-04   3.0422e-04   3.8337e-04
 1.9482e-04   3.2681e-04   3.5945e-04   1.6533e-04  -1.8119e-04  -1.5106e-04
 1.1212e-03   9.4718e-04   3.1031e-04  -1.7870e-04  -3.2275e-04  -3.4611e-04
 1.1858e-03   1.0774e-03   3.8332e-04  -1.5257e-04  -3.4884e-04  -3.8323e-04
 4.9287e-04   7.3950e-04   6.7541e-04   1.7449e-04  -4.4652e-04  -4.3653e-04
-4.9100e-04  -6.1165e-05   4.3114e-04   4.7355e-04   2.9651e-04   4.0548e-04
-9.3422e-04  -8.0087e-04  -2.7038e-04   5.6332e-04   1.3204e-03   1.5392e-03
-4.2522e-04  -4.6933e-04  -2.7056e-04   2.5099e-04   7.5178e-04   8.7583e-04
 6.6581e-04   4.4288e-04   5.2230e-05  -2.3470e-04  -2.9300e-04  -3.3319e-04
 1.4344e-03   1.0534e-03   1.6282e-04  -4.1150e-04  -6.7407e-04  -7.9937e-04
 1.0534e-03   1.0419e-03   4.8718e-04  -2.1018e-04  -7.6444e-04  -9.0402e-04
 1.6282e-04   4.8718e-04   6.6228e-04   1.3992e-04  -4.8055e-04  -5.1258e-04
-4.1150e-04  -2.1018e-04   1.3992e-04   3.9451e-04   3.7424e-04   4.2239e-04
-6.7407e-04  -7.6444e-04  -4.8055e-04   3.7424e-04   1.2975e-03   1.4478e-03
-7.9937e-04  -9.0402e-04  -5.1258e-04   4.2239e-04   1.4478e-03   1.6777e-03
-9.5086e-04  -6.7264e-04  -4.1017e-05   5.6879e-04   8.4549e-04   1.0272e-03
-2.8789e-04   8.3242e-05   4.6866e-04   3.6058e-04   1.0329e-04   2.3891e-04
 8.1198e-04   8.5212e-04   4.8639e-04   4.0357e-06  -2.7262e-04  -2.0968e-04
 5.7027e-04   5.0783e-04   1.6291e-04  -4.9483e-05  -1.5060e-04  -1.4678e-04
```

Columns 19 through 22:

```
 1.4997e-04  -2.8819e-04  -4.5379e-04  -1.9248e-04
 4.9193e-04  -4.9346e-04  -9.3915e-04  -4.2506e-04
 7.3711e-04  -6.5942e-05  -8.0498e-04  -4.7424e-04
 6.7287e-04   4.3106e-04  -2.7407e-04  -2.7072e-04
 1.7767e-04   4.7440e-04   5.6059e-04   2.4795e-04
-4.4411e-04   3.0103e-04   1.3221e-03   7.5825e-04
-4.4025e-04   4.0426e-04   1.5373e-03   8.7592e-04
 3.3515e-05   7.4470e-04   1.1889e-03   5.7395e-04
 7.4624e-04   8.7401e-04   5.8481e-04   1.7408e-04
 1.1870e-03   5.8614e-04   1.0799e-04  -1.9604e-05
 5.7736e-04   1.7309e-04  -2.5371e-05  -2.3734e-05
-4.8558e-04  -1.8303e-04   3.3117e-04   2.2795e-04
-9.5086e-04  -2.8789e-04   8.1198e-04   5.7027e-04
-6.7264e-04   8.3242e-05   8.5212e-04   5.0783e-04
-4.1017e-05   4.6866e-04   4.8639e-04   1.6291e-04
```

```
 5.6879e-04   3.6058e-04   4.0357e-06  -4.9483e-05
 8.4549e-04   1.0329e-04  -2.7262e-04  -1.5060e-04
 1.0272e-03   2.3891e-04  -2.0968e-04  -1.4678e-04
 1.1571e-03   6.5679e-04  -6.4382e-05  -1.4172e-04
 6.5679e-04   9.5384e-04   7.8670e-04   2.7727e-04
-6.4382e-05   7.8670e-04   1.6618e-03   8.5739e-04
-1.4172e-04   2.7727e-04   8.5739e-04   4.9122e-04
```

Iteration 10/100 μ:
 0.0033181

Iteration 10/100 d:
 -0.60536
 -1.36979
 -1.28125
 -0.99993
 -1.32922
 -1.54521
 -1.32500
 -0.87807
 -0.46917
 -0.50826
 -0.30264
 -0.83883
 -1.61579
 -1.28165
 -1.04992
 -1.15079
 -1.31987
 -1.25829
 -0.75645
 -0.61034
 -0.79094
 -0.36578

μ = 0.003318 / 2 -> 0.001659

Iteration 10/100 w(t):
    0.243700   9.799495
   -0.098837   8.213905
    0.729798   9.634057
    1.570931 11.461579
    0.017016 12.046428
   -1.414588 12.045567
   -0.705301 12.616281
    2.228507 15.043567
    4.532741 15.028728
    5.217567 13.721537
    8.634560 18.433675

Iteration 10/100 error:
 0.11650

Iteration 10/100 gradient:
   0.0019417
   0.0044952
   0.0041778
   0.0032446
   0.0043973
   0.0051067
   0.0043621
   0.0028866
   0.0015309
   0.0016801
   0.0010032
   0.0027469
   0.0053538
   0.0042567
   0.0034625
   0.0037903
   0.0042965
   0.0041485
   0.0024878
   0.0020050
   0.0025740
   0.0012272

Iteration 10/100 gradient norm:
 0.016297

Iteration 11/100 Hessian matrix:
 Columns 1 through 6:

   3.4156e-04   6.6865e-04   4.4527e-04   5.3746e-05 -2.3125e-04 -2.8794e-04
   6.6865e-04   1.4329e-03   1.0516e-03   1.6480e-04 -4.1022e-04 -6.7215e-04
   4.4527e-04   1.0516e-03   1.0364e-03   4.8432e-04 -2.1119e-04 -7.6722e-04
   5.3746e-05   1.6480e-04   4.8432e-04   6.5952e-04   1.4086e-04 -4.8005e-04
  -2.3125e-04 -4.1022e-04 -2.1119e-04   1.4086e-04   3.9550e-04   3.7935e-04
  -2.8794e-04 -6.7215e-04 -7.6722e-04 -4.8005e-04   3.7935e-04   1.3021e-03
  -3.3153e-04 -8.0144e-04 -9.0852e-04 -5.1468e-04   4.2495e-04   1.4498e-03
  -4.8772e-04 -9.5151e-04 -6.7260e-04 -4.1449e-05   5.6908e-04   8.4870e-04
  -1.7869e-04 -2.8685e-04   8.1388e-05   4.6620e-04   3.6345e-04   1.0475e-04
   3.3344e-04   8.1462e-04   8.5481e-04   4.8844e-04   8.6667e-06 -2.6923e-04
   2.3082e-04   5.7083e-04   5.0799e-04   1.6262e-04 -5.2656e-05 -1.4965e-04
  -8.4299e-05 -2.1231e-04 -3.4439e-04 -3.4720e-04   5.1613e-05   5.0430e-04
  -2.1337e-04 -5.4650e-04 -8.4315e-04 -7.2285e-04   1.9477e-04   1.1213e-03
  -3.4128e-04 -8.4088e-04 -8.6735e-04 -3.8579e-04   3.2726e-04   9.4674e-04
  -3.4487e-04 -7.2209e-04 -3.8491e-04   1.8638e-04   3.6277e-04   3.1003e-04

5.3185e-05   1.9739e-04   3.2651e-04   3.6194e-04   1.6594e-04 -1.7921e-04
5.0802e-04   1.1223e-03   9.4764e-04   3.1156e-04 -1.7836e-04 -3.2476e-04
5.0452e-04   1.1876e-03   1.0760e-03   3.8754e-04 -1.5001e-04 -3.4743e-04
1.5597e-04   4.9474e-04   7.3893e-04   6.7923e-04   1.8067e-04 -4.4365e-04
-2.8563e-04 -4.9123e-04 -6.3545e-05   4.3454e-04   4.7604e-04   3.0172e-04
-4.5041e-04 -9.3688e-04 -8.0400e-04 -2.7259e-04   5.6306e-04   1.3208e-03
-1.9213e-04 -4.2407e-04 -4.7134e-04 -2.7001e-04   2.5013e-04   7.5488e-04

Columns 7 through 12:

-3.3153e-04 -4.8772e-04 -1.7869e-04   3.3344e-04   2.3082e-04 -8.4299e-05
-8.0144e-04 -9.5151e-04 -2.8685e-04   8.1462e-04   5.7083e-04 -2.1231e-04
-9.0852e-04 -6.7260e-04   8.1388e-05   8.5481e-04   5.0799e-04 -3.4439e-04
-5.1468e-04 -4.1449e-05   4.6620e-04   4.8844e-04   1.6262e-04 -3.4720e-04
4.2495e-04   5.6908e-04   3.6345e-04   8.6667e-06 -5.2656e-05   5.1613e-05
1.4498e-03   8.4870e-04   1.0475e-04 -2.6923e-04 -1.4965e-04   5.0430e-04
1.6822e-03   1.0273e-03   2.3727e-04 -2.0459e-04 -1.4884e-04   5.0329e-04
1.0273e-03   1.1565e-03   6.5638e-04 -6.1876e-05 -1.4240e-04   1.5472e-04
2.3727e-04   6.5638e-04   9.5115e-04   7.8966e-04   2.7598e-04 -2.8379e-04
-2.0459e-04 -6.1876e-05   7.8966e-04   1.6655e-03   8.6079e-04 -4.4998e-04
-1.4884e-04 -1.4240e-04   2.7598e-04   8.6079e-04   4.9030e-04 -1.9200e-04
5.0329e-04   1.5472e-04 -2.8379e-04 -4.4998e-04 -1.9200e-04   3.4181e-04
1.1861e-03   4.9278e-04 -4.9060e-04 -9.3417e-04 -4.2417e-04   6.6650e-04
1.0758e-03   7.3905e-04 -6.3999e-05 -8.0134e-04 -4.6957e-04   4.4614e-04
3.8827e-04   6.7798e-04   4.3483e-04 -2.7004e-04 -2.6909e-04   5.3664e-05
-1.5082e-04   1.7933e-04   4.7649e-04   5.6459e-04   2.5182e-04 -2.3067e-04
-3.4595e-04 -4.4389e-04   3.0198e-04   1.3231e-03   7.5610e-04 -2.8786e-04
-3.8226e-04 -4.3747e-04   4.0592e-04   1.5405e-03   8.7777e-04 -3.2942e-04
-4.3728e-04   3.8120e-05   7.4704e-04   1.1928e-03   5.7549e-04 -4.8602e-04
4.0508e-04   7.4680e-04   8.7365e-04   5.8800e-04   1.7471e-04 -1.7832e-04
1.5368e-03   1.1904e-03   5.8659e-04   1.0734e-04 -2.0559e-05   3.3099e-04
8.7625e-04   5.7329e-04   1.7374e-04 -2.0756e-05 -2.2767e-05   2.3022e-04

Columns 13 through 18:

-2.1337e-04 -3.4128e-04 -3.4487e-04   5.3185e-05   5.0802e-04   5.0452e-04
-5.4650e-04 -8.4088e-04 -7.2209e-04   1.9739e-04   1.1223e-03   1.1876e-03
-8.4315e-04 -8.6735e-04 -3.8491e-04   3.2651e-04   9.4764e-04   1.0760e-03
-7.2285e-04 -3.8579e-04   1.8638e-04   3.6194e-04   3.1156e-04   3.8754e-04
1.9477e-04   3.2726e-04   3.6277e-04   1.6594e-04 -1.7836e-04 -1.5001e-04
1.1213e-03   9.4674e-04   3.1003e-04 -1.7921e-04 -3.2476e-04 -3.4743e-04
1.1861e-03   1.0758e-03   3.8827e-04 -1.5082e-04 -3.4595e-04 -3.8226e-04
4.9278e-04   7.3905e-04   6.7798e-04   1.7933e-04 -4.4389e-04 -4.3747e-04
-4.9060e-04 -6.3999e-05   4.3483e-04   4.7649e-04   3.0198e-04   4.0592e-04
-9.3417e-04 -8.0134e-04 -2.7004e-04   5.6459e-04   1.3231e-03   1.5405e-03
-4.2417e-04 -4.6957e-04 -2.6909e-04   2.5182e-04   7.5610e-04   8.7777e-04
6.6650e-04   4.4614e-04   5.3664e-05 -2.3067e-04 -2.8786e-04 -3.2942e-04
1.4327e-03   1.0533e-03   1.6727e-04 -4.0955e-04 -6.7084e-04 -7.9916e-04
1.0533e-03   1.0402e-03   4.8612e-04 -2.0886e-04 -7.6336e-04 -9.0478e-04

```
 1.6727e-04   4.8612e-04   6.6265e-04   1.4472e-04  -4.7498e-04  -5.1050e-04
-4.0955e-04  -2.0886e-04   1.4472e-04   3.9930e-04   3.8262e-04   4.2678e-04
-6.7084e-04  -7.6336e-04  -4.7498e-04   3.8262e-04   1.3059e-03   1.4534e-03
-7.9916e-04  -9.0478e-04  -5.1050e-04   4.2678e-04   1.4534e-03   1.6864e-03
-9.5030e-04  -6.6929e-04  -3.8963e-05   5.7231e-04   8.5076e-04   1.0315e-03
-2.8768e-04   8.4041e-05   4.6952e-04   3.6564e-04   1.0573e-04   2.3851e-04
 8.1252e-04   8.5557e-04   4.8959e-04   8.5792e-06  -2.6719e-04  -2.0562e-04
 5.6878e-04   5.0896e-04   1.6332e-04  -5.0798e-05  -1.4735e-04  -1.4433e-04
```

Columns 19 through 22:

```
 1.5597e-04  -2.8563e-04  -4.5041e-04  -1.9213e-04
 4.9474e-04  -4.9123e-04  -9.3688e-04  -4.2407e-04
 7.3893e-04  -6.3545e-05  -8.0400e-04  -4.7134e-04
 6.7923e-04   4.3454e-04  -2.7259e-04  -2.7001e-04
 1.8067e-04   4.7604e-04   5.6306e-04   2.5013e-04
-4.4365e-04   3.0172e-04   1.3208e-03   7.5488e-04
-4.3728e-04   4.0508e-04   1.5368e-03   8.7625e-04
 3.8120e-05   7.4680e-04   1.1904e-03   5.7329e-04
 7.4704e-04   8.7365e-04   5.8659e-04   1.7374e-04
 1.1928e-03   5.8800e-04   1.0734e-04  -2.0756e-05
 5.7549e-04   1.7471e-04  -2.0559e-05  -2.2767e-05
-4.8602e-04  -1.7832e-04   3.3099e-04   2.3022e-04
-9.5030e-04  -2.8768e-04   8.1252e-04   5.6878e-04
-6.6929e-04   8.4041e-05   8.5557e-04   5.0896e-04
-3.8963e-05   4.6952e-04   4.8959e-04   1.6332e-04
 5.7231e-04   3.6564e-04   8.5792e-06  -5.0798e-05
 8.5076e-04   1.0573e-04  -2.6719e-04  -1.4735e-04
 1.0315e-03   2.3851e-04  -2.0562e-04  -1.4433e-04
 1.1607e-03   6.5711e-04  -6.2322e-05  -1.4114e-04
 6.5711e-04   9.5250e-04   7.8921e-04   2.7575e-04
-6.2322e-05   7.8921e-04   1.6623e-03   8.5948e-04
-1.4114e-04   2.7575e-04   8.5948e-04   4.9032e-04
```

Iteration 11/100 μ:
 0.0016591

Iteration 11/100 d:
 -0.783480
 -1.791420
 -1.824007
 -1.518880
 -1.544957
 -1.173071
 -0.591899
 -0.466308
  0.068022
  0.459902
  0.196447
```

```
  -1.090889
  -1.949557
  -1.557021
  -1.492986
  -1.305166
  -0.993924
  -0.766434
  -0.444720
  -0.141776
   0.239330
   0.230951
```

μ = 0.001659 / 2 -> 0.000830

Iteration 11/100 w(t):
```
  -0.539780    8.708605
  -1.890258    6.264347
  -1.094209    8.077036
   0.052052    9.968594
  -1.527942   10.741262
  -2.587659   11.051643
  -1.297199   11.849847
   1.762199   14.598847
   4.600763   14.886951
   5.677469   13.960868
   8.831007   18.664626
```

Iteration 11/100 error:
 0.055854

Iteration 11/100 gradient:
```
   1.3118e-03
   2.9838e-03
   3.0088e-03
   2.5197e-03
   2.5735e-03
   1.9197e-03
   9.7220e-04
   7.7673e-04
  -1.0893e-04
  -7.4562e-04
  -3.0317e-04
   1.8085e-03
   3.2427e-03
   2.5947e-03
   2.5069e-03
   2.2000e-03
   1.6608e-03
   1.2924e-03
```

7.7278e-04
2.4781e-04
-4.0290e-04
-3.6319e-04

Iteration 11/100 gradient norm:
0.0086929

Iteration 12/100 Hessian matrix:
Columns 1 through 6:

```
 3.4395e-04  6.6882e-04  4.4747e-04  5.5791e-05 -2.3076e-04 -2.8757e-04
 6.6882e-04  1.4333e-03  1.0519e-03  1.6647e-04 -4.1028e-04 -6.7131e-04
 4.4747e-04  1.0519e-03  1.0380e-03  4.8464e-04 -2.1104e-04 -7.6368e-04
 5.5791e-05  1.6647e-04  4.8464e-04  6.6031e-04  1.4097e-04 -4.7773e-04
-2.3076e-04 -4.1028e-04 -2.1104e-04  1.4097e-04  3.9610e-04  3.8019e-04
-2.8757e-04 -6.7131e-04 -7.6368e-04 -4.7773e-04  3.8019e-04  1.3042e-03
-3.2865e-04 -7.9933e-04 -9.0533e-04 -5.1279e-04  4.2529e-04  1.4522e-03
-4.8448e-04 -9.5048e-04 -6.7034e-04 -3.9469e-05  5.6970e-04  8.5119e-04
-1.7793e-04 -2.8799e-04  8.2168e-05  4.6751e-04  3.6295e-04  1.0641e-04
 3.3352e-04  8.1444e-04  8.5503e-04  4.8827e-04  6.6495e-06 -2.6861e-04
 2.3082e-04  5.7016e-04  5.0732e-04  1.6180e-04 -5.4393e-05 -1.4917e-04
-8.2964e-05 -2.1299e-04 -3.4231e-04 -3.4667e-04  5.2008e-05  5.0674e-04
-2.1242e-04 -5.4664e-04 -8.4197e-04 -7.2316e-04  1.9423e-04  1.1216e-03
-3.4127e-04 -8.4174e-04 -8.6867e-04 -3.8508e-04  3.2559e-04  9.4822e-04
-3.4471e-04 -7.2320e-04 -3.8507e-04  1.8556e-04  3.6119e-04  3.1098e-04
 5.3196e-05  1.9489e-04  3.2583e-04  3.6057e-04  1.6529e-04 -1.7962e-04
 5.0794e-04  1.1226e-03  9.4867e-04  3.1096e-04 -1.7906e-04 -3.2380e-04
 5.0511e-04  1.1866e-03  1.0756e-03  3.8787e-04 -1.5133e-04 -3.4709e-04
 1.5513e-04  4.9414e-04  7.3876e-04  6.7830e-04  1.7803e-04 -4.4415e-04
-2.8344e-04 -4.8964e-04 -6.2859e-05  4.3537e-04  4.7659e-04  3.0271e-04
-4.5034e-04 -9.3651e-04 -8.0261e-04 -2.7161e-04  5.6299e-04  1.3227e-03
-1.9224e-04 -4.2486e-04 -4.7155e-04 -2.7100e-04  2.4954e-04  7.5515e-04
```

Columns 7 through 12:

```
-3.2865e-04 -4.8448e-04 -1.7793e-04  3.3352e-04  2.3082e-04 -8.2964e-05
-7.9933e-04 -9.5048e-04 -2.8799e-04  8.1444e-04  5.7016e-04 -2.1299e-04
-9.0533e-04 -6.7034e-04  8.2168e-05  8.5503e-04  5.0732e-04 -3.4231e-04
-5.1279e-04 -3.9469e-05  4.6751e-04  4.8827e-04  1.6180e-04 -3.4667e-04
 4.2529e-04  5.6970e-04  3.6295e-04  6.6495e-06 -5.4393e-05  5.2008e-05
 1.4522e-03  8.5119e-04  1.0641e-04 -2.6861e-04 -1.4917e-04  5.0674e-04
 1.6848e-03  1.0315e-03  2.3958e-04 -2.0516e-04 -1.4708e-04  5.0473e-04
 1.0315e-03  1.1612e-03  6.5768e-04 -6.0281e-05 -1.4198e-04  1.5572e-04
 2.3958e-04  6.5768e-04  9.5142e-04  7.9005e-04  2.7508e-04 -2.8519e-04
-2.0516e-04 -6.0281e-05  7.9005e-04  1.6644e-03  8.5877e-04 -4.5072e-04
-1.4708e-04 -1.4198e-04  2.7508e-04  8.5877e-04  4.8861e-04 -1.9272e-04
 5.0473e-04  1.5572e-04 -2.8519e-04 -4.5072e-04 -1.9272e-04  3.4143e-04
 1.1865e-03  4.9503e-04 -4.9056e-04 -9.3669e-04 -4.2562e-04  6.6665e-04
```

```
 1.0759e-03   7.4000e-04  -6.4217e-05  -8.0270e-04  -4.7138e-04   4.4585e-04
 3.8723e-04   6.7907e-04   4.3521e-04  -2.7143e-04  -2.7100e-04   5.3436e-05
-1.5057e-04   1.7931e-04   4.7632e-04   5.6331e-04   2.4907e-04  -2.3229e-04
-3.4498e-04  -4.4276e-04   3.0194e-04   1.3232e-03   7.5643e-04  -2.8876e-04
-3.8218e-04  -4.3630e-04   4.0524e-04   1.5385e-03   8.7502e-04  -3.3032e-04
-4.3589e-04   3.8484e-05   7.4728e-04   1.1905e-03   5.7421e-04  -4.8710e-04
 4.0680e-04   7.4771e-04   8.7434e-04   5.8749e-04   1.7406e-04  -1.7825e-04
 1.5392e-03   1.1915e-03   5.8728e-04   1.0756e-04  -2.2138e-05   3.3101e-04
 8.7601e-04   5.7438e-04   1.7385e-04  -2.1940e-05  -2.3724e-05   2.2960e-04
```

Columns 13 through 18:

```
-2.1242e-04  -3.4127e-04  -3.4471e-04   5.3196e-05   5.0794e-04   5.0511e-04
-5.4664e-04  -8.4174e-04  -7.2320e-04   1.9489e-04   1.1226e-03   1.1866e-03
-8.4197e-04  -8.6867e-04  -3.8507e-04   3.2583e-04   9.4867e-04   1.0756e-03
-7.2316e-04  -3.8508e-04   1.8556e-04   3.6057e-04   3.1096e-04   3.8787e-04
 1.9423e-04   3.2559e-04   3.6119e-04   1.6529e-04  -1.7906e-04  -1.5133e-04
 1.1216e-03   9.4822e-04   3.1098e-04  -1.7962e-04  -3.2380e-04  -3.4709e-04
 1.1865e-03   1.0759e-03   3.8723e-04  -1.5057e-04  -3.4498e-04  -3.8218e-04
 4.9503e-04   7.4000e-04   6.7907e-04   1.7931e-04  -4.4276e-04  -4.3630e-04
-4.9056e-04  -6.4217e-05   4.3521e-04   4.7632e-04   3.0194e-04   4.0524e-04
-9.3669e-04  -8.0270e-04  -2.7143e-04   5.6331e-04   1.3232e-03   1.5385e-03
-4.2562e-04  -4.7138e-04  -2.7100e-04   2.4907e-04   7.5643e-04   8.7502e-04
 6.6665e-04   4.4585e-04   5.3436e-05  -2.3229e-04  -2.8876e-04  -3.3032e-04
 1.4323e-03   1.0512e-03   1.6540e-04  -4.1142e-04  -6.7131e-04  -8.0075e-04
 1.0512e-03   1.0370e-03   4.8394e-04  -2.1156e-04  -7.6445e-04  -9.0724e-04
 1.6540e-04   4.8394e-04   6.6025e-04   1.4075e-04  -4.7735e-04  -5.1371e-04
-4.1142e-04  -2.1156e-04   1.4075e-04   3.9628e-04   3.8013e-04   4.2497e-04
-6.7131e-04  -7.6445e-04  -4.7735e-04   3.8013e-04   1.3045e-03   1.4521e-03
-8.0075e-04  -9.0724e-04  -5.1371e-04   4.2497e-04   1.4521e-03   1.6832e-03
-9.5215e-04  -6.7141e-04  -4.0410e-05   5.6983e-04   8.4973e-04   1.0295e-03
-2.8831e-04   8.2467e-05   4.6815e-04   3.6409e-04   1.0620e-04   2.3859e-04
 8.1315e-04   8.5487e-04   4.8726e-04   6.6072e-06  -2.6749e-04  -2.0615e-04
 5.6864e-04   5.0617e-04   1.6136e-04  -5.4159e-05  -1.4810e-04  -1.4829e-04
```

Columns 19 through 22:

```
 1.5513e-04  -2.8344e-04  -4.5034e-04  -1.9224e-04
 4.9414e-04  -4.8964e-04  -9.3651e-04  -4.2486e-04
 7.3876e-04  -6.2859e-05  -8.0261e-04  -4.7155e-04
 6.7830e-04   4.3537e-04  -2.7161e-04  -2.7100e-04
 1.7803e-04   4.7659e-04   5.6299e-04   2.4954e-04
-4.4415e-04   3.0271e-04   1.3227e-03   7.5515e-04
-4.3589e-04   4.0680e-04   1.5392e-03   8.7601e-04
 3.8484e-05   7.4771e-04   1.1915e-03   5.7438e-04
 7.4728e-04   8.7434e-04   5.8728e-04   1.7385e-04
 1.1905e-03   5.8749e-04   1.0756e-04  -2.1940e-05
 5.7421e-04   1.7406e-04  -2.2138e-05  -2.3724e-05
-4.8710e-04  -1.7825e-04   3.3101e-04   2.2960e-04
```

```
-9.5215e-04  -2.8831e-04   8.1315e-04   5.6864e-04
-6.7141e-04   8.2467e-05   8.5487e-04   5.0617e-04
-4.0410e-05   4.6815e-04   4.8726e-04   1.6136e-04
 5.6983e-04   3.6409e-04   6.6072e-06  -5.4159e-05
 8.4973e-04   1.0620e-04  -2.6749e-04  -1.4810e-04
 1.0295e-03   2.3859e-04  -2.0615e-04  -1.4829e-04
 1.1586e-03   6.5746e-04  -6.1044e-05  -1.4276e-04
 6.5746e-04   9.5240e-04   7.8960e-04   2.7507e-04
-6.1044e-05   7.8960e-04   1.6637e-03   8.5885e-04
-1.4276e-04   2.7507e-04   8.5885e-04   4.8872e-04
```

Iteration 12/100 µ:
```
 8.2953e-04
```

Iteration 12/100 d:
```
-0.7374374
-1.7756800
-2.0466636
-1.8758557
-1.7105374
-0.8755010
 0.0029283
-0.2114224
 0.2790336
 1.0232618
 0.5039211
-1.2217218
-1.9705659
-1.5972194
-1.8721972
-1.3967752
-0.6904266
-0.3828332
-0.2439528
-0.0212247
 0.7544169
 0.5965070
```

µ = 0.000830 / 2 -> 0.000415

Iteration 12/100 w(t):
```
 -1.2772    7.4869
 -3.6659    4.2938
 -3.1409    6.4798
 -1.8238    8.0964
 -3.2385    9.3445
 -3.4632   10.3612
 -1.2943   11.4670
  1.5508   14.3549
```

```
 4.8798   14.8657
 6.7007   14.7153
 9.3349   19.2611
```

Iteration 12/100 error:
 0.019154

Iteration 12/100 gradient:
```
 6.3811e-04
 1.4811e-03
 1.6948e-03
 1.5623e-03
 1.4241e-03
 7.2544e-04
 8.7146e-06
 2.0311e-04
-2.2675e-04
-8.4732e-04
-4.1446e-04
 1.0161e-03
 1.6353e-03
 1.3159e-03
 1.5571e-03
 1.1607e-03
 5.7278e-04
 3.1897e-04
 2.1232e-04
 3.1836e-05
-6.2962e-04
-4.9557e-04
```

Iteration 12/100 gradient norm:
 0.0046668

Iteration 13/100 Hessian matrix:
 Columns 1 through 6:

```
  3.4130e-04   6.6601e-04   4.4632e-04   5.3045e-05  -2.3262e-04  -2.8888e-04
  6.6601e-04   1.4319e-03   1.0519e-03   1.6540e-04  -4.1113e-04  -6.7151e-04
  4.4632e-04   1.0519e-03   1.0388e-03   4.8469e-04  -2.1085e-04  -7.6358e-04
  5.3045e-05   1.6540e-04   4.8469e-04   6.5949e-04   1.4062e-04  -4.7800e-04
 -2.3262e-04  -4.1113e-04  -2.1085e-04   1.4062e-04   3.9565e-04   3.8026e-04
 -2.8888e-04  -6.7151e-04  -7.6358e-04  -4.7800e-04   3.8026e-04   1.3040e-03
 -3.3063e-04  -8.0066e-04  -9.0632e-04  -5.1372e-04   4.2447e-04   1.4519e-03
 -4.8741e-04  -9.5278e-04  -6.7141e-04  -4.1775e-05   5.6881e-04   8.4905e-04
 -1.7912e-04  -2.8914e-04   8.1947e-05   4.6691e-04   3.6326e-04   1.0614e-04
  3.3130e-04   8.1279e-04   8.5536e-04   4.8767e-04   6.8598e-06  -2.6758e-04
  2.2933e-04   5.6904e-04   5.0770e-04   1.6136e-04  -5.4082e-05  -1.4877e-04
 -8.4397e-05  -2.1374e-04  -3.4216e-04  -3.4661e-04   5.2053e-05   5.0702e-04
```

```
  -2.1392e-04  -5.4726e-04  -8.4197e-04  -7.2371e-04   1.9419e-04   1.1217e-03
  -3.4228e-04  -8.4218e-04  -8.6709e-04  -3.8487e-04   3.2599e-04   9.4860e-04
  -3.4676e-04  -7.2350e-04  -3.8514e-04   1.8548e-04   3.6080e-04   3.1072e-04
   5.1222e-05   1.9394e-04   3.2587e-04   3.6049e-04   1.6496e-04  -1.7975e-04
   5.0723e-04   1.1217e-03   9.4863e-04   3.1067e-04  -1.7924e-04  -3.2372e-04
   5.0366e-04   1.1856e-03   1.0764e-03   3.8655e-04  -1.5135e-04  -3.4638e-04
   1.5407e-04   4.9273e-04   7.3883e-04   6.7721e-04   1.7775e-04  -4.4477e-04
  -2.8535e-04  -4.9069e-04  -6.3578e-05   4.3468e-04   4.7597e-04   3.0164e-04
  -4.5102e-04  -9.3677e-04  -8.0263e-04  -2.7178e-04   5.6337e-04   1.3228e-03
  -1.9334e-04  -4.2570e-04  -4.7116e-04  -2.7173e-04   2.4915e-04   7.5538e-04

Columns 7 through 12:

  -3.3063e-04  -4.8741e-04  -1.7912e-04   3.3130e-04   2.2933e-04  -8.4397e-05
  -8.0066e-04  -9.5278e-04  -2.8914e-04   8.1279e-04   5.6904e-04  -2.1374e-04
  -9.0632e-04  -6.7141e-04   8.1947e-05   8.5536e-04   5.0770e-04  -3.4216e-04
  -5.1372e-04  -4.1775e-05   4.6691e-04   4.8767e-04   1.6136e-04  -3.4661e-04
   4.2447e-04   5.6881e-04   3.6326e-04   6.8598e-06  -5.4082e-05   5.2053e-05
   1.4519e-03   8.4905e-04   1.0614e-04  -2.6758e-04  -1.4877e-04   5.0702e-04
   1.6831e-03   1.0286e-03   2.3817e-04  -2.0575e-04  -1.4817e-04   5.0398e-04
   1.0286e-03   1.1576e-03   6.5598e-04  -6.1826e-05  -1.4338e-04   1.5424e-04
   2.3817e-04   6.5598e-04   9.5103e-04   7.8942e-04   2.7401e-04  -2.8535e-04
  -2.0575e-04  -6.1826e-05   7.8942e-04   1.6642e-03   8.5848e-04  -4.5059e-04
  -1.4817e-04  -1.4338e-04   2.7401e-04   8.5848e-04   4.8878e-04  -1.9316e-04
   5.0398e-04   1.5424e-04  -2.8535e-04  -4.5059e-04  -1.9316e-04   3.4176e-04
   1.1857e-03   4.9256e-04  -4.9098e-04  -9.3645e-04  -4.2518e-04   6.6637e-04
   1.0760e-03   7.3883e-04  -6.3629e-05  -8.0245e-04  -4.7088e-04   4.4624e-04
   3.8661e-04   6.7725e-04   4.3432e-04  -2.7146e-04  -2.7138e-04   5.3159e-05
  -1.5181e-04   1.7746e-04   4.7577e-04   5.6319e-04   2.4944e-04  -2.3254e-04
  -3.4627e-04  -4.4443e-04   3.0188e-04   1.3234e-03   7.5613e-04  -2.8858e-04
  -3.8253e-04  -4.3760e-04   4.0527e-04   1.5382e-03   8.7552e-04  -3.3047e-04
  -4.3753e-04   3.6448e-05   7.4599e-04   1.1900e-03   5.7309e-04  -4.8724e-04
   4.0535e-04   7.4607e-04   8.7329e-04   5.8689e-04   1.7324e-04  -1.7869e-04
   1.5379e-03   1.1901e-03   5.8677e-04   1.0742e-04  -2.2005e-05   3.3163e-04
   8.7538e-04   5.7282e-04   1.7305e-04  -2.2075e-05  -2.3778e-05   2.2930e-04

Columns 13 through 18:

  -2.1392e-04  -3.4228e-04  -3.4676e-04   5.1222e-05   5.0723e-04   5.0366e-04
  -5.4726e-04  -8.4218e-04  -7.2350e-04   1.9394e-04   1.1217e-03   1.1856e-03
  -8.4197e-04  -8.6709e-04  -3.8514e-04   3.2587e-04   9.4863e-04   1.0764e-03
  -7.2371e-04  -3.8487e-04   1.8548e-04   3.6049e-04   3.1067e-04   3.8655e-04
   1.9419e-04   3.2599e-04   3.6080e-04   1.6496e-04  -1.7924e-04  -1.5135e-04
   1.1217e-03   9.4860e-04   3.1072e-04  -1.7975e-04  -3.2372e-04  -3.4638e-04
   1.1857e-03   1.0760e-03   3.8661e-04  -1.5181e-04  -3.4627e-04  -3.8253e-04
   4.9256e-04   7.3883e-04   6.7725e-04   1.7746e-04  -4.4443e-04  -4.3760e-04
  -4.9098e-04  -6.3629e-05   4.3432e-04   4.7577e-04   3.0188e-04   4.0527e-04
  -9.3645e-04  -8.0245e-04  -2.7146e-04   5.6319e-04   1.3234e-03   1.5382e-03
  -4.2518e-04  -4.7088e-04  -2.7138e-04   2.4944e-04   7.5613e-04   8.7552e-04
```

```
  6.6637e-04   4.4624e-04   5.3159e-05  -2.3254e-04  -2.8858e-04  -3.3047e-04
  1.4318e-03   1.0521e-03   1.6533e-04  -4.1157e-04  -6.7122e-04  -8.0053e-04
  1.0521e-03   1.0387e-03   4.8475e-04  -2.1102e-04  -7.6334e-04  -9.0609e-04
  1.6533e-04   4.8475e-04   6.5960e-04   1.4043e-04  -4.7753e-04  -5.1332e-04
 -4.1157e-04  -2.1102e-04   1.4043e-04   3.9534e-04   3.8015e-04   4.2410e-04
 -6.7122e-04  -7.6334e-04  -4.7753e-04   3.8015e-04   1.3043e-03   1.4522e-03
 -8.0053e-04  -9.0609e-04  -5.1332e-04   4.2410e-04   1.4522e-03   1.6833e-03
 -9.5246e-04  -6.7134e-04  -4.1521e-05   5.6850e-04   8.4937e-04   1.0289e-03
 -2.8904e-04   8.2045e-05   4.6696e-04   3.6307e-04   1.0626e-04   2.3855e-04
  8.1278e-04   8.5520e-04   4.8746e-04   6.4206e-06  -2.6769e-04  -2.0626e-04
  5.6880e-04   5.0735e-04   1.6135e-04  -5.4391e-05  -1.4859e-04  -1.4826e-04
```

Columns 19 through 22:

```
  1.5407e-04  -2.8535e-04  -4.5102e-04  -1.9334e-04
  4.9273e-04  -4.9069e-04  -9.3677e-04  -4.2570e-04
  7.3883e-04  -6.3578e-05  -8.0263e-04  -4.7116e-04
  6.7721e-04   4.3468e-04  -2.7178e-04  -2.7173e-04
  1.7775e-04   4.7597e-04   5.6337e-04   2.4915e-04
 -4.4477e-04   3.0164e-04   1.3228e-03   7.5538e-04
 -4.3753e-04   4.0535e-04   1.5379e-03   8.7538e-04
  3.6448e-05   7.4607e-04   1.1901e-03   5.7282e-04
  7.4599e-04   8.7329e-04   5.8677e-04   1.7305e-04
  1.1900e-03   5.8689e-04   1.0742e-04  -2.2075e-05
  5.7309e-04   1.7324e-04  -2.2005e-05  -2.3778e-05
 -4.8724e-04  -1.7869e-04   3.3163e-04   2.2930e-04
 -9.5246e-04  -2.8904e-04   8.1278e-04   5.6880e-04
 -6.7134e-04   8.2045e-05   8.5520e-04   5.0735e-04
 -4.1521e-05   4.6696e-04   4.8746e-04   1.6135e-04
  5.6850e-04   3.6307e-04   6.4206e-06  -5.4391e-05
  8.4937e-04   1.0626e-04  -2.6769e-04  -1.4859e-04
  1.0289e-03   2.3855e-04  -2.0626e-04  -1.4826e-04
  1.1580e-03   6.5614e-04  -6.1974e-05  -1.4349e-04
  6.5614e-04   9.5130e-04   7.8929e-04   2.7403e-04
 -6.1974e-05   7.8929e-04   1.6637e-03   8.5815e-04
 -1.4349e-04   2.7403e-04   8.5815e-04   4.8828e-04
```

Iteration 13/100 μ:
```
  4.1477e-04
```

Iteration 13/100 d:
```
 -0.524658
 -1.246761
 -1.648364
 -1.591723
 -1.476422
 -0.700041
  0.326529
 -0.010122
```

0.242654
0.903197
0.445376
-1.141167
-1.487126
-1.025962
-1.653146
-1.108491
-0.475137
-0.190281
0.037877
-0.117430
0.579774
0.592627

μ = 0.000415 / 2 -> 0.000207

Iteration 13/100 w(t):
  -1.80188   6.34572
  -4.91270   2.80666
  -4.78924   5.45385
  -3.41553   6.44325
  -4.71490   8.23600
  -4.16320   9.88608
  -0.96774   11.27673
   1.54065   14.39277
   5.12245   14.74830
   7.60393   15.29506
   9.78030   19.85376

Iteration 13/100 error:
 0.0044911

Iteration 13/100 gradient:
  2.1564e-04
  5.1489e-04
  6.8403e-04
  6.5968e-04
  6.1228e-04
  2.8782e-04
 -1.3723e-04
  3.6607e-06
 -1.0092e-04
 -3.7527e-04
 -1.8308e-04
  4.7356e-04
  6.1428e-04
  4.2603e-04
  6.8536e-04

4.5668e-04
1.9610e-04
7.8886e-05
-1.5131e-05
4.9840e-05
-2.4292e-04
-2.4738e-04

Iteration 13/100 gradient norm:
0.0018721

Iteration 14/100 Hessian matrix:
Columns 1 through 6:

3.4145e-04   6.6646e-04   4.4619e-04   5.3184e-05 -2.3237e-04 -2.8873e-04
6.6646e-04   1.4324e-03   1.0523e-03   1.6546e-04 -4.1093e-04 -6.7097e-04
4.4619e-04   1.0523e-03   1.0388e-03   4.8475e-04 -2.1075e-04 -7.6350e-04
5.3184e-05   1.6546e-04   4.8475e-04   6.5956e-04   1.4069e-04 -4.7770e-04
-2.3237e-04 -4.1093e-04 -2.1075e-04   1.4069e-04   3.9585e-04   3.8037e-04
-2.8873e-04 -6.7097e-04 -7.6350e-04 -4.7770e-04   3.8037e-04   1.3046e-03
-3.3039e-04 -8.0023e-04 -9.0607e-04 -5.1338e-04   4.2445e-04   1.4521e-03
-4.8718e-04 -9.5252e-04 -6.7135e-04 -4.1650e-05   5.6867e-04   8.4955e-04
-1.7889e-04 -2.8887e-04   8.2047e-05   4.6688e-04   3.6305e-04   1.0630e-04
3.3140e-04   8.1321e-04   8.5547e-04   4.8759e-04   6.9329e-06 -2.6746e-04
2.2911e-04   5.6913e-04   5.0740e-04   1.6121e-04 -5.4187e-05 -1.4856e-04
-8.4343e-05 -2.1354e-04 -3.4224e-04 -3.4667e-04   5.1854e-05   5.0715e-04
-2.1359e-04 -5.4688e-04 -8.4192e-04 -7.2345e-04   1.9431e-04   1.1222e-03
-3.4228e-04 -8.4188e-04 -8.6707e-04 -3.8509e-04   3.2618e-04   9.4878e-04
-3.4679e-04 -7.2335e-04 -3.8511e-04   1.8533e-04   3.6085e-04   3.1067e-04
5.1863e-05   1.9436e-04   3.2620e-04   3.6075e-04   1.6515e-04 -1.7926e-04
5.0715e-04   1.1222e-03   9.4890e-04   3.1082e-04 -1.7928e-04 -3.2364e-04
5.0391e-04   1.1860e-03   1.0763e-03   3.8665e-04 -1.5129e-04 -3.4622e-04
1.5423e-04   4.9305e-04   7.3888e-04   6.7722e-04   1.7773e-04 -4.4451e-04
-2.8544e-04 -4.9069e-04 -6.3619e-05   4.3437e-04   4.7593e-04   3.0189e-04
-4.5065e-04 -9.3623e-04 -8.0236e-04 -2.7155e-04   5.6343e-04   1.3232e-03
-1.9330e-04 -4.2535e-04 -4.7088e-04 -2.7146e-04   2.4937e-04   7.5580e-04

Columns 7 through 12:

-3.3039e-04 -4.8718e-04 -1.7889e-04   3.3140e-04   2.2911e-04 -8.4343e-05
-8.0023e-04 -9.5252e-04 -2.8887e-04   8.1321e-04   5.6913e-04 -2.1354e-04
-9.0607e-04 -6.7135e-04   8.2047e-05   8.5547e-04   5.0740e-04 -3.4224e-04
-5.1338e-04 -4.1650e-05   4.6688e-04   4.8759e-04   1.6121e-04 -3.4667e-04
4.2445e-04   5.6867e-04   3.6305e-04   6.9329e-06 -5.4187e-05   5.1854e-05
1.4521e-03   8.4955e-04   1.0630e-04 -2.6746e-04 -1.4856e-04   5.0715e-04
1.6835e-03   1.0290e-03   2.3844e-04 -2.0574e-04 -1.4806e-04   5.0398e-04
1.0290e-03   1.1579e-03   6.5606e-04 -6.1584e-05 -1.4345e-04   1.5420e-04
2.3844e-04   6.5606e-04   9.5115e-04   7.8937e-04   2.7398e-04 -2.8540e-04
-2.0574e-04 -6.1584e-05   7.8937e-04   1.6644e-03   8.5856e-04 -4.5060e-04

```
-1.4806e-04  -1.4345e-04   2.7398e-04   8.5856e-04   4.8856e-04  -1.9325e-04
 5.0398e-04   1.5420e-04  -2.8540e-04  -4.5060e-04  -1.9325e-04   3.4153e-04
 1.1860e-03   4.9293e-04  -4.9069e-04  -9.3621e-04  -4.2539e-04   6.6648e-04
 1.0763e-03   7.3888e-04  -6.3587e-05  -8.0244e-04  -4.7097e-04   4.4617e-04
 3.8663e-04   6.7716e-04   4.3433e-04  -2.7150e-04  -2.7154e-04   5.3329e-05
-1.5133e-04   1.7769e-04   4.7593e-04   5.6340e-04   2.4939e-04  -2.3229e-04
-3.4607e-04  -4.4445e-04   3.0194e-04   1.3233e-03   7.5576e-04  -2.8859e-04
-3.8215e-04  -4.3727e-04   4.0539e-04   1.5384e-03   8.7550e-04  -3.3029e-04
-4.3729e-04   3.6537e-05   7.4606e-04   1.1903e-03   5.7296e-04  -4.8709e-04
 4.0538e-04   7.4605e-04   8.7308e-04   5.8688e-04   1.7315e-04  -1.7885e-04
 1.5384e-03   1.1903e-03   5.8684e-04   1.0775e-04  -2.2052e-05   3.3146e-04
 8.7559e-04   5.7311e-04   1.7318e-04  -2.2022e-05  -2.3944e-05   2.2928e-04
```

Columns 13 through 18:

```
-2.1359e-04  -3.4228e-04  -3.4679e-04   5.1863e-05   5.0715e-04   5.0391e-04
-5.4688e-04  -8.4188e-04  -7.2335e-04   1.9436e-04   1.1222e-03   1.1860e-03
-8.4192e-04  -8.6707e-04  -3.8511e-04   3.2620e-04   9.4890e-04   1.0763e-03
-7.2345e-04  -3.8509e-04   1.8533e-04   3.6075e-04   3.1082e-04   3.8665e-04
 1.9431e-04   3.2618e-04   3.6085e-04   1.6515e-04  -1.7928e-04  -1.5129e-04
 1.1222e-03   9.4878e-04   3.1067e-04  -1.7926e-04  -3.2364e-04  -3.4622e-04
 1.1860e-03   1.0763e-03   3.8663e-04  -1.5133e-04  -3.4607e-04  -3.8215e-04
 4.9293e-04   7.3888e-04   6.7716e-04   1.7769e-04  -4.4445e-04  -4.3727e-04
-4.9069e-04  -6.3587e-05   4.3433e-04   4.7593e-04   3.0194e-04   4.0539e-04
-9.3621e-04  -8.0244e-04  -2.7150e-04   5.6340e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7097e-04  -2.7154e-04   2.4939e-04   7.5576e-04   8.7550e-04
 6.6648e-04   4.4617e-04   5.3329e-05  -2.3229e-04  -2.8859e-04  -3.3029e-04
 1.4324e-03   1.0522e-03   1.6540e-04  -4.1100e-04  -6.7088e-04  -8.0033e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1086e-04  -7.6355e-04  -9.0603e-04
 1.6540e-04   4.8465e-04   6.5957e-04   1.4071e-04  -4.7776e-04  -5.1337e-04
-4.1100e-04  -2.1086e-04   1.4071e-04   3.9583e-04   3.8047e-04   4.2443e-04
-6.7088e-04  -7.6355e-04  -4.7776e-04   3.8047e-04   1.3047e-03   1.4522e-03
-8.0033e-04  -9.0603e-04  -5.1337e-04   4.2443e-04   1.4522e-03   1.6835e-03
-9.5254e-04  -6.7143e-04  -4.1644e-05   5.6864e-04   8.4959e-04   1.0290e-03
-2.8897e-04   8.2070e-05   4.6680e-04   3.6298e-04   1.0633e-04   2.3842e-04
 8.1317e-04   8.5541e-04   4.8750e-04   6.9617e-06  -2.6742e-04  -2.0581e-04
 5.6912e-04   5.0743e-04   1.6117e-04  -5.4168e-05  -1.4848e-04  -1.4805e-04
```

Columns 19 through 22:

```
 1.5423e-04  -2.8544e-04  -4.5065e-04  -1.9330e-04
 4.9305e-04  -4.9069e-04  -9.3623e-04  -4.2535e-04
 7.3888e-04  -6.3619e-05  -8.0236e-04  -4.7088e-04
 6.7722e-04   4.3437e-04  -2.7155e-04  -2.7146e-04
 1.7773e-04   4.7593e-04   5.6343e-04   2.4937e-04
-4.4451e-04   3.0189e-04   1.3232e-03   7.5580e-04
-4.3729e-04   4.0538e-04   1.5384e-03   8.7559e-04
 3.6537e-05   7.4605e-04   1.1903e-03   5.7311e-04
 7.4606e-04   8.7308e-04   5.8684e-04   1.7318e-04
```

```
 1.1903e-03   5.8688e-04   1.0775e-04  -2.2022e-05
 5.7296e-04   1.7315e-04  -2.2052e-05  -2.3944e-05
-4.8709e-04  -1.7885e-04   3.3146e-04   2.2928e-04
-9.5254e-04  -2.8897e-04   8.1317e-04   5.6912e-04
-6.7143e-04   8.2070e-05   8.5541e-04   5.0743e-04
-4.1644e-05   4.6680e-04   4.8750e-04   1.6117e-04
 5.6864e-04   3.6298e-04   6.9617e-06  -5.4168e-05
 8.4959e-04   1.0633e-04  -2.6742e-04  -1.4848e-04
 1.0290e-03   2.3842e-04  -2.0581e-04  -1.4805e-04
 1.1579e-03   6.5606e-04  -6.1611e-05  -1.4341e-04
 6.5606e-04   9.5113e-04   7.8938e-04   2.7403e-04
-6.1611e-05   7.8938e-04   1.6643e-03   8.5856e-04
-1.4341e-04   2.7403e-04   8.5856e-04   4.8865e-04
```

Iteration 14/100 μ:
  2.0738e-04

Iteration 14/100 d:
 -0.2429520
 -0.4896345
 -0.8047663
 -0.8376294
 -0.9913234
 -0.5614204
  0.5486446
  0.2862488
  0.1084286
  0.3654182
  0.1497106
 -0.9020803
 -0.7359617
 -0.1617279
 -1.0109466
 -0.6795960
 -0.3586440
 -0.0061454
  0.4322829
 -0.1837481
  0.0729975
  0.3378226

μ = 0.000207 / 2 -> 0.000104

Iteration 14/100 w(t):
  -2.04483   5.44364
  -5.40233   2.07069
  -5.59400   5.29213
  -4.25316   5.43230
  -5.70623   7.55640

```
  -4.72462   9.52744
  -0.41910  11.27059
   1.82690  14.82505
   5.23088  14.56455
   7.96935  15.36806
   9.93001  20.19158
```

Iteration 14/100 error:
 0.0014996

Iteration 14/100 gradient:
   5.0293e-05
   1.0199e-04
   1.6745e-04
   1.7369e-04
   2.0616e-04
   1.1642e-04
  -1.1344e-04
  -5.9250e-05
  -2.2288e-05
  -7.5656e-05
  -3.1048e-05
   1.8739e-04
   1.5285e-04
   3.3904e-05
   2.0974e-04
   1.4150e-04
   7.4666e-05
   1.6469e-06
  -8.9313e-05
   3.8169e-05
  -1.5154e-05
  -6.9890e-05

Iteration 14/100 gradient norm:
   5.4270e-04

Iteration 15/100 Hessian matrix:
 Columns 1 through 6:

   3.4145e-04   6.6638e-04   4.4610e-04   5.3230e-05 -2.3245e-04 -2.8877e-04
   6.6638e-04   1.4323e-03   1.0521e-03   1.6547e-04 -4.1109e-04 -6.7102e-04
   4.4610e-04   1.0521e-03   1.0386e-03   4.8462e-04 -2.1099e-04 -7.6362e-04
   5.3230e-05   1.6547e-04   4.8462e-04   6.5957e-04   1.4062e-04 -4.7770e-04
  -2.3245e-04 -4.1109e-04 -2.1099e-04   1.4062e-04   3.9565e-04   3.8033e-04
  -2.8877e-04 -6.7102e-04 -7.6362e-04 -4.7770e-04   3.8033e-04   1.3046e-03
  -3.3044e-04 -8.0041e-04 -9.0619e-04 -5.1343e-04   4.2428e-04   1.4521e-03
  -4.8723e-04 -9.5260e-04 -6.7146e-04 -4.1660e-05   5.6860e-04   8.4949e-04
  -1.7889e-04 -2.8899e-04   8.1960e-05   4.6684e-04   3.6292e-04   1.0624e-04
```

```
 3.3140e-04   8.1308e-04   8.5536e-04   4.8755e-04   6.8767e-06  -2.6747e-04
 2.2915e-04   5.6904e-04   5.0737e-04   1.6119e-04  -5.4268e-05  -1.4855e-04
-8.4354e-05  -2.1362e-04  -3.4239e-04  -3.4666e-04   5.1745e-05   5.0713e-04
-2.1365e-04  -5.4696e-04  -8.4203e-04  -7.2340e-04   1.9419e-04   1.1221e-03
-3.4236e-04  -8.4195e-04  -8.6729e-04  -3.8510e-04   3.2604e-04   9.4880e-04
-3.4668e-04  -7.2339e-04  -3.8512e-04   1.8543e-04   3.6074e-04   3.1078e-04
 5.1798e-05   1.9424e-04   3.2604e-04   3.6077e-04   1.6494e-04  -1.7932e-04
 5.0711e-04   1.1221e-03   9.4875e-04   3.1081e-04  -1.7939e-04  -3.2361e-04
 5.0392e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5146e-04  -3.4622e-04
 1.5415e-04   4.9285e-04   7.3877e-04   6.7717e-04   1.7761e-04  -4.4451e-04
-2.8546e-04  -4.9081e-04  -6.3701e-05   4.3434e-04   4.7585e-04   3.0187e-04
-4.5062e-04  -9.3627e-04  -8.0245e-04  -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04  -4.2540e-04  -4.7100e-04  -2.7149e-04   2.4934e-04   7.5576e-04
```

Columns 7 through 12:

```
-3.3044e-04  -4.8723e-04  -1.7889e-04   3.3140e-04   2.2915e-04  -8.4354e-05
-8.0041e-04  -9.5260e-04  -2.8899e-04   8.1308e-04   5.6904e-04  -2.1362e-04
-9.0619e-04  -6.7146e-04   8.1960e-05   8.5536e-04   5.0737e-04  -3.4239e-04
-5.1343e-04  -4.1660e-05   4.6684e-04   4.8755e-04   1.6119e-04  -3.4666e-04
 4.2428e-04   5.6860e-04   3.6292e-04   6.8767e-06  -5.4268e-05   5.1745e-05
 1.4521e-03   8.4949e-04   1.0624e-04  -2.6747e-04  -1.4855e-04   5.0713e-04
 1.6833e-03   1.0289e-03   2.3828e-04  -2.0575e-04  -1.4811e-04   5.0394e-04
 1.0289e-03   1.1579e-03   6.5598e-04  -6.1570e-05  -1.4343e-04   1.5423e-04
 2.3828e-04   6.5598e-04   9.5105e-04   7.8934e-04   2.7392e-04  -2.8543e-04
-2.0575e-04  -6.1570e-05   7.8934e-04   1.6643e-03   8.5852e-04  -4.5061e-04
-1.4811e-04  -1.4343e-04   2.7392e-04   8.5852e-04   4.8862e-04  -1.9325e-04
 5.0394e-04   1.5423e-04  -2.8543e-04  -4.5061e-04  -1.9325e-04   3.4150e-04
 1.1859e-03   4.9290e-04  -4.9077e-04  -9.3629e-04  -4.2541e-04   6.6644e-04
 1.0763e-03   7.3885e-04  -6.3658e-05  -8.0240e-04  -4.7095e-04   4.4620e-04
 3.8664e-04   6.7724e-04   4.3436e-04  -2.7151e-04  -2.7151e-04   5.3274e-05
-1.5140e-04   1.7766e-04   4.7591e-04   5.6335e-04   2.4940e-04  -2.3237e-04
-3.4621e-04  -4.4452e-04   3.0185e-04   1.3232e-03   7.5573e-04  -2.8866e-04
-3.8231e-04  -4.3738e-04   4.0532e-04   1.5383e-03   8.7551e-04  -3.3037e-04
-4.3740e-04   3.6446e-05   7.4599e-04   1.1902e-03   5.7304e-04  -4.8720e-04
 4.0534e-04   7.4602e-04   8.7301e-04   5.8683e-04   1.7312e-04  -1.7888e-04
 1.5383e-03   1.1903e-03   5.8684e-04   1.0768e-04  -2.2060e-05   3.3146e-04
 8.7554e-04   5.7303e-04   1.7309e-04  -2.2067e-05  -2.4014e-05   2.2920e-04
```

Columns 13 through 18:

```
-2.1365e-04  -3.4236e-04  -3.4668e-04   5.1798e-05   5.0711e-04   5.0392e-04
-5.4696e-04  -8.4195e-04  -7.2339e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4203e-04  -8.6729e-04  -3.8512e-04   3.2604e-04   9.4875e-04   1.0762e-03
-7.2340e-04  -3.8510e-04   1.8543e-04   3.6077e-04   3.1081e-04   3.8662e-04
 1.9419e-04   3.2604e-04   3.6074e-04   1.6494e-04  -1.7939e-04  -1.5146e-04
 1.1221e-03   9.4880e-04   3.1078e-04  -1.7932e-04  -3.2361e-04  -3.4622e-04
 1.1859e-03   1.0763e-03   3.8664e-04  -1.5140e-04  -3.4621e-04  -3.8231e-04
 4.9290e-04   7.3885e-04   6.7724e-04   1.7766e-04  -4.4452e-04  -4.3738e-04
```

```
-4.9077e-04  -6.3658e-05   4.3436e-04   4.7591e-04   3.0185e-04   4.0532e-04
-9.3629e-04  -8.0240e-04  -2.7151e-04   5.6335e-04   1.3232e-03   1.5383e-03
-4.2541e-04  -4.7095e-04  -2.7151e-04   2.4940e-04   7.5573e-04   8.7551e-04
 6.6644e-04   4.4620e-04   5.3274e-05  -2.3237e-04  -2.8866e-04  -3.3037e-04
 1.4323e-03   1.0522e-03   1.6545e-04  -4.1102e-04  -6.7101e-04  -8.0040e-04
 1.0522e-03   1.0387e-03   4.8469e-04  -2.1087e-04  -7.6356e-04  -9.0613e-04
 1.6545e-04   4.8469e-04   6.5962e-04   1.4072e-04  -4.7773e-04  -5.1342e-04
-4.1102e-04  -2.1087e-04   1.4072e-04   3.9574e-04   3.8041e-04   4.2436e-04
-6.7101e-04  -7.6356e-04  -4.7773e-04   3.8041e-04   1.3046e-03   1.4521e-03
-8.0040e-04  -9.0613e-04  -5.1342e-04   4.2436e-04   1.4521e-03   1.6833e-03
-9.5263e-04  -6.7145e-04  -4.1661e-05   5.6865e-04   8.4946e-04   1.0289e-03
-2.8895e-04   8.2007e-05   4.6688e-04   3.6300e-04   1.0624e-04   2.3829e-04
 8.1311e-04   8.5541e-04   4.8759e-04   6.9452e-06  -2.6747e-04  -2.0576e-04
 5.6907e-04   5.0743e-04   1.6122e-04  -5.4216e-05  -1.4849e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5415e-04  -2.8546e-04  -4.5062e-04  -1.9323e-04
 4.9285e-04  -4.9081e-04  -9.3627e-04  -4.2540e-04
 7.3877e-04  -6.3701e-05  -8.0245e-04  -4.7100e-04
 6.7717e-04   4.3434e-04  -2.7147e-04  -2.7149e-04
 1.7761e-04   4.7585e-04   5.6337e-04   2.4934e-04
-4.4451e-04   3.0187e-04   1.3233e-03   7.5576e-04
-4.3740e-04   4.0534e-04   1.5383e-03   8.7554e-04
 3.6446e-05   7.4602e-04   1.1903e-03   5.7303e-04
 7.4599e-04   8.7301e-04   5.8684e-04   1.7309e-04
 1.1902e-03   5.8683e-04   1.0768e-04  -2.2067e-05
 5.7304e-04   1.7312e-04  -2.2060e-05  -2.4014e-05
-4.8720e-04  -1.7888e-04   3.3146e-04   2.2920e-04
-9.5263e-04  -2.8895e-04   8.1311e-04   5.6907e-04
-6.7145e-04   8.2007e-05   8.5541e-04   5.0743e-04
-4.1661e-05   4.6688e-04   4.8759e-04   1.6122e-04
 5.6865e-04   3.6300e-04   6.9452e-06  -5.4216e-05
 8.4946e-04   1.0624e-04  -2.6747e-04  -1.4849e-04
 1.0289e-03   2.3829e-04  -2.0576e-04  -1.4810e-04
 1.1578e-03   6.5600e-04  -6.1595e-05  -1.4344e-04
 6.5600e-04   9.5112e-04   7.8936e-04   2.7400e-04
-6.1595e-05   7.8936e-04   1.6643e-03   8.5858e-04
-1.4344e-04   2.7400e-04   8.5858e-04   4.8867e-04
```

Iteration 15/100 μ:
```
 1.0369e-04
```

Iteration 15/100 d:
```
-0.200545
-0.037004
-0.051653
-0.280392
-0.756637
```

-0.512646
0.747812
0.562635
-0.026005
-0.119574
-0.102346
-0.691795
-0.215460
0.420122
-0.498554
-0.603256
-0.386300
0.326431
0.749337
-0.156085
-0.302448
0.050430

$\mu = 0.000104 / 2 \rightarrow 0.000052$

Iteration 15/100 w(t):
  -2.24537   4.75184
  -5.43934   1.85523
  -5.64566   5.71225
  -4.53355   4.93375
  -6.46286   6.95314
  -5.23727   9.14114
   0.32871   11.59702
   2.38954   15.57439
   5.20487   14.40846
   7.84977   15.06561
   9.82767   20.24201

Iteration 15/100 error:
  8.7132e-04

Iteration 15/100 gradient:
  2.0718e-05
  3.8713e-06
  5.2671e-06
  2.9107e-05
  7.8342e-05
  5.3094e-05
 -7.7544e-05
 -5.8341e-05
  2.6891e-06
  1.2301e-05
  1.0494e-05
  7.1683e-05

2.2365e-05
-4.3566e-05
 5.1708e-05
 6.2543e-05
 4.0063e-05
-3.3866e-05
-7.7701e-05
 1.6180e-05
 3.1347e-05
-5.2564e-06

Iteration 15/100 gradient norm:
  2.1011e-04

Iteration 16/100 Hessian matrix:
 Columns 1 through 6:

  3.4151e-04   6.6641e-04   4.4618e-04   5.3213e-05 -2.3240e-04 -2.8871e-04
  6.6641e-04   1.4323e-03   1.0521e-03   1.6539e-04 -4.1109e-04 -6.7104e-04
  4.4618e-04   1.0521e-03   1.0386e-03   4.8460e-04 -2.1094e-04 -7.6356e-04
  5.3213e-05   1.6539e-04   4.8460e-04   6.5951e-04   1.4061e-04 -4.7776e-04
 -2.3240e-04 -4.1109e-04 -2.1094e-04   1.4061e-04   3.9569e-04   3.8037e-04
 -2.8871e-04 -6.7104e-04 -7.6356e-04 -4.7776e-04   3.8037e-04   1.3046e-03
 -3.3043e-04 -8.0044e-04 -9.0619e-04 -5.1351e-04   4.2430e-04   1.4520e-03
 -4.8725e-04 -9.5264e-04 -6.7144e-04 -4.1723e-05   5.6858e-04   8.4947e-04
 -1.7887e-04 -2.8900e-04   8.1994e-05   4.6681e-04   3.6295e-04   1.0624e-04
  3.3144e-04   8.1306e-04   8.5538e-04   4.8750e-04   6.8905e-06 -2.6747e-04
  2.2914e-04   5.6900e-04   5.0734e-04   1.6114e-04 -5.4233e-05 -1.4853e-04
 -8.4284e-05 -2.1367e-04 -3.4235e-04 -3.4671e-04   5.1767e-05   5.0715e-04
 -2.1366e-04 -5.4702e-04 -8.4204e-04 -7.2350e-04   1.9418e-04   1.1221e-03
 -3.4234e-04 -8.4203e-04 -8.6726e-04 -3.8516e-04   3.2604e-04   9.4879e-04
 -3.4669e-04 -7.2345e-04 -3.8516e-04   1.8532e-04   3.6073e-04   3.1075e-04
  5.1763e-05   1.9419e-04   3.2605e-04   3.6072e-04   1.6497e-04 -1.7932e-04
  5.0708e-04   1.1221e-03   9.4874e-04   3.1072e-04 -1.7937e-04 -3.2366e-04
  5.0392e-04   1.1859e-03   1.0762e-03   3.8658e-04 -1.5145e-04 -3.4621e-04
  1.5418e-04   4.9283e-04   7.3878e-04   6.7714e-04   1.7761e-04 -4.4454e-04
 -2.8550e-04 -4.9086e-04 -6.3720e-05   4.3427e-04   4.7584e-04   3.0183e-04
 -4.5063e-04 -9.3632e-04 -8.0244e-04 -2.7153e-04   5.6334e-04   1.3232e-03
 -1.9329e-04 -4.2543e-04 -4.7094e-04 -2.7156e-04   2.4935e-04   7.5572e-04

 Columns 7 through 12:

 -3.3043e-04 -4.8725e-04 -1.7887e-04   3.3144e-04   2.2914e-04 -8.4284e-05
 -8.0044e-04 -9.5264e-04 -2.8900e-04   8.1306e-04   5.6900e-04 -2.1367e-04
 -9.0619e-04 -6.7144e-04   8.1994e-05   8.5538e-04   5.0734e-04 -3.4235e-04
 -5.1351e-04 -4.1723e-05   4.6681e-04   4.8750e-04   1.6114e-04 -3.4671e-04
  4.2430e-04   5.6858e-04   3.6295e-04   6.8905e-06 -5.4233e-05   5.1767e-05
  1.4520e-03   8.4947e-04   1.0624e-04 -2.6747e-04 -1.4853e-04   5.0715e-04
  1.6833e-03   1.0289e-03   2.3824e-04 -2.0581e-04 -1.4817e-04   5.0389e-04

```
 1.0289e-03   1.1578e-03   6.5598e-04  -6.1609e-05  -1.4349e-04   1.5419e-04
 2.3824e-04   6.5598e-04   9.5106e-04   7.8931e-04   2.7391e-04  -2.8544e-04
-2.0581e-04  -6.1609e-05   7.8931e-04   1.6643e-03   8.5852e-04  -4.5063e-04
-1.4817e-04  -1.4349e-04   2.7391e-04   8.5852e-04   4.8858e-04  -1.9328e-04
 5.0389e-04   1.5419e-04  -2.8544e-04  -4.5063e-04  -1.9328e-04   3.4150e-04
 1.1858e-03   4.9286e-04  -4.9083e-04  -9.3631e-04  -4.2546e-04   6.6639e-04
 1.0762e-03   7.3878e-04  -6.3682e-05  -8.0245e-04  -4.7098e-04   4.4617e-04
 3.8657e-04   6.7717e-04   4.3430e-04  -2.7153e-04  -2.7156e-04   5.3217e-05
-1.5147e-04   1.7763e-04   4.7586e-04   5.6335e-04   2.4932e-04  -2.3239e-04
-3.4626e-04  -4.4455e-04   3.0181e-04   1.3232e-03   7.5571e-04  -2.8872e-04
-3.8238e-04  -4.3743e-04   4.0528e-04   1.5383e-03   8.7548e-04  -3.3041e-04
-4.3744e-04   3.6405e-05   7.4598e-04   1.1902e-03   5.7293e-04  -4.8722e-04
 4.0525e-04   7.4598e-04   8.7300e-04   5.8681e-04   1.7308e-04  -1.7891e-04
 1.5383e-03   1.1903e-03   5.8683e-04   1.0768e-04  -2.2083e-05   3.3146e-04
 8.7545e-04   5.7296e-04   1.7309e-04  -2.2089e-05  -2.4060e-05   2.2914e-04
```

Columns 13 through 18:

```
-2.1366e-04  -3.4234e-04  -3.4669e-04   5.1763e-05   5.0708e-04   5.0392e-04
-5.4702e-04  -8.4203e-04  -7.2345e-04   1.9419e-04   1.1221e-03   1.1859e-03
-8.4204e-04  -8.6726e-04  -3.8516e-04   3.2605e-04   9.4874e-04   1.0762e-03
-7.2350e-04  -3.8516e-04   1.8532e-04   3.6072e-04   3.1072e-04   3.8658e-04
 1.9418e-04   3.2604e-04   3.6073e-04   1.6497e-04  -1.7937e-04  -1.5145e-04
 1.1221e-03   9.4879e-04   3.1075e-04  -1.7932e-04  -3.2366e-04  -3.4621e-04
 1.1858e-03   1.0762e-03   3.8657e-04  -1.5147e-04  -3.4626e-04  -3.8238e-04
 4.9286e-04   7.3878e-04   6.7717e-04   1.7763e-04  -4.4455e-04  -4.3743e-04
-4.9083e-04  -6.3682e-05   4.3430e-04   4.7586e-04   3.0181e-04   4.0528e-04
-9.3631e-04  -8.0245e-04  -2.7153e-04   5.6335e-04   1.3232e-03   1.5383e-03
-4.2546e-04  -4.7098e-04  -2.7156e-04   2.4932e-04   7.5571e-04   8.7548e-04
 6.6639e-04   4.4617e-04   5.3217e-05  -2.3239e-04  -2.8872e-04  -3.3041e-04
 1.4323e-03   1.0521e-03   1.6538e-04  -4.1108e-04  -6.7106e-04  -8.0042e-04
 1.0521e-03   1.0387e-03   4.8462e-04  -2.1091e-04  -7.6358e-04  -9.0616e-04
 1.6538e-04   4.8462e-04   6.5953e-04   1.4066e-04  -4.7775e-04  -5.1345e-04
-4.1108e-04  -2.1091e-04   1.4066e-04   3.9570e-04   3.8036e-04   4.2432e-04
-6.7106e-04  -7.6358e-04  -4.7775e-04   3.8036e-04   1.3046e-03   1.4520e-03
-8.0042e-04  -9.0616e-04  -5.1345e-04   4.2432e-04   1.4520e-03   1.6833e-03
-9.5266e-04  -6.7146e-04  -4.1762e-05   5.6857e-04   8.4942e-04   1.0289e-03
-2.8904e-04   8.1980e-05   4.6679e-04   3.6295e-04   1.0620e-04   2.3827e-04
 8.1305e-04   8.5534e-04   4.8754e-04   6.8962e-06  -2.6751e-04  -2.0579e-04
 5.6901e-04   5.0736e-04   1.6117e-04  -5.4263e-05  -1.4853e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5418e-04  -2.8550e-04  -4.5063e-04  -1.9329e-04
 4.9283e-04  -4.9086e-04  -9.3632e-04  -4.2543e-04
 7.3878e-04  -6.3720e-05  -8.0244e-04  -4.7094e-04
 6.7714e-04   4.3427e-04  -2.7153e-04  -2.7156e-04
 1.7761e-04   4.7584e-04   5.6334e-04   2.4935e-04
-4.4454e-04   3.0183e-04   1.3232e-03   7.5572e-04
```

```
-4.3744e-04   4.0525e-04   1.5383e-03   8.7545e-04
 3.6405e-05   7.4598e-04   1.1903e-03   5.7296e-04
 7.4598e-04   8.7300e-04   5.8683e-04   1.7309e-04
 1.1902e-03   5.8681e-04   1.0768e-04  -2.2089e-05
 5.7293e-04   1.7308e-04  -2.2083e-05  -2.4060e-05
-4.8722e-04  -1.7891e-04   3.3146e-04   2.2914e-04
-9.5266e-04  -2.8904e-04   8.1305e-04   5.6901e-04
-6.7146e-04   8.1980e-05   8.5534e-04   5.0736e-04
-4.1762e-05   4.6679e-04   4.8754e-04   1.6117e-04
 5.6857e-04   3.6295e-04   6.8962e-06  -5.4263e-05
 8.4942e-04   1.0620e-04  -2.6751e-04  -1.4853e-04
 1.0289e-03   2.3827e-04  -2.0579e-04  -1.4810e-04
 1.1578e-03   6.5593e-04  -6.1628e-05  -1.4352e-04
 6.5593e-04   9.5102e-04   7.8932e-04   2.7391e-04
-6.1628e-05   7.8932e-04   1.6643e-03   8.5851e-04
-1.4352e-04   2.7391e-04   8.5851e-04   4.8861e-04
```

Iteration 16/100 μ:
  5.1846e-05

Iteration 16/100 d:
  -0.3542854
   0.1018938
   0.3538587
  -0.1264397
  -0.7980729
  -0.5780170
   0.9242892
   0.7654835
  -0.0778228
  -0.3650162
  -0.2491338
  -0.5812292
   0.0090266
   0.5857805
  -0.2608444
  -0.7811056
  -0.5189425
   0.7065891
   0.8806337
  -0.0796962
  -0.4540588
  -0.1923983

μ = 0.000052 / 2 -> 0.000026

Iteration 16/100 w(t):
  -2.5997   4.1706
  -5.3374   1.8643
```

```
-5.2918   6.2980
-4.6600   4.6729
-7.2609   6.1720
-5.8153   8.6222
 1.2530  12.3036
 3.1550  16.4550
 5.1271  14.3288
 7.4848  14.6115
 9.5785  20.0496
```

Iteration 16/100 error:
   4.7323e-04

Iteration 16/100 gradient:
   1.8364e-05
  -5.2666e-06
  -1.8313e-05
   6.5153e-06
   4.1399e-05
   3.0023e-05
  -4.7998e-05
  -3.9668e-05
   4.0650e-06
   1.8917e-05
   1.2937e-05
   3.0161e-05
  -4.3526e-07
  -3.0353e-05
   1.3549e-05
   4.0538e-05
   2.6878e-05
  -3.6607e-05
  -4.5689e-05
   4.1161e-06
   2.3582e-05
   9.9633e-06

Iteration 16/100 gradient norm:
   1.2751e-04

Iteration 17/100 Hessian matrix:
 Columns 1 through 6:

   3.4150e-04   6.6643e-04   4.4620e-04   5.3227e-05 -2.3240e-04 -2.8871e-04
   6.6643e-04   1.4324e-03   1.0522e-03   1.6545e-04 -4.1104e-04 -6.7101e-04
   4.4620e-04   1.0522e-03   1.0387e-03   4.8467e-04 -2.1093e-04 -7.6357e-04
   5.3227e-05   1.6545e-04   4.8467e-04   6.5956e-04   1.4063e-04 -4.7774e-04
  -2.3240e-04 -4.1104e-04 -2.1093e-04   1.4063e-04   3.9569e-04   3.8038e-04
  -2.8871e-04 -6.7101e-04 -7.6357e-04 -4.7774e-04   3.8038e-04   1.3046e-03
```

-3.3041e-04 -8.0036e-04 -9.0614e-04 -5.1345e-04 4.2431e-04 1.4520e-03
-4.8720e-04 -9.5253e-04 -6.7139e-04 -4.1701e-05 5.6861e-04 8.4950e-04
-1.7888e-04 -2.8894e-04 8.2026e-05 4.6684e-04 3.6297e-04 1.0623e-04
 3.3146e-04 8.1315e-04 8.5540e-04 4.8757e-04 6.9327e-06 -2.6747e-04
 2.2917e-04 5.6907e-04 5.0740e-04 1.6118e-04 -5.4233e-05 -1.4851e-04
-8.4290e-05 -2.1359e-04 -3.4231e-04 -3.4668e-04 5.1778e-05 5.0711e-04
-2.1365e-04 -5.4696e-04 -8.4200e-04 -7.2345e-04 1.9420e-04 1.1221e-03
-3.4235e-04 -8.4196e-04 -8.6721e-04 -3.8514e-04 3.2602e-04 9.4879e-04
-3.4666e-04 -7.2341e-04 -3.8508e-04 1.8537e-04 3.6076e-04 3.1077e-04
 5.1778e-05 1.9425e-04 3.2606e-04 3.6073e-04 1.6498e-04 -1.7935e-04
 5.0712e-04 1.1221e-03 9.4884e-04 3.1077e-04 -1.7935e-04 -3.2362e-04
 5.0390e-04 1.1859e-03 1.0762e-03 3.8660e-04 -1.5147e-04 -3.4623e-04
 1.5420e-04 4.9290e-04 7.3880e-04 6.7717e-04 1.7763e-04 -4.4454e-04
-2.8545e-04 -4.9079e-04 -6.3663e-05 4.3433e-04 4.7588e-04 3.0184e-04
-4.5063e-04 -9.3627e-04 -8.0241e-04 -2.7152e-04 5.6333e-04 1.3232e-03
-1.9326e-04 -4.2536e-04 -4.7093e-04 -2.7151e-04 2.4935e-04 7.5576e-04

Columns 7 through 12:

-3.3041e-04 -4.8720e-04 -1.7888e-04 3.3146e-04 2.2917e-04 -8.4290e-05
-8.0036e-04 -9.5253e-04 -2.8894e-04 8.1315e-04 5.6907e-04 -2.1359e-04
-9.0614e-04 -6.7139e-04 8.2026e-05 8.5540e-04 5.0740e-04 -3.4231e-04
-5.1345e-04 -4.1701e-05 4.6684e-04 4.8757e-04 1.6118e-04 -3.4668e-04
 4.2431e-04 5.6861e-04 3.6297e-04 6.9327e-06 -5.4233e-05 5.1778e-05
 1.4520e-03 8.4950e-04 1.0623e-04 -2.6747e-04 -1.4851e-04 5.0711e-04
 1.6833e-03 1.0289e-03 2.3831e-04 -2.0575e-04 -1.4810e-04 5.0393e-04
 1.0289e-03 1.1579e-03 6.5602e-04 -6.1562e-05 -1.4342e-04 1.5422e-04
 2.3831e-04 6.5602e-04 9.5108e-04 7.8935e-04 2.7396e-04 -2.8543e-04
-2.0575e-04 -6.1562e-05 7.8935e-04 1.6644e-03 8.5859e-04 -4.5059e-04
-1.4810e-04 -1.4342e-04 2.7396e-04 8.5859e-04 4.8865e-04 -1.9323e-04
 5.0393e-04 1.5422e-04 -2.8543e-04 -4.5059e-04 -1.9323e-04 3.4150e-04
 1.1859e-03 4.9291e-04 -4.9081e-04 -9.3628e-04 -4.2541e-04 6.6641e-04
 1.0762e-03 7.3884e-04 -6.3676e-05 -8.0239e-04 -4.7096e-04 4.4617e-04
 3.8662e-04 6.7720e-04 4.3433e-04 -2.7145e-04 -2.7148e-04 5.3261e-05
-1.5144e-04 1.7766e-04 4.7589e-04 5.6337e-04 2.4936e-04 -2.3238e-04
-3.4620e-04 -4.4449e-04 3.0185e-04 1.3233e-03 7.5575e-04 -2.8868e-04
-3.8233e-04 -4.3740e-04 4.0531e-04 1.5383e-03 8.7549e-04 -3.3038e-04
-4.3741e-04 3.6467e-05 7.4601e-04 1.1903e-03 5.7302e-04 -4.8720e-04
 4.0532e-04 7.4603e-04 8.7303e-04 5.8689e-04 1.7315e-04 -1.7887e-04
 1.5383e-03 1.1903e-03 5.8685e-04 1.0770e-04 -2.2051e-05 3.3144e-04
 8.7551e-04 5.7302e-04 1.7313e-04 -2.2016e-05 -2.3985e-05 2.2920e-04

Columns 13 through 18:

-2.1365e-04 -3.4235e-04 -3.4666e-04 5.1778e-05 5.0712e-04 5.0390e-04
-5.4696e-04 -8.4196e-04 -7.2341e-04 1.9425e-04 1.1221e-03 1.1859e-03
-8.4200e-04 -8.6721e-04 -3.8508e-04 3.2606e-04 9.4884e-04 1.0762e-03
-7.2345e-04 -3.8514e-04 1.8537e-04 3.6073e-04 3.1077e-04 3.8660e-04
 1.9420e-04 3.2602e-04 3.6076e-04 1.6498e-04 -1.7935e-04 -1.5147e-04

```
 1.1221e-03   9.4879e-04   3.1077e-04  -1.7935e-04  -3.2362e-04  -3.4623e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5144e-04  -3.4620e-04  -3.8233e-04
 4.9291e-04   7.3884e-04   6.7720e-04   1.7766e-04  -4.4449e-04  -4.3740e-04
-4.9081e-04  -6.3676e-05   4.3433e-04   4.7589e-04   3.0185e-04   4.0531e-04
-9.3628e-04  -8.0239e-04  -2.7145e-04   5.6337e-04   1.3233e-03   1.5383e-03
-4.2541e-04  -4.7096e-04  -2.7148e-04   2.4936e-04   7.5575e-04   8.7549e-04
 6.6641e-04   4.4617e-04   5.3261e-05  -2.3238e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0521e-03   1.6544e-04  -4.1107e-04  -6.7101e-04  -8.0039e-04
 1.0521e-03   1.0386e-03   4.8466e-04  -2.1092e-04  -7.6355e-04  -9.0614e-04
 1.6544e-04   4.8466e-04   6.5961e-04   1.4068e-04  -4.7768e-04  -5.1344e-04
-4.1107e-04  -2.1092e-04   1.4068e-04   3.9571e-04   3.8038e-04   4.2434e-04
-6.7101e-04  -7.6355e-04  -4.7768e-04   3.8038e-04   1.3046e-03   1.4520e-03
-8.0039e-04  -9.0614e-04  -5.1344e-04   4.2434e-04   1.4520e-03   1.6833e-03
-9.5263e-04  -6.7145e-04  -4.1692e-05   5.6860e-04   8.4948e-04   1.0289e-03
-2.8897e-04   8.2017e-05   4.6687e-04   3.6296e-04   1.0622e-04   2.3828e-04
 8.1308e-04   8.5538e-04   4.8755e-04   6.9083e-06  -2.6748e-04  -2.0581e-04
 5.6906e-04   5.0741e-04   1.6122e-04  -5.4199e-05  -1.4849e-04  -1.4809e-04
```

Columns 19 through 22:

```
 1.5420e-04  -2.8545e-04  -4.5063e-04  -1.9326e-04
 4.9290e-04  -4.9079e-04  -9.3627e-04  -4.2536e-04
 7.3880e-04  -6.3663e-05  -8.0241e-04  -4.7093e-04
 6.7717e-04   4.3433e-04  -2.7152e-04  -2.7151e-04
 1.7763e-04   4.7588e-04   5.6333e-04   2.4935e-04
-4.4454e-04   3.0184e-04   1.3232e-03   7.5576e-04
-4.3741e-04   4.0532e-04   1.5383e-03   8.7551e-04
 3.6467e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4601e-04   8.7303e-04   5.8685e-04   1.7313e-04
 1.1903e-03   5.8689e-04   1.0770e-04  -2.2016e-05
 5.7302e-04   1.7315e-04  -2.2051e-05  -2.3985e-05
-4.8720e-04  -1.7887e-04   3.3144e-04   2.2920e-04
-9.5263e-04  -2.8897e-04   8.1308e-04   5.6906e-04
-6.7145e-04   8.2017e-05   8.5538e-04   5.0741e-04
-4.1692e-05   4.6687e-04   4.8755e-04   1.6122e-04
 5.6860e-04   3.6296e-04   6.9083e-06  -5.4199e-05
 8.4948e-04   1.0622e-04  -2.6748e-04  -1.4849e-04
 1.0289e-03   2.3828e-04  -2.0581e-04  -1.4809e-04
 1.1578e-03   6.5599e-04  -6.1611e-05  -1.4345e-04
 6.5599e-04   9.5109e-04   7.8934e-04   2.7397e-04
-6.1611e-05   7.8934e-04   1.6643e-03   8.5856e-04
-1.4345e-04   2.7397e-04   8.5856e-04   4.8865e-04
```

Iteration 17/100 μ:
  2.5923e-05

Iteration 17/100 d:
 -0.464184
  0.200989

0.389378
-0.162337
-0.754767
-0.641902
0.985789
0.757839
-0.012070
-0.387660
-0.372295
-0.509890
0.148111
0.482408
-0.184558
-0.814508
-0.597116
0.883429
0.779236
0.057201
-0.456442
-0.409455

$\mu = 0.000026 / 2 \rightarrow 0.000013$

Iteration 17/100 w(t):
-3.0638   3.6607
-5.1365   2.0124
-4.9024   6.7804
-4.8223   4.4883
-8.0157   5.3575
-6.4572   8.0251
 2.2388 13.1870
 3.9129 17.2343
 5.1150 14.3860
 7.0971 14.1551
 9.2062 19.6402

Iteration 17/100 error:
2.2669e-04

Iteration 17/100 gradient:
1.2012e-05
-5.2031e-06
-1.0078e-05
4.1603e-06
1.9619e-05
1.6620e-05
-2.5585e-05
-1.9692e-05
2.8242e-07

1.0066e-05
9.6347e-06
1.3184e-05
-3.8533e-06
-1.2498e-05
4.8406e-06
2.1135e-05
1.5453e-05
-2.2947e-05
-2.0189e-05
-1.4896e-06
1.1816e-05
1.0617e-05

Iteration 17/100 gradient norm:
6.6562e-05

Iteration 18/100 Hessian matrix:
Columns 1 through 6:

  3.4152e-04   6.6645e-04   4.4617e-04   5.3251e-05 -2.3236e-04 -2.8868e-04
  6.6645e-04   1.4323e-03   1.0522e-03   1.6545e-04 -4.1104e-04 -6.7102e-04
  4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1090e-04 -7.6356e-04
  5.3251e-05   1.6545e-04   4.8465e-04   6.5958e-04   1.4067e-04 -4.7770e-04
 -2.3236e-04 -4.1104e-04 -2.1090e-04   1.4067e-04   3.9573e-04   3.8039e-04
 -2.8868e-04 -6.7102e-04 -7.6356e-04 -4.7770e-04   3.8039e-04   1.3046e-03
 -3.3039e-04 -8.0037e-04 -9.0613e-04 -5.1344e-04   4.2434e-04   1.4520e-03
 -4.8717e-04 -9.5256e-04 -6.7141e-04 -4.1674e-05   5.6864e-04   8.4951e-04
 -1.7887e-04 -2.8896e-04   8.2029e-05   4.6685e-04   3.6298e-04   1.0625e-04
  3.3148e-04   8.1314e-04   8.5540e-04   4.8759e-04   6.9419e-06 -2.6745e-04
  2.2920e-04   5.6907e-04   5.0738e-04   1.6120e-04 -5.4210e-05 -1.4851e-04
 -8.4287e-05 -2.1361e-04 -3.4234e-04 -3.4666e-04   5.1784e-05   5.0712e-04
 -2.1360e-04 -5.4696e-04 -8.4198e-04 -7.2342e-04   1.9426e-04   1.1221e-03
 -3.4233e-04 -8.4196e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4879e-04
 -3.4669e-04 -7.2342e-04 -3.8513e-04   1.8537e-04   3.6074e-04   3.1077e-04
  5.1799e-05   1.9424e-04   3.2605e-04   3.6076e-04   1.6498e-04 -1.7934e-04
  5.0714e-04   1.1221e-03   9.4880e-04   3.1078e-04 -1.7932e-04 -3.2363e-04
  5.0396e-04   1.1859e-03   1.0762e-03   3.8664e-04 -1.5141e-04 -3.4620e-04
  1.5421e-04   4.9290e-04   7.3880e-04   6.7717e-04   1.7766e-04 -4.4452e-04
 -2.8542e-04 -4.9077e-04 -6.3645e-05   4.3435e-04   4.7591e-04   3.0187e-04
 -4.5060e-04 -9.3625e-04 -8.0241e-04 -2.7147e-04   5.6338e-04   1.3233e-03
 -1.9323e-04 -4.2538e-04 -4.7093e-04 -2.7148e-04   2.4938e-04   7.5577e-04

Columns 7 through 12:

 -3.3039e-04 -4.8717e-04 -1.7887e-04   3.3148e-04   2.2920e-04 -8.4287e-05
 -8.0037e-04 -9.5256e-04 -2.8896e-04   8.1314e-04   5.6907e-04 -2.1361e-04
 -9.0613e-04 -6.7141e-04   8.2029e-05   8.5540e-04   5.0738e-04 -3.4234e-04
 -5.1344e-04 -4.1674e-05   4.6685e-04   4.8759e-04   1.6120e-04 -3.4666e-04

```
 4.2434e-04   5.6864e-04   3.6298e-04   6.9419e-06  -5.4210e-05   5.1784e-05
 1.4520e-03   8.4951e-04   1.0625e-04  -2.6745e-04  -1.4851e-04   5.0712e-04
 1.6834e-03   1.0289e-03   2.3829e-04  -2.0575e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1559e-05  -1.4344e-04   1.5422e-04
 2.3829e-04   6.5602e-04   9.5109e-04   7.8938e-04   2.7395e-04  -2.8542e-04
-2.0575e-04  -6.1559e-05   7.8938e-04   1.6644e-03   8.5858e-04  -4.5059e-04
-1.4810e-04  -1.4344e-04   2.7395e-04   8.5858e-04   4.8864e-04  -1.9325e-04
 5.0395e-04   1.5422e-04  -2.8542e-04  -4.5059e-04  -1.9325e-04   3.4150e-04
 1.1859e-03   4.9293e-04  -4.9078e-04  -9.3625e-04  -4.2538e-04   6.6643e-04
 1.0762e-03   7.3881e-04  -6.3669e-05  -8.0241e-04  -4.7096e-04   4.4617e-04
 3.8660e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7151e-04   5.3244e-05
-1.5142e-04   1.7767e-04   4.7591e-04   5.6338e-04   2.4935e-04  -2.3239e-04
-3.4620e-04  -4.4451e-04   3.0187e-04   1.3233e-03   7.5576e-04  -2.8869e-04
-3.8230e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6469e-05   7.4601e-04   1.1903e-03   5.7301e-04  -4.8721e-04
 4.0533e-04   7.4606e-04   8.7306e-04   5.8691e-04   1.7314e-04  -1.7886e-04
 1.5383e-03   1.1903e-03   5.8688e-04   1.0774e-04  -2.2046e-05   3.3149e-04
 8.7553e-04   5.7304e-04   1.7314e-04  -2.2020e-05  -2.3989e-05   2.2921e-04
```

Columns 13 through 18:

```
-2.1360e-04  -3.4233e-04  -3.4669e-04   5.1799e-05   5.0714e-04   5.0396e-04
-5.4696e-04  -8.4196e-04  -7.2342e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4198e-04  -8.6723e-04  -3.8513e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2342e-04  -3.8511e-04   1.8537e-04   3.6076e-04   3.1078e-04   3.8664e-04
 1.9426e-04   3.2605e-04   3.6074e-04   1.6498e-04  -1.7932e-04  -1.5141e-04
 1.1221e-03   9.4879e-04   3.1077e-04  -1.7934e-04  -3.2363e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8660e-04  -1.5142e-04  -3.4620e-04  -3.8230e-04
 4.9293e-04   7.3881e-04   6.7719e-04   1.7767e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3669e-05   4.3434e-04   4.7591e-04   3.0187e-04   4.0533e-04
-9.3625e-04  -8.0241e-04  -2.7147e-04   5.6338e-04   1.3233e-03   1.5384e-03
-4.2538e-04  -4.7096e-04  -2.7151e-04   2.4935e-04   7.5576e-04   8.7551e-04
 6.6643e-04   4.4617e-04   5.3244e-05  -2.3239e-04  -2.8869e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6542e-04  -4.1104e-04  -6.7100e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6355e-04  -9.0614e-04
 1.6542e-04   4.8465e-04   6.5955e-04   1.4066e-04  -4.7772e-04  -5.1344e-04
-4.1104e-04  -2.1091e-04   1.4066e-04   3.9572e-04   3.8038e-04   4.2436e-04
-6.7100e-04  -7.6355e-04  -4.7772e-04   3.8038e-04   1.3046e-03   1.4521e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2436e-04   1.4521e-03   1.6834e-03
-9.5260e-04  -6.7143e-04  -4.1700e-05   5.6861e-04   8.4949e-04   1.0289e-03
-2.8894e-04   8.2031e-05   4.6684e-04   3.6299e-04   1.0624e-04   2.3832e-04
 8.1312e-04   8.5540e-04   4.8755e-04   6.9377e-06  -2.6746e-04  -2.0575e-04
 5.6906e-04   5.0741e-04   1.6120e-04  -5.4209e-05  -1.4851e-04  -1.4808e-04
```

Columns 19 through 22:

```
 1.5421e-04  -2.8542e-04  -4.5060e-04  -1.9323e-04
 4.9290e-04  -4.9077e-04  -9.3625e-04  -4.2538e-04
 7.3880e-04  -6.3645e-05  -8.0241e-04  -4.7093e-04
```

```
 6.7717e-04   4.3435e-04  -2.7147e-04  -2.7148e-04
 1.7766e-04   4.7591e-04   5.6338e-04   2.4938e-04
-4.4452e-04   3.0187e-04   1.3233e-03   7.5577e-04
-4.3738e-04   4.0533e-04   1.5383e-03   8.7553e-04
 3.6469e-05   7.4606e-04   1.1903e-03   5.7304e-04
 7.4601e-04   8.7306e-04   5.8688e-04   1.7314e-04
 1.1903e-03   5.8691e-04   1.0774e-04  -2.2020e-05
 5.7301e-04   1.7314e-04  -2.2046e-05  -2.3989e-05
-4.8721e-04  -1.7886e-04   3.3149e-04   2.2921e-04
-9.5260e-04  -2.8894e-04   8.1312e-04   5.6906e-04
-6.7143e-04   8.2031e-05   8.5540e-04   5.0741e-04
-4.1700e-05   4.6684e-04   4.8755e-04   1.6120e-04
 5.6861e-04   3.6299e-04   6.9377e-06  -5.4209e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3832e-04  -2.0575e-04  -1.4808e-04
 1.1578e-03   6.5602e-04  -6.1595e-05  -1.4344e-04
 6.5602e-04   9.5111e-04   7.8939e-04   2.7399e-04
-6.1595e-05   7.8939e-04   1.6643e-03   8.5858e-04
-1.4344e-04   2.7399e-04   8.5858e-04   4.8867e-04
```

Iteration 18/100 μ:
```
  1.2961e-05
```

Iteration 18/100 d:
```
 -0.44991
  0.34067
  0.16280
 -0.26375
 -0.44933
 -0.52408
  0.82021
  0.47038
  0.18285
 -0.27037
 -0.51277
 -0.42021
  0.27884
  0.23926
 -0.22820
 -0.57653
 -0.45385
  0.72592
  0.42967
  0.31872
 -0.37646
 -0.63318
```

μ = 0.000013 / 2 -> 0.000006

Iteration 18/100 w(t):
   -3.5138   3.2405
   -4.7958   2.2912
   -4.7396   7.0197
   -5.0861   4.2602
   -8.4650   4.7810
   -6.9813   7.5712
    3.0590 13.9130
    4.3832 17.6639
    5.2978 14.7047
    6.8267 13.7786
    8.6935 19.0070

Iteration 18/100 error:
   1.3192e-04

Iteration 18/100 gradient:
    5.8310e-06
   -4.4197e-06
   -2.1217e-06
    3.4460e-06
    5.8398e-06
    6.7863e-06
   -1.0664e-05
   -6.0930e-06
   -2.3472e-06
    3.5308e-06
    6.6467e-06
    5.4278e-06
   -3.5943e-06
   -3.0965e-06
    2.9527e-06
    7.4571e-06
    5.8683e-06
   -9.3933e-06
   -5.5680e-06
   -4.1156e-06
    4.9058e-06
    8.2188e-06

Iteration 18/100 gradient norm:
   2.7232e-05

Iteration 19/100 Hessian matrix:
 Columns 1 through 6:

   3.4152e-04   6.6640e-04   4.4617e-04   5.3229e-05 -2.3239e-04 -2.8869e-04
   6.6640e-04   1.4323e-03   1.0522e-03   1.6542e-04 -4.1107e-04 -6.7103e-04
   4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1092e-04 -7.6357e-04

```
 5.3229e-05  1.6542e-04  4.8465e-04  6.5955e-04  1.4065e-04 -4.7772e-04
-2.3239e-04 -4.1107e-04 -2.1092e-04  1.4065e-04  3.9569e-04  3.8037e-04
-2.8869e-04 -6.7103e-04 -7.6357e-04 -4.7772e-04  3.8037e-04  1.3046e-03
-3.3039e-04 -8.0039e-04 -9.0613e-04 -5.1345e-04  4.2435e-04  1.4520e-03
-4.8719e-04 -9.5259e-04 -6.7142e-04 -4.1694e-05  5.6860e-04  8.4949e-04
-1.7886e-04 -2.8898e-04  8.2021e-05  4.6684e-04  3.6296e-04  1.0624e-04
 3.3148e-04  8.1310e-04  8.5539e-04  4.8755e-04  6.9207e-06 -2.6746e-04
 2.2919e-04  5.6905e-04  5.0739e-04  1.6119e-04 -5.4229e-05 -1.4851e-04
-8.4262e-05 -2.1362e-04 -3.4232e-04 -3.4666e-04  5.1784e-05  5.0715e-04
-2.1362e-04 -5.4698e-04 -8.4198e-04 -7.2344e-04  1.9422e-04  1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8512e-04  3.2604e-04  9.4879e-04
-3.4668e-04 -7.2345e-04 -3.8512e-04  1.8536e-04  3.6074e-04  3.1077e-04
 5.1780e-05  1.9422e-04  3.2606e-04  3.6075e-04  1.6499e-04 -1.7934e-04
 5.0714e-04  1.1221e-03  9.4880e-04  3.1076e-04 -1.7934e-04 -3.2363e-04
 5.0395e-04  1.1859e-03  1.0762e-03  3.8662e-04 -1.5142e-04 -3.4621e-04
 1.5422e-04  4.9290e-04  7.3880e-04  6.7719e-04  1.7764e-04 -4.4452e-04
-2.8543e-04 -4.9080e-04 -6.3668e-05  4.3434e-04  4.7589e-04  3.0184e-04
-4.5061e-04 -9.3627e-04 -8.0241e-04 -2.7148e-04  5.6335e-04  1.3233e-03
-1.9324e-04 -4.2540e-04 -4.7095e-04 -2.7150e-04  2.4935e-04  7.5575e-04
```

Columns 7 through 12:

```
-3.3039e-04 -4.8719e-04 -1.7886e-04  3.3148e-04  2.2919e-04 -8.4262e-05
-8.0039e-04 -9.5259e-04 -2.8898e-04  8.1310e-04  5.6905e-04 -2.1362e-04
-9.0613e-04 -6.7142e-04  8.2021e-05  8.5539e-04  5.0739e-04 -3.4232e-04
-5.1345e-04 -4.1694e-05  4.6684e-04  4.8755e-04  1.6119e-04 -3.4666e-04
 4.2435e-04  5.6860e-04  3.6296e-04  6.9207e-06 -5.4229e-05  5.1784e-05
 1.4520e-03  8.4949e-04  1.0624e-04 -2.6746e-04 -1.4851e-04  5.0715e-04
 1.6834e-03  1.0289e-03  2.3831e-04 -2.0576e-04 -1.4810e-04  5.0397e-04
 1.0289e-03  1.1579e-03  6.5601e-04 -6.1572e-05 -1.4345e-04  1.5423e-04
 2.3831e-04  6.5601e-04  9.5110e-04  7.8937e-04  2.7395e-04 -2.8541e-04
-2.0576e-04 -6.1572e-05  7.8937e-04  1.6644e-03  8.5857e-04 -4.5057e-04
-1.4810e-04 -1.4345e-04  2.7395e-04  8.5857e-04  4.8864e-04 -1.9321e-04
 5.0397e-04  1.5423e-04 -2.8541e-04 -4.5057e-04 -1.9321e-04  3.4154e-04
 1.1859e-03  4.9291e-04 -4.9079e-04 -9.3625e-04 -4.2540e-04  6.6644e-04
 1.0762e-03  7.3880e-04 -6.3683e-05 -8.0241e-04 -4.7096e-04  4.4618e-04
 3.8660e-04  6.7717e-04  4.3434e-04 -2.7147e-04 -2.7151e-04  5.3244e-05
-1.5142e-04  1.7765e-04  4.7591e-04  5.6338e-04  2.4937e-04 -2.3235e-04
-3.4620e-04 -4.4452e-04  3.0184e-04  1.3233e-03  7.5575e-04 -2.8867e-04
-3.8231e-04 -4.3738e-04  4.0533e-04  1.5384e-03  8.7551e-04 -3.3036e-04
-4.3739e-04  3.6461e-05  7.4603e-04  1.1903e-03  5.7302e-04 -4.8717e-04
 4.0532e-04  7.4602e-04  8.7303e-04  5.8688e-04  1.7312e-04 -1.7885e-04
 1.5383e-03  1.1903e-03  5.8687e-04  1.0772e-04 -2.2059e-05  3.3148e-04
 8.7551e-04  5.7301e-04  1.7313e-04 -2.2046e-05 -2.4000e-05  2.2920e-04
```

Columns 13 through 18:

```
-2.1362e-04 -3.4233e-04 -3.4668e-04  5.1780e-05  5.0714e-04  5.0395e-04
-5.4698e-04 -8.4199e-04 -7.2345e-04  1.9422e-04  1.1221e-03  1.1859e-03
```

```
-8.4198e-04  -8.6723e-04  -3.8512e-04   3.2606e-04   9.4880e-04   1.0762e-03
-7.2344e-04  -3.8512e-04   1.8536e-04   3.6075e-04   3.1076e-04   3.8662e-04
 1.9422e-04   3.2604e-04   3.6074e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4879e-04   3.1077e-04  -1.7934e-04  -3.2363e-04  -3.4621e-04
 1.1859e-03   1.0762e-03   3.8660e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3880e-04   6.7717e-04   1.7765e-04  -4.4452e-04  -4.3738e-04
-4.9079e-04  -6.3683e-05   4.3434e-04   4.7591e-04   3.0184e-04   4.0533e-04
-9.3625e-04  -8.0241e-04  -2.7147e-04   5.6338e-04   1.3233e-03   1.5384e-03
-4.2540e-04  -4.7096e-04  -2.7151e-04   2.4937e-04   7.5575e-04   8.7551e-04
 6.6644e-04   4.4618e-04   5.3244e-05  -2.3235e-04  -2.8867e-04  -3.3036e-04
 1.4323e-03   1.0522e-03   1.6542e-04  -4.1105e-04  -6.7101e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6542e-04   4.8465e-04   6.5956e-04   1.4066e-04  -4.7773e-04  -5.1345e-04
-4.1105e-04  -2.1091e-04   1.4066e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7101e-04  -7.6357e-04  -4.7773e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1345e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5259e-04  -6.7143e-04  -4.1699e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8897e-04   8.2014e-05   4.6683e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1312e-04   8.5538e-04   4.8754e-04   6.9184e-06  -2.6747e-04  -2.0575e-04
 5.6907e-04   5.0738e-04   1.6119e-04  -5.4217e-05  -1.4851e-04  -1.4809e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5061e-04  -1.9324e-04
 4.9290e-04  -4.9080e-04  -9.3627e-04  -4.2540e-04
 7.3880e-04  -6.3668e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7148e-04  -2.7150e-04
 1.7764e-04   4.7589e-04   5.6335e-04   2.4935e-04
-4.4452e-04   3.0184e-04   1.3233e-03   7.5575e-04
-4.3739e-04   4.0532e-04   1.5383e-03   8.7551e-04
 3.6461e-05   7.4602e-04   1.1903e-03   5.7301e-04
 7.4603e-04   8.7303e-04   5.8687e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2046e-05
 5.7302e-04   1.7312e-04  -2.2059e-05  -2.4000e-05
-4.8717e-04  -1.7885e-04   3.3148e-04   2.2920e-04
-9.5259e-04  -2.8897e-04   8.1312e-04   5.6907e-04
-6.7143e-04   8.2014e-05   8.5538e-04   5.0738e-04
-4.1699e-05   4.6683e-04   4.8754e-04   1.6119e-04
 5.6862e-04   3.6298e-04   6.9184e-06  -5.4217e-05
 8.4949e-04   1.0624e-04  -2.6747e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0575e-04  -1.4809e-04
 1.1579e-03   6.5601e-04  -6.1586e-05  -1.4344e-04
 6.5601e-04   9.5108e-04   7.8936e-04   2.7395e-04
-6.1586e-05   7.8936e-04   1.6643e-03   8.5856e-04
-1.4344e-04   2.7395e-04   8.5856e-04   4.8865e-04
```

Iteration 19/100 μ:
  6.4807e-06

Iteration 19/100 d:
  -0.454213
   0.465778
  -0.063304
  -0.490216
  -0.072904
  -0.186415
   0.535873
   0.116872
   0.475436
  -0.187705
  -0.694978
  -0.376522
   0.359383
   0.058771
  -0.408219
  -0.299549
  -0.062959
   0.372061
   0.034610
   0.727970
  -0.384175
  -0.925625

$\mu = 0.000006 / 2 \rightarrow 0.000003$

Iteration 19/100 w(t):
  -3.9680   2.8640
  -4.3300   2.6506
  -4.8029   7.0785
  -5.5763   3.8519
  -8.5379   4.4815
  -7.1677   7.5083
   3.5949   14.2850
   4.5001   17.6985
   5.7733   15.4327
   6.6390   13.3945
   7.9985   18.0814

Iteration 19/100 error:
  9.6892e-05

Iteration 19/100 gradient:
  2.9473e-06
  -3.0378e-06
  4.0675e-07
  3.1795e-06
  4.5435e-07
  1.2329e-06

```
-3.4681e-06
-7.7570e-07
-3.0868e-06
 1.2320e-06
 4.5115e-06
 2.4597e-06
-2.3170e-06
-3.8080e-07
 2.6428e-06
 1.9523e-06
 4.0739e-07
-2.4016e-06
-2.2092e-07
-4.7165e-06
 2.4680e-06
 6.0012e-06
```

Iteration 19/100 gradient norm:
   1.2909e-05

Iteration 20/100 Hessian matrix:
 Columns 1 through 6:

```
 3.4150e-04  6.6642e-04  4.4617e-04  5.3231e-05 -2.3238e-04 -2.8869e-04
 6.6642e-04  1.4323e-03  1.0522e-03  1.6543e-04 -4.1104e-04 -6.7101e-04
 4.4617e-04  1.0522e-03  1.0387e-03  4.8465e-04 -2.1090e-04 -7.6356e-04
 5.3231e-05  1.6543e-04  4.8465e-04  6.5956e-04  1.4066e-04 -4.7771e-04
-2.3238e-04 -4.1104e-04 -2.1090e-04  1.4066e-04  3.9571e-04  3.8039e-04
-2.8869e-04 -6.7101e-04 -7.6356e-04 -4.7771e-04  3.8039e-04  1.3046e-03
-3.3039e-04 -8.0037e-04 -9.0614e-04 -5.1345e-04  4.2435e-04  1.4520e-03
-4.8719e-04 -9.5257e-04 -6.7142e-04 -4.1687e-05  5.6862e-04  8.4949e-04
-1.7885e-04 -2.8895e-04  8.2026e-05  4.6685e-04  3.6299e-04  1.0625e-04
 3.3148e-04  8.1312e-04  8.5539e-04  4.8757e-04  6.9335e-06 -2.6746e-04
 2.2919e-04  5.6908e-04  5.0739e-04  1.6120e-04 -5.4208e-05 -1.4850e-04
-8.4274e-05 -2.1361e-04 -3.4232e-04 -3.4667e-04  5.1784e-05  5.0715e-04
-2.1361e-04 -5.4696e-04 -8.4198e-04 -7.2342e-04  1.9425e-04  1.1221e-03
-3.4233e-04 -8.4198e-04 -8.6723e-04 -3.8512e-04  3.2606e-04  9.4882e-04
-3.4668e-04 -7.2342e-04 -3.8512e-04  1.8536e-04  3.6075e-04  3.1077e-04
 5.1787e-05  1.9425e-04  3.2605e-04  3.6076e-04  1.6500e-04 -1.7933e-04
 5.0713e-04  1.1221e-03  9.4879e-04  3.1075e-04 -1.7934e-04 -3.2362e-04
 5.0395e-04  1.1859e-03  1.0762e-03  3.8662e-04 -1.5141e-04 -3.4619e-04
 1.5421e-04  4.9292e-04  7.3882e-04  6.7720e-04  1.7766e-04 -4.4452e-04
-2.8543e-04 -4.9078e-04 -6.3665e-05  4.3434e-04  4.7591e-04  3.0185e-04
-4.5060e-04 -9.3625e-04 -8.0241e-04 -2.7148e-04  5.6336e-04  1.3233e-03
-1.9324e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04  2.4935e-04  7.5575e-04
```

 Columns 7 through 12:

```
-3.3039e-04 -4.8719e-04 -1.7885e-04  3.3148e-04  2.2919e-04 -8.4274e-05
```

```
-8.0037e-04  -9.5257e-04  -2.8895e-04   8.1312e-04   5.6908e-04  -2.1361e-04
-9.0614e-04  -6.7142e-04   8.2026e-05   8.5539e-04   5.0739e-04  -3.4232e-04
-5.1345e-04  -4.1687e-05   4.6685e-04   4.8757e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6862e-04   3.6299e-04   6.9335e-06  -5.4208e-05   5.1784e-05
 1.4520e-03   8.4949e-04   1.0625e-04  -2.6746e-04  -1.4850e-04   5.0715e-04
 1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1565e-05  -1.4344e-04   1.5422e-04
 2.3831e-04   6.5602e-04   9.5110e-04   7.8937e-04   2.7396e-04  -2.8542e-04
-2.0576e-04  -6.1565e-05   7.8937e-04   1.6644e-03   8.5857e-04  -4.5059e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8542e-04  -4.5059e-04  -1.9323e-04   3.4153e-04
 1.1859e-03   4.9291e-04  -4.9077e-04  -9.3625e-04  -4.2538e-04   6.6644e-04
 1.0762e-03   7.3882e-04  -6.3661e-05  -8.0240e-04  -4.7094e-04   4.4618e-04
 3.8662e-04   6.7718e-04   4.3435e-04  -2.7147e-04  -2.7149e-04   5.3243e-05
-1.5141e-04   1.7766e-04   4.7592e-04   5.6338e-04   2.4937e-04  -2.3236e-04
-3.4621e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0534e-04   1.5384e-03   8.7553e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8718e-04
 4.0533e-04   7.4603e-04   8.7305e-04   5.8688e-04   1.7313e-04  -1.7885e-04
 1.5383e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2059e-05   3.3147e-04
 8.7550e-04   5.7302e-04   1.7314e-04  -2.2046e-05  -2.3999e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1361e-04  -3.4233e-04  -3.4668e-04   5.1787e-05   5.0713e-04   5.0395e-04
-5.4696e-04  -8.4198e-04  -7.2342e-04   1.9425e-04   1.1221e-03   1.1859e-03
-8.4198e-04  -8.6723e-04  -3.8512e-04   3.2605e-04   9.4879e-04   1.0762e-03
-7.2342e-04  -3.8512e-04   1.8536e-04   3.6076e-04   3.1075e-04   3.8662e-04
 1.9425e-04   3.2606e-04   3.6075e-04   1.6500e-04  -1.7934e-04  -1.5141e-04
 1.1221e-03   9.4882e-04   3.1077e-04  -1.7933e-04  -3.2362e-04  -3.4619e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5141e-04  -3.4621e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7718e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9077e-04  -6.3661e-05   4.3435e-04   4.7592e-04   3.0185e-04   4.0534e-04
-9.3625e-04  -8.0240e-04  -2.7147e-04   5.6338e-04   1.3233e-03   1.5384e-03
-4.2538e-04  -4.7094e-04  -2.7149e-04   2.4937e-04   7.5575e-04   8.7553e-04
 6.6644e-04   4.4618e-04   5.3243e-05  -2.3236e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1103e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8466e-04  -2.1090e-04  -7.6356e-04  -9.0613e-04
 1.6544e-04   4.8466e-04   6.5956e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1103e-04  -2.1090e-04   1.4067e-04   3.9574e-04   3.8038e-04   4.2435e-04
-6.7102e-04  -7.6356e-04  -4.7771e-04   3.8038e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0613e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1681e-05   5.6863e-04   8.4948e-04   1.0289e-03
-2.8895e-04   8.2025e-05   4.6685e-04   3.6298e-04   1.0623e-04   2.3831e-04
 8.1312e-04   8.5539e-04   4.8755e-04   6.9284e-06  -2.6747e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6119e-04  -5.4213e-05  -1.4852e-04  -1.4809e-04
```

Columns 19 through 22:

```
 1.5421e-04  -2.8543e-04  -4.5060e-04  -1.9324e-04
 4.9292e-04  -4.9078e-04  -9.3625e-04  -4.2539e-04
 7.3882e-04  -6.3665e-05  -8.0241e-04  -4.7095e-04
 6.7720e-04   4.3434e-04  -2.7148e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6336e-04   2.4935e-04
-4.4452e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5383e-03   8.7550e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7305e-04   5.8688e-04   1.7314e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2046e-05
 5.7302e-04   1.7313e-04  -2.2059e-05  -2.3999e-05
-4.8718e-04  -1.7885e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8895e-04   8.1312e-04   5.6906e-04
-6.7142e-04   8.2025e-05   8.5539e-04   5.0739e-04
-4.1681e-05   4.6685e-04   4.8755e-04   1.6119e-04
 5.6863e-04   3.6298e-04   6.9284e-06  -5.4213e-05
 8.4948e-04   1.0623e-04  -2.6747e-04  -1.4852e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4809e-04
 1.1579e-03   6.5602e-04  -6.1583e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8937e-04   2.7395e-04
-6.1583e-05   7.8937e-04   1.6643e-03   8.5856e-04
-1.4344e-04   2.7395e-04   8.5856e-04   4.8863e-04
```

Iteration 20/100 μ:
```
 3.2404e-06
```

Iteration 20/100 d:
```
-0.565403
 0.613081
-0.187365
-0.850011
 0.162329
 0.201545
 0.346092
-0.066083
 0.846330
-0.244591
-0.973812
-0.427604
 0.427403
 0.025048
-0.717003
-0.220537
 0.403895
 0.076578
-0.210587
 1.271270
-0.579003
-1.364294
```

μ = 0.000003 / 2 -> 0.000002

Iteration 20/100 w(t):
  -4.5334   2.4364
  -3.7169   3.0780
  -4.9903   7.1035
  -6.4263   3.1349
  -8.3756   4.2609
  -6.9661   7.9122
   3.9410 14.3616
   4.4340 17.4879
   6.6196 16.7039
   6.3944 12.8155
   7.0247 16.7171

Iteration 20/100 error:
  6.6242e-05

Iteration 20/100 gradient:
  1.7953e-06
 -1.9799e-06
  5.8383e-07
  2.7362e-06
 -5.6070e-07
 -6.3802e-07
 -1.1492e-06
  2.0716e-07
 -2.7415e-06
  8.0352e-07
  3.1354e-06
  1.3675e-06
 -1.3892e-06
 -8.6675e-08
  2.2827e-06
  7.2275e-07
 -1.3173e-06
 -2.3930e-07
  6.8071e-07
 -4.1338e-06
  1.8279e-06
  4.3885e-06

Iteration 20/100 gradient norm:
  9.3023e-06

Iteration 21/100 Hessian matrix:
 Columns 1 through 6:

3.4152e-04   6.6642e-04   4.4617e-04   5.3241e-05 -2.3237e-04 -2.8869e-04
6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1104e-04 -6.7102e-04
4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1091e-04 -7.6357e-04
5.3241e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7772e-04
-2.3237e-04 -4.1104e-04 -2.1091e-04   1.4067e-04   3.9573e-04   3.8039e-04
-2.8869e-04 -6.7102e-04 -7.6357e-04 -4.7772e-04   3.8039e-04   1.3046e-03
-3.3038e-04 -8.0038e-04 -9.0614e-04 -5.1345e-04   4.2435e-04   1.4520e-03
-4.8719e-04 -9.5259e-04 -6.7143e-04 -4.1688e-05   5.6863e-04   8.4948e-04
-1.7887e-04 -2.8897e-04   8.2014e-05   4.6685e-04   3.6298e-04   1.0623e-04
3.3147e-04   8.1310e-04   8.5538e-04   4.8755e-04   6.9265e-06 -2.6747e-04
2.2919e-04   5.6906e-04   5.0738e-04   1.6120e-04 -5.4216e-05 -1.4851e-04
-8.4281e-05 -2.1362e-04 -3.4233e-04 -3.4666e-04   5.1791e-05   5.0713e-04
-2.1363e-04 -5.4698e-04 -8.4199e-04 -7.2343e-04   1.9425e-04   1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6724e-04 -3.8511e-04   3.2605e-04   9.4879e-04
-3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
5.1781e-05   1.9424e-04   3.2605e-04   3.6074e-04   1.6500e-04 -1.7935e-04
5.0714e-04   1.1221e-03   9.4879e-04   3.1076e-04 -1.7934e-04 -3.2363e-04
5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04 -1.5141e-04 -3.4620e-04
1.5421e-04   4.9290e-04   7.3880e-04   6.7718e-04   1.7765e-04 -4.4452e-04
-2.8544e-04 -4.9080e-04 -6.3675e-05   4.3434e-04   4.7590e-04   3.0184e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6338e-04   1.3233e-03
-1.9324e-04 -4.2540e-04 -4.7096e-04 -2.7150e-04   2.4936e-04   7.5574e-04

Columns 7 through 12:

-3.3038e-04 -4.8719e-04 -1.7887e-04   3.3147e-04   2.2919e-04 -8.4281e-05
-8.0038e-04 -9.5259e-04 -2.8897e-04   8.1310e-04   5.6906e-04 -2.1362e-04
-9.0614e-04 -6.7143e-04   8.2014e-05   8.5538e-04   5.0738e-04 -3.4233e-04
-5.1345e-04 -4.1688e-05   4.6685e-04   4.8755e-04   1.6120e-04 -3.4666e-04
4.2435e-04   5.6863e-04   3.6298e-04   6.9265e-06 -5.4216e-05   5.1791e-05
1.4520e-03   8.4948e-04   1.0623e-04 -2.6747e-04 -1.4851e-04   5.0713e-04
1.6834e-03   1.0289e-03   2.3830e-04 -2.0575e-04 -1.4810e-04   5.0395e-04
1.0289e-03   1.1579e-03   6.5601e-04 -6.1585e-05 -1.4345e-04   1.5421e-04
2.3830e-04   6.5601e-04   9.5109e-04   7.8936e-04   2.7395e-04 -2.8543e-04
-2.0575e-04 -6.1585e-05   7.8936e-04   1.6643e-03   8.5856e-04 -4.5060e-04
-1.4810e-04 -1.4345e-04   2.7395e-04   8.5856e-04   4.8864e-04 -1.9323e-04
5.0395e-04   1.5421e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04   3.4152e-04
1.1859e-03   4.9290e-04 -4.9079e-04 -9.3627e-04 -4.2540e-04   6.6643e-04
1.0762e-03   7.3881e-04 -6.3676e-05 -8.0241e-04 -4.7096e-04   4.4618e-04
3.8662e-04   6.7719e-04   4.3434e-04 -2.7147e-04 -2.7150e-04   5.3241e-05
-1.5142e-04   1.7765e-04   4.7590e-04   5.6337e-04   2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4452e-04   3.0184e-04   1.3232e-03   7.5574e-04 -2.8869e-04
-3.8230e-04 -4.3739e-04   4.0533e-04   1.5384e-03   8.7551e-04 -3.3037e-04
-4.3739e-04   3.6453e-05   7.4602e-04   1.1903e-03   5.7301e-04 -4.8719e-04
4.0532e-04   7.4602e-04   8.7303e-04   5.8687e-04   1.7312e-04 -1.7886e-04
1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04 -2.2048e-05   3.3148e-04
8.7551e-04   5.7301e-04   1.7312e-04 -2.2052e-05 -2.4006e-05   2.2919e-04

Columns 13 through 18:

```
-2.1363e-04  -3.4233e-04  -3.4667e-04   5.1781e-05   5.0714e-04   5.0395e-04
-5.4698e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6724e-04  -3.8511e-04   3.2605e-04   9.4879e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6074e-04   3.1076e-04   3.8662e-04
 1.9425e-04   3.2605e-04   3.6075e-04   1.6500e-04  -1.7934e-04  -1.5141e-04
 1.1221e-03   9.4879e-04   3.1077e-04  -1.7935e-04  -3.2363e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8230e-04
 4.9290e-04   7.3881e-04   6.7719e-04   1.7765e-04  -4.4452e-04  -4.3739e-04
-4.9079e-04  -6.3676e-05   4.3434e-04   4.7590e-04   3.0184e-04   4.0533e-04
-9.3627e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3232e-03   1.5384e-03
-4.2540e-04  -4.7096e-04  -2.7150e-04   2.4936e-04   7.5574e-04   8.7551e-04
 6.6643e-04   4.4618e-04   5.3241e-05  -2.3237e-04  -2.8869e-04  -3.3037e-04
 1.4323e-03   1.0522e-03   1.6543e-04  -4.1105e-04  -6.7103e-04  -8.0038e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6358e-04  -9.0614e-04
 1.6543e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8038e-04   4.2435e-04
-6.7103e-04  -7.6358e-04  -4.7771e-04   3.8038e-04   1.3046e-03   1.4520e-03
-8.0038e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5259e-04  -6.7143e-04  -4.1688e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8897e-04   8.2020e-05   4.6684e-04   3.6298e-04   1.0623e-04   2.3830e-04
 8.1312e-04   8.5539e-04   4.8756e-04   6.9332e-06  -2.6747e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6119e-04  -5.4218e-05  -1.4852e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5421e-04  -2.8544e-04  -4.5060e-04  -1.9324e-04
 4.9290e-04  -4.9080e-04  -9.3626e-04  -4.2540e-04
 7.3880e-04  -6.3675e-05  -8.0241e-04  -4.7096e-04
 6.7718e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7765e-04   4.7590e-04   5.6338e-04   2.4936e-04
-4.4452e-04   3.0184e-04   1.3233e-03   7.5574e-04
-4.3739e-04   4.0532e-04   1.5384e-03   8.7551e-04
 3.6453e-05   7.4602e-04   1.1903e-03   5.7301e-04
 7.4602e-04   8.7303e-04   5.8688e-04   1.7312e-04
 1.1903e-03   5.8687e-04   1.0772e-04  -2.2052e-05
 5.7301e-04   1.7312e-04  -2.2048e-05  -2.4006e-05
-4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04
-9.5259e-04  -2.8897e-04   8.1312e-04   5.6906e-04
-6.7143e-04   8.2020e-05   8.5539e-04   5.0739e-04
-4.1688e-05   4.6684e-04   4.8756e-04   1.6119e-04
 5.6862e-04   3.6298e-04   6.9332e-06  -5.4218e-05
 8.4949e-04   1.0623e-04  -2.6747e-04  -1.4852e-04
 1.0289e-03   2.3830e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5600e-04  -6.1583e-05  -1.4345e-04
 6.5600e-04   9.5108e-04   7.8936e-04   2.7395e-04
-6.1583e-05   7.8936e-04   1.6644e-03   8.5857e-04
-1.4345e-04   2.7395e-04   8.5857e-04   4.8864e-04
```

Iteration 21/100 μ:
  1.6202e-06

Iteration 21/100 d:
  -0.590261
   0.794252
  -0.315666
  -1.212292
   0.245769
   0.449586
   0.306725
  -0.053417
   1.214583
  -0.400835
  -1.254738
  -0.405929
   0.509511
  -0.012938
  -1.005580
  -0.328858
   0.766154
  -0.094826
  -0.271646
   1.837621
  -0.859576
  -1.830292

μ = 0.000002 / 2 -> 0.000001

Iteration 21/100 w(t):
  -5.1236   2.0305
  -2.9227   3.5875
  -5.3060   7.0906
  -7.6386   2.1293
  -8.1298   3.9321
  -6.5165   8.6783
   4.2477   14.2668
   4.3806   17.2163
   7.8342   18.5415
   5.9936   11.9559
   5.7699   14.8868

Iteration 21/100 error:
  3.5048e-05

Iteration 21/100 gradient:
   9.6220e-07
  -1.2753e-06
   5.0843e-07

1.9766e-06
-3.7667e-07
-7.1663e-07
-4.8363e-07
9.7998e-08
-1.9725e-06
6.5801e-07
2.0369e-06
6.5996e-07
-8.2116e-07
3.0680e-08
1.6419e-06
5.4745e-07
-1.2362e-06
1.6634e-07
4.4095e-07
-2.9795e-06
1.4320e-06
2.9665e-06

Iteration 21/100 gradient norm:
6.4556e-06

Iteration 22/100 Hessian matrix:
Columns 1 through 6:

3.4151e-04   6.6642e-04   4.4618e-04   5.3247e-05 -2.3237e-04 -2.8868e-04
6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7101e-04
4.4618e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1090e-04 -7.6356e-04
5.3247e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7771e-04
-2.3237e-04 -4.1105e-04 -2.1090e-04   1.4067e-04   3.9573e-04   3.8039e-04
-2.8868e-04 -6.7101e-04 -7.6356e-04 -4.7771e-04   3.8039e-04   1.3046e-03
-3.3038e-04 -8.0037e-04 -9.0613e-04 -5.1344e-04   4.2435e-04   1.4520e-03
-4.8719e-04 -9.5258e-04 -6.7141e-04 -4.1686e-05   5.6863e-04   8.4950e-04
-1.7886e-04 -2.8897e-04   8.2022e-05   4.6684e-04   3.6298e-04   1.0624e-04
3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9378e-06 -2.6746e-04
2.2920e-04   5.6907e-04   5.0740e-04   1.6120e-04 -5.4204e-05 -1.4850e-04
-8.4277e-05 -2.1361e-04 -3.4232e-04 -3.4667e-04   5.1794e-05   5.0714e-04
-2.1362e-04 -5.4697e-04 -8.4198e-04 -7.2343e-04   1.9425e-04   1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04   3.2606e-04   9.4880e-04
-3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1076e-04
5.1784e-05   1.9424e-04   3.2605e-04   3.6074e-04   1.6499e-04 -1.7934e-04
5.0713e-04   1.1221e-03   9.4880e-04   3.1076e-04 -1.7933e-04 -3.2362e-04
5.0394e-04   1.1859e-03   1.0762e-03   3.8661e-04 -1.5142e-04 -3.4620e-04
1.5422e-04   4.9290e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04
-2.8543e-04 -4.9079e-04 -6.3667e-05   4.3434e-04   4.7591e-04   3.0185e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6338e-04   1.3233e-03
-1.9323e-04 -4.2540e-04 -4.7094e-04 -2.7150e-04   2.4936e-04   7.5575e-04

Columns 7 through 12:

```
-3.3038e-04  -4.8719e-04  -1.7886e-04   3.3147e-04   2.2920e-04  -8.4277e-05
-8.0037e-04  -9.5258e-04  -2.8897e-04   8.1311e-04   5.6907e-04  -2.1361e-04
-9.0613e-04  -6.7141e-04   8.2022e-05   8.5539e-04   5.0740e-04  -3.4232e-04
-5.1344e-04  -4.1686e-05   4.6684e-04   4.8756e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6863e-04   3.6298e-04   6.9378e-06  -5.4204e-05   5.1794e-05
 1.4520e-03   8.4950e-04   1.0624e-04  -2.6746e-04  -1.4850e-04   5.0714e-04
 1.6834e-03   1.0289e-03   2.3830e-04  -2.0575e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1571e-05  -1.4344e-04   1.5422e-04
 2.3830e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
-2.0575e-04  -6.1571e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5059e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5059e-04  -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04  -4.9079e-04  -9.3626e-04  -4.2539e-04   6.6643e-04
 1.0762e-03   7.3882e-04  -6.3673e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7149e-04   5.3247e-05
-1.5142e-04   1.7766e-04   4.7590e-04   5.6337e-04   2.4936e-04  -2.3237e-04
-3.4619e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0532e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6466e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8718e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7885e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2038e-05   3.3148e-04
 8.7552e-04   5.7302e-04   1.7313e-04  -2.2042e-05  -2.3993e-05   2.2920e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1784e-05   5.0713e-04   5.0394e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4198e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6074e-04   3.1076e-04   3.8661e-04
 1.9425e-04   3.2606e-04   3.6075e-04   1.6499e-04  -1.7933e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1076e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4619e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9079e-04  -6.3673e-05   4.3434e-04   4.7590e-04   3.0185e-04   4.0532e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7149e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6643e-04   4.4617e-04   5.3247e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1090e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1345e-04
-4.1105e-04  -2.1090e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1345e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1683e-05   5.6863e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2023e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1312e-04   8.5539e-04   4.8756e-04   6.9326e-06  -2.6746e-04  -2.0576e-04
 5.6907e-04   5.0740e-04   1.6120e-04  -5.4212e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9290e-04  -4.9079e-04  -9.3626e-04  -4.2540e-04
 7.3882e-04  -6.3667e-05  -8.0241e-04  -4.7094e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6338e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7552e-04
 3.6466e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2042e-05
 5.7302e-04   1.7313e-04  -2.2038e-05  -2.3993e-05
-4.8718e-04  -1.7885e-04   3.3148e-04   2.2920e-04
-9.5258e-04  -2.8896e-04   8.1312e-04   5.6907e-04
-6.7142e-04   8.2023e-05   8.5539e-04   5.0740e-04
-4.1683e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6863e-04   3.6298e-04   6.9326e-06  -5.4212e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1574e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8937e-04   2.7396e-04
-6.1574e-05   7.8937e-04   1.6644e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04
```

Iteration 22/100 μ:
 8.1009e-07

Iteration 22/100 d:
 -0.296248
  0.870078
 -0.512393
 -1.334295
  0.162730
  0.533702
  0.274153
  0.117810
  1.433875
 -0.553606
 -1.297182
 -0.077171
  0.552910
 -0.172089
 -1.086999
 -0.513068
  0.903907
 -0.199495
 -0.121592

2.143049
  -1.099967
  -1.949841

μ = 0.000001 / 2 -> 0.000000

Iteration 22/100 w(t):
  -5.4199   1.9533
  -2.0526   4.1404
  -5.8183   6.9185
  -8.9729   1.0424
  -7.9671   3.4190
  -5.9828   9.5822
   4.5219   14.0673
   4.4984   17.0947
   9.2681   20.6846
   5.4400   10.8559
   4.4728   12.9369

Iteration 22/100 error:
  1.2940e-05

Iteration 22/100 gradient:
   2.5229e-07
  -6.9868e-07
   4.2880e-07
   1.0862e-06
  -1.1670e-07
  -4.2480e-07
  -2.0986e-07
  -8.8451e-08
  -1.1448e-06
   4.6980e-07
   1.0683e-06
   7.2361e-08
  -4.3980e-07
   1.5371e-07
   8.8827e-07
   4.1866e-07
  -7.2256e-07
   1.6512e-07
   1.1454e-07
  -1.7272e-06
   9.1448e-07
   1.6063e-06

Iteration 22/100 gradient norm:
  3.6032e-06

Iteration 23/100 Hessian matrix:
Columns 1 through 6:

```
 3.4152e-04   6.6643e-04   4.4617e-04   5.3248e-05  -2.3238e-04  -2.8868e-04
 6.6643e-04   1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04
 4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04  -2.1090e-04  -7.6357e-04
 5.3248e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7772e-04
-2.3238e-04  -4.1105e-04  -2.1090e-04   1.4067e-04   3.9572e-04   3.8038e-04
-2.8868e-04  -6.7102e-04  -7.6357e-04  -4.7772e-04   3.8038e-04   1.3046e-03
-3.3038e-04  -8.0037e-04  -9.0614e-04  -5.1345e-04   4.2435e-04   1.4520e-03
-4.8719e-04  -9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04
-1.7886e-04  -2.8896e-04   8.2023e-05   4.6685e-04   3.6298e-04   1.0624e-04
 3.3148e-04   8.1312e-04   8.5539e-04   4.8756e-04   6.9290e-06  -2.6747e-04
 2.2920e-04   5.6907e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04
-8.4275e-05  -2.1361e-04  -3.4233e-04  -3.4667e-04   5.1782e-05   5.0713e-04
-2.1362e-04  -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03
-3.4233e-04  -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4879e-04
-3.4667e-04  -7.2342e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1076e-04
 5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04
 5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04
 5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04
 1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7765e-04  -4.4451e-04
-2.8542e-04  -4.9078e-04  -6.3667e-05   4.3434e-04   4.7590e-04   3.0185e-04
-4.5059e-04  -9.3626e-04  -8.0241e-04  -2.7146e-04   5.6337e-04   1.3233e-03
-1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
-3.3038e-04  -4.8719e-04  -1.7886e-04   3.3148e-04   2.2920e-04  -8.4275e-05
-8.0037e-04  -9.5258e-04  -2.8896e-04   8.1312e-04   5.6907e-04  -2.1361e-04
-9.0614e-04  -6.7142e-04   8.2023e-05   8.5539e-04   5.0739e-04  -3.4233e-04
-5.1345e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6862e-04   3.6298e-04   6.9290e-06  -5.4213e-05   5.1782e-05
 1.4520e-03   8.4949e-04   1.0624e-04  -2.6747e-04  -1.4851e-04   5.0713e-04
 1.6834e-03   1.0289e-03   2.3830e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5601e-04  -6.1578e-05  -1.4344e-04   1.5422e-04
 2.3830e-04   6.5601e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
-2.0576e-04  -6.1578e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04  -4.9079e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
 1.0762e-03   7.3881e-04  -6.3670e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3247e-05
-1.5142e-04   1.7766e-04   4.7590e-04   5.6337e-04   2.4936e-04  -2.3238e-04
-3.4620e-04  -4.4452e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3739e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5383e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2045e-05   3.3148e-04
```

8.7551e-04 5.7302e-04 1.7313e-04 -2.2048e-05 -2.3997e-05 2.2919e-04

Columns 13 through 18:

-2.1362e-04 -3.4233e-04 -3.4667e-04 5.1787e-05 5.0714e-04 5.0395e-04
-5.4697e-04 -8.4199e-04 -7.2342e-04 1.9424e-04 1.1221e-03 1.1859e-03
-8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04 1.0762e-03
-7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04 3.8662e-04
 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04 -1.5142e-04
 1.1221e-03 9.4879e-04 3.1076e-04 -1.7934e-04 -3.2362e-04 -3.4620e-04
 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04 -3.8231e-04
 4.9291e-04 7.3881e-04 6.7719e-04 1.7766e-04 -4.4452e-04 -4.3739e-04
-4.9079e-04 -6.3670e-05 4.3434e-04 4.7590e-04 3.0185e-04 4.0533e-04
-9.3626e-04 -8.0241e-04 -2.7147e-04 5.6337e-04 1.3233e-03 1.5384e-03
-4.2539e-04 -4.7095e-04 -2.7150e-04 2.4936e-04 7.5575e-04 8.7551e-04
 6.6642e-04 4.4617e-04 5.3247e-05 -2.3238e-04 -2.8868e-04 -3.3038e-04
 1.4323e-03 1.0522e-03 1.6544e-04 -4.1105e-04 -6.7102e-04 -8.0038e-04
 1.0522e-03 1.0387e-03 4.8465e-04 -2.1091e-04 -7.6357e-04 -9.0614e-04
 1.6544e-04 4.8465e-04 6.5957e-04 1.4067e-04 -4.7771e-04 -5.1344e-04
-4.1105e-04 -2.1091e-04 1.4067e-04 3.9572e-04 3.8039e-04 4.2435e-04
-6.7102e-04 -7.6357e-04 -4.7771e-04 3.8039e-04 1.3046e-03 1.4520e-03
-8.0038e-04 -9.0614e-04 -5.1344e-04 4.2435e-04 1.4520e-03 1.6834e-03
-9.5258e-04 -6.7142e-04 -4.1684e-05 5.6862e-04 8.4949e-04 1.0289e-03
-2.8897e-04 8.2020e-05 4.6685e-04 3.6298e-04 1.0624e-04 2.3831e-04
 8.1312e-04 8.5539e-04 4.8756e-04 6.9307e-06 -2.6746e-04 -2.0575e-04
 5.6906e-04 5.0739e-04 1.6120e-04 -5.4216e-05 -1.4851e-04 -1.4810e-04

Columns 19 through 22:

 1.5422e-04 -2.8542e-04 -4.5059e-04 -1.9323e-04
 4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04
 7.3882e-04 -6.3667e-05 -8.0241e-04 -4.7095e-04
 6.7719e-04 4.3434e-04 -2.7146e-04 -2.7150e-04
 1.7765e-04 4.7590e-04 5.6337e-04 2.4936e-04
-4.4451e-04 3.0185e-04 1.3233e-03 7.5575e-04
-4.3738e-04 4.0533e-04 1.5383e-03 8.7551e-04
 3.6464e-05 7.4603e-04 1.1903e-03 5.7302e-04
 7.4603e-04 8.7304e-04 5.8688e-04 1.7313e-04
 1.1903e-03 5.8688e-04 1.0772e-04 -2.2048e-05
 5.7302e-04 1.7313e-04 -2.2045e-05 -2.3997e-05
-4.8719e-04 -1.7886e-04 3.3148e-04 2.2919e-04
-9.5258e-04 -2.8897e-04 8.1312e-04 5.6906e-04
-6.7142e-04 8.2020e-05 8.5539e-04 5.0739e-04
-4.1684e-05 4.6685e-04 4.8756e-04 1.6120e-04
 5.6862e-04 3.6298e-04 6.9307e-06 -5.4216e-05
 8.4949e-04 1.0624e-04 -2.6746e-04 -1.4851e-04
 1.0289e-03 2.3831e-04 -2.0575e-04 -1.4810e-04
 1.1579e-03 6.5601e-04 -6.1574e-05 -1.4344e-04
 6.5601e-04 9.5109e-04 7.8937e-04 2.7396e-04

-6.1574e-05   7.8937e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04

Iteration 23/100 μ:
  4.0505e-07

Iteration 23/100 d:
  0.258987
  0.688557
 -0.704347
 -1.047616
 -0.034257
  0.472221
  0.161523
  0.361063
  1.278210
 -0.647424
 -0.971876
  0.439339
  0.446613
 -0.401857
 -0.842532
 -0.589931
  0.791668
 -0.201319
  0.172453
  1.859238
 -1.093831
 -1.503277

μ = 0.000000 / 2 -> 0.000000

Iteration 23/100 w(t):
  -5.16089   2.39262
  -1.36403   4.58703
  -6.52270   6.51663
 -10.02051   0.19982
  -8.00136   2.82906
  -5.51062   10.37389
   4.68337   13.86596
   4.85948   17.26717
  10.54627   22.54383
   4.79256   9.76209
   3.50088   11.43365

Iteration 23/100 error:
  3.2669e-06

Iteration 23/100 gradient:

-9.6708e-08
-2.7162e-07
 2.8199e-07
 4.3441e-07
 2.4082e-08
-1.9168e-07
-6.4063e-08
-1.3771e-07
-5.0744e-07
 2.7057e-07
 4.0011e-07
-1.7104e-07
-1.7003e-07
 1.6825e-07
 3.5291e-07
 2.4144e-07
-3.0931e-07
 9.0218e-08
-5.3362e-08
-7.4324e-07
 4.4762e-07
 6.1621e-07

Iteration 23/100 gradient norm:
 1.5527e-06

Iteration 24/100 Hessian matrix:
 Columns 1 through 6:

  3.4152e-04 6.6642e-04 4.4617e-04 5.3246e-05 -2.3237e-04 -2.8868e-04
  6.6642e-04 1.4323e-03 1.0522e-03 1.6544e-04 -4.1105e-04 -6.7102e-04
  4.4617e-04 1.0522e-03 1.0387e-03 4.8465e-04 -2.1090e-04 -7.6357e-04
  5.3246e-05 1.6544e-04 4.8465e-04 6.5957e-04 1.4067e-04 -4.7771e-04
 -2.3237e-04 -4.1105e-04 -2.1090e-04 1.4067e-04 3.9572e-04 3.8039e-04
 -2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04 3.8039e-04 1.3046e-03
 -3.3038e-04 -8.0037e-04 -9.0613e-04 -5.1344e-04 4.2435e-04 1.4520e-03
 -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1683e-05 5.6863e-04 8.4949e-04
 -1.7886e-04 -2.8896e-04 8.2023e-05 4.6685e-04 3.6298e-04 1.0624e-04
  3.3148e-04 8.1312e-04 8.5539e-04 4.8756e-04 6.9327e-06 -2.6746e-04
  2.2919e-04 5.6906e-04 5.0739e-04 1.6120e-04 -5.4212e-05 -1.4851e-04
 -8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04 5.1788e-05 5.0714e-04
 -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03
 -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04
 -3.4667e-04 -7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1076e-04
  5.1786e-05 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04
  5.0713e-04 1.1221e-03 9.4880e-04 3.1077e-04 -1.7934e-04 -3.2362e-04
  5.0395e-04 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04
  1.5422e-04 4.9291e-04 7.3882e-04 6.7719e-04 1.7766e-04 -4.4451e-04
 -2.8543e-04 -4.9079e-04 -6.3667e-05 4.3434e-04 4.7591e-04 3.0185e-04

-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04 5.6337e-04 1.3233e-03
-1.9323e-04 -4.2540e-04 -4.7095e-04 -2.7150e-04 2.4936e-04 7.5575e-04

Columns 7 through 12:

-3.3038e-04 -4.8719e-04 -1.7886e-04 3.3148e-04 2.2919e-04 -8.4277e-05
-8.0037e-04 -9.5258e-04 -2.8896e-04 8.1312e-04 5.6906e-04 -2.1362e-04
-9.0613e-04 -6.7142e-04 8.2023e-05 8.5539e-04 5.0739e-04 -3.4233e-04
-5.1344e-04 -4.1683e-05 4.6685e-04 4.8756e-04 1.6120e-04 -3.4667e-04
 4.2435e-04 5.6863e-04 3.6298e-04 6.9327e-06 -5.4212e-05 5.1788e-05
 1.4520e-03 8.4949e-04 1.0624e-04 -2.6746e-04 -1.4851e-04 5.0714e-04
 1.6834e-03 1.0289e-03 2.3831e-04 -2.0575e-04 -1.4810e-04 5.0395e-04
 1.0289e-03 1.1579e-03 6.5602e-04 -6.1575e-05 -1.4344e-04 1.5422e-04
 2.3831e-04 6.5602e-04 9.5109e-04 7.8937e-04 2.7396e-04 -2.8543e-04
-2.0575e-04 -6.1575e-05 7.8937e-04 1.6643e-03 8.5857e-04 -4.5060e-04
-1.4810e-04 -1.4344e-04 2.7396e-04 8.5857e-04 4.8864e-04 -1.9323e-04
 5.0395e-04 1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04 3.4152e-04
 1.1859e-03 4.9291e-04 -4.9079e-04 -9.3626e-04 -4.2540e-04 6.6642e-04
 1.0762e-03 7.3882e-04 -6.3667e-05 -8.0241e-04 -4.7095e-04 4.4617e-04
 3.8662e-04 6.7719e-04 4.3434e-04 -2.7147e-04 -2.7150e-04 5.3246e-05
-1.5142e-04 1.7766e-04 4.7590e-04 5.6337e-04 2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4451e-04 3.0185e-04 1.3233e-03 7.5575e-04 -2.8868e-04
-3.8231e-04 -4.3738e-04 4.0533e-04 1.5384e-03 8.7551e-04 -3.3038e-04
-4.3738e-04 3.6465e-05 7.4603e-04 1.1903e-03 5.7302e-04 -4.8719e-04
 4.0533e-04 7.4603e-04 8.7304e-04 5.8688e-04 1.7313e-04 -1.7886e-04
 1.5384e-03 1.1903e-03 5.8688e-04 1.0772e-04 -2.2048e-05 3.3148e-04
 8.7551e-04 5.7302e-04 1.7313e-04 -2.2046e-05 -2.3998e-05 2.2919e-04

Columns 13 through 18:

-2.1362e-04 -3.4233e-04 -3.4667e-04 5.1786e-05 5.0713e-04 5.0395e-04
-5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03 1.1859e-03
-8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04 1.0762e-03
-7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04 3.8662e-04
 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04 -1.5142e-04
 1.1221e-03 9.4880e-04 3.1076e-04 -1.7934e-04 -3.2362e-04 -3.4620e-04
 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04 -3.8231e-04
 4.9291e-04 7.3882e-04 6.7719e-04 1.7766e-04 -4.4451e-04 -4.3738e-04
-4.9079e-04 -6.3667e-05 4.3434e-04 4.7590e-04 3.0185e-04 4.0533e-04
-9.3626e-04 -8.0241e-04 -2.7147e-04 5.6337e-04 1.3233e-03 1.5384e-03
-4.2540e-04 -4.7095e-04 -2.7150e-04 2.4936e-04 7.5575e-04 8.7551e-04
 6.6642e-04 4.4617e-04 5.3246e-05 -2.3237e-04 -2.8868e-04 -3.3038e-04
 1.4323e-03 1.0522e-03 1.6543e-04 -4.1105e-04 -6.7102e-04 -8.0037e-04
 1.0522e-03 1.0387e-03 4.8465e-04 -2.1091e-04 -7.6356e-04 -9.0614e-04
 1.6543e-04 4.8465e-04 6.5957e-04 1.4067e-04 -4.7771e-04 -5.1344e-04
-4.1105e-04 -2.1091e-04 1.4067e-04 3.9572e-04 3.8039e-04 4.2435e-04
-6.7102e-04 -7.6356e-04 -4.7771e-04 3.8039e-04 1.3046e-03 1.4520e-03
-8.0037e-04 -9.0614e-04 -5.1344e-04 4.2435e-04 1.4520e-03 1.6834e-03
-9.5258e-04 -6.7142e-04 -4.1687e-05 5.6862e-04 8.4949e-04 1.0289e-03

```
-2.8896e-04  8.2023e-05  4.6685e-04  3.6298e-04  1.0624e-04  2.3831e-04
 8.1311e-04  8.5539e-04  4.8756e-04  6.9295e-06 -2.6746e-04 -2.0576e-04
 5.6906e-04  5.0739e-04  1.6120e-04 -5.4213e-05 -1.4851e-04 -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04
 4.9291e-04 -4.9079e-04 -9.3626e-04 -4.2540e-04
 7.3882e-04 -6.3667e-05 -8.0241e-04 -4.7095e-04
 6.7719e-04  4.3434e-04 -2.7147e-04 -2.7150e-04
 1.7766e-04  4.7591e-04  5.6337e-04  2.4936e-04
-4.4451e-04  3.0185e-04  1.3233e-03  7.5575e-04
-4.3738e-04  4.0533e-04  1.5384e-03  8.7551e-04
 3.6465e-05  7.4603e-04  1.1903e-03  5.7302e-04
 7.4603e-04  8.7304e-04  5.8688e-04  1.7313e-04
 1.1903e-03  5.8688e-04  1.0772e-04 -2.2046e-05
 5.7302e-04  1.7313e-04 -2.2048e-05 -2.3998e-05
-4.8719e-04 -1.7886e-04  3.3148e-04  2.2919e-04
-9.5258e-04 -2.8896e-04  8.1311e-04  5.6906e-04
-6.7142e-04  8.2023e-05  8.5539e-04  5.0739e-04
-4.1687e-05  4.6685e-04  4.8756e-04  1.6120e-04
 5.6862e-04  3.6298e-04  6.9295e-06 -5.4213e-05
 8.4949e-04  1.0624e-04 -2.6746e-04 -1.4851e-04
 1.0289e-03  2.3831e-04 -2.0576e-04 -1.4810e-04
 1.1579e-03  6.5602e-04 -6.1577e-05 -1.4344e-04
 6.5602e-04  9.5109e-04  7.8936e-04  2.7396e-04
-6.1577e-05  7.8936e-04  1.6643e-03  8.5857e-04
-1.4344e-04  2.7396e-04  8.5857e-04  4.8864e-04
```

Iteration 24/100 μ:
```
 2.0252e-07
```

Iteration 24/100 d:
```
 0.575635
 0.317775
-0.627069
-0.575307
-0.111598
 0.337490
 0.105270
 0.412662
 0.814828
-0.588564
-0.515943
 0.654145
 0.189089
-0.482451
-0.471231
-0.395144
```

0.480280
  -0.075791
   0.304690
   1.115418
  -0.825885
  -0.775077

μ = 0.000000 / 2 -> 0.000000

Iteration 24/100 w(t):
   -4.58526   3.04677
   -1.04626   4.77612
   -7.14977   6.03418
  -10.59581   -0.27141
   -8.11296   2.43392
   -5.17313   10.85417
    4.78864   13.79017
    5.27214   17.57186
   11.36110   23.65925
    4.20400   8.93621
    2.98494   10.65857

Iteration 24/100 error:
   6.9250e-07

Iteration 24/100 gradient:
  -1.1288e-07
  -6.2348e-08
   1.2891e-07
   1.1737e-07
   2.4605e-08
  -6.6844e-08
  -2.0446e-08
  -8.1397e-08
  -1.6176e-07
   1.2136e-07
   1.0372e-07
  -1.3163e-07
  -3.6559e-08
   9.9424e-08
   9.7620e-08
   8.0987e-08
  -9.6482e-08
   1.9555e-08
  -6.0725e-08
  -2.2290e-07
   1.6611e-07
   1.5854e-07

Iteration 24/100 gradient norm:
  5.2079e-07

Iteration 25/100 Hessian matrix:
 Columns 1 through 6:

   3.4152e-04   6.6643e-04   4.4617e-04   5.3246e-05 -2.3237e-04 -2.8868e-04
   6.6643e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7101e-04
   4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1090e-04 -7.6357e-04
   5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7771e-04
  -2.3237e-04 -4.1105e-04 -2.1090e-04   1.4067e-04   3.9572e-04   3.8039e-04
  -2.8868e-04 -6.7101e-04 -7.6357e-04 -4.7771e-04   3.8039e-04   1.3046e-03
  -3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04   4.2435e-04   1.4520e-03
  -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05   5.6862e-04   8.4949e-04
  -1.7886e-04 -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
   3.3148e-04   8.1312e-04   8.5539e-04   4.8756e-04   6.9314e-06 -2.6746e-04
   2.2919e-04   5.6907e-04   5.0739e-04   1.6120e-04 -5.4213e-05 -1.4851e-04
  -8.4276e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04   5.1788e-05   5.0714e-04
  -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04   1.9424e-04   1.1221e-03
  -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4880e-04
  -3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
   5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04 -1.7934e-04
   5.0713e-04   1.1221e-03   9.4880e-04   3.1077e-04 -1.7934e-04 -3.2362e-04
   5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04 -1.5142e-04 -3.4620e-04
   1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04
  -2.8543e-04 -4.9078e-04 -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
  -4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6337e-04   1.3233e-03
  -1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04   2.4936e-04   7.5575e-04

 Columns 7 through 12:

  -3.3038e-04 -4.8719e-04 -1.7886e-04   3.3148e-04   2.2919e-04 -8.4276e-05
  -8.0037e-04 -9.5258e-04 -2.8896e-04   8.1312e-04   5.6907e-04 -2.1362e-04
  -9.0614e-04 -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04 -3.4233e-04
  -5.1344e-04 -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04 -3.4667e-04
   4.2435e-04   5.6862e-04   3.6298e-04   6.9314e-06 -5.4213e-05   5.1788e-05
   1.4520e-03   8.4949e-04   1.0624e-04 -2.6746e-04 -1.4851e-04   5.0714e-04
   1.6834e-03   1.0289e-03   2.3831e-04 -2.0576e-04 -1.4810e-04   5.0395e-04
   1.0289e-03   1.1579e-03   6.5602e-04 -6.1577e-05 -1.4344e-04   1.5422e-04
   2.3831e-04   6.5602e-04   9.5109e-04   7.8937e-04   2.7396e-04 -2.8543e-04
  -2.0576e-04 -6.1577e-05   7.8937e-04   1.6643e-03   8.5857e-04 -4.5060e-04
  -1.4810e-04 -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04 -1.9323e-04
   5.0395e-04   1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04   3.4152e-04
   1.1859e-03   4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04   6.6643e-04
   1.0762e-03   7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04   4.4617e-04
   3.8662e-04   6.7719e-04   4.3434e-04 -2.7147e-04 -2.7150e-04   5.3246e-05
  -1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04 -2.3237e-04
  -3.4620e-04 -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04 -2.8868e-04
  -3.8231e-04 -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04 -3.3038e-04

```
-4.3738e-04   3.6465e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3148e-04
 8.7551e-04   5.7302e-04   1.7313e-04  -2.2046e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0713e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6643e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1090e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1090e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1684e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1312e-04   8.5539e-04   4.8756e-04   6.9306e-06  -2.6746e-04  -2.0576e-04
 5.6907e-04   5.0739e-04   1.6120e-04  -5.4212e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6465e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2046e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1312e-04   5.6907e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1684e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9306e-06  -5.4212e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
```

```
1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
6.5602e-04   9.5109e-04   7.8937e-04   2.7396e-04
-6.1577e-05   7.8937e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04
```

Iteration 25/100 μ:
```
 1.0126e-07
```

Iteration 25/100 d:
```
  0.416364
 -0.055248
 -0.426880
 -0.233436
  0.054388
  0.218234
  0.210633
  0.232973
  0.291971
 -0.477999
 -0.205354
  0.439823
 -0.096041
 -0.383660
 -0.197011
 -0.024096
  0.259814
  0.156042
  0.206990
  0.383999
 -0.542895
 -0.283940
```

$\mu = 0.000000 / 2 \rightarrow 0.000000$

Iteration 25/100 w(t):
```
  -4.16890    3.48659
  -1.10151    4.68008
  -7.57665    5.65052
 -10.82925   -0.46842
  -8.05857    2.40982
  -4.95490   11.11399
   4.99928   13.94621
   5.50512   17.77885
  11.65307   24.04325
   3.72600    8.39331
   2.77959   10.37463
```

Iteration 25/100 error:

2.9314e-07

Iteration 25/100 gradient:
 -4.2125e-08
  5.7952e-09
  4.2937e-08
  2.3087e-08
 -5.3760e-09
 -2.2602e-08
 -2.1628e-08
 -2.4219e-08
 -3.0096e-08
  4.8090e-08
  2.0453e-08
 -4.4925e-08
  9.4321e-09
  3.8595e-08
  2.0166e-08
  2.8587e-09
 -2.6810e-08
 -1.5749e-08
 -2.1137e-08
 -3.9001e-08
  5.4490e-08
  2.8377e-08

Iteration 25/100 gradient norm:
  1.4190e-07

Iteration 26/100 Hessian matrix:
 Columns 1 through 6:

  3.4152e-04 6.6642e-04 4.4617e-04 5.3246e-05 -2.3237e-04 -2.8868e-04
  6.6642e-04 1.4323e-03 1.0522e-03 1.6544e-04 -4.1105e-04 -6.7101e-04
  4.4617e-04 1.0522e-03 1.0387e-03 4.8465e-04 -2.1091e-04 -7.6356e-04
  5.3246e-05 1.6544e-04 4.8465e-04 6.5957e-04 1.4067e-04 -4.7771e-04
 -2.3237e-04 -4.1105e-04 -2.1091e-04 1.4067e-04 3.9572e-04 3.8039e-04
 -2.8868e-04 -6.7101e-04 -7.6356e-04 -4.7771e-04 3.8039e-04 1.3046e-03
 -3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04 4.2435e-04 1.4520e-03
 -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05 5.6862e-04 8.4949e-04
 -1.7886e-04 -2.8896e-04 8.2024e-05 4.6685e-04 3.6298e-04 1.0624e-04
  3.3148e-04 8.1311e-04 8.5539e-04 4.8756e-04 6.9303e-06 -2.6746e-04
  2.2919e-04 5.6907e-04 5.0739e-04 1.6120e-04 -5.4213e-05 -1.4851e-04
 -8.4276e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04 5.1788e-05 5.0714e-04
 -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03
 -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04
 -3.4667e-04 -7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04
  5.1787e-05 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04
  5.0714e-04 1.1221e-03 9.4880e-04 3.1077e-04 -1.7934e-04 -3.2362e-04

```
  5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04
  1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04
 -2.8543e-04  -4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
 -4.5060e-04  -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03
 -1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
 -3.3038e-04  -4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04  -8.4276e-05
 -8.0037e-04  -9.5258e-04  -2.8896e-04   8.1311e-04   5.6907e-04  -2.1362e-04
 -9.0614e-04  -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04  -3.4233e-04
 -5.1344e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
  4.2435e-04   5.6862e-04   3.6298e-04   6.9303e-06  -5.4213e-05   5.1788e-05
  1.4520e-03   8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04   5.0714e-04
  1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
  1.0289e-03   1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04   1.5422e-04
  2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
 -2.0576e-04  -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
 -1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
  5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
  1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6643e-04
  1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
  3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
 -1.5142e-04   1.7766e-04   4.7590e-04   5.6337e-04   2.4936e-04  -2.3237e-04
 -3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
 -3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
 -4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
  4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
  1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3148e-04
  8.7551e-04   5.7302e-04   1.7313e-04  -2.2047e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
 -2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
 -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
 -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
 -7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
  1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
  1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
  1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
  4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
 -4.9078e-04  -6.3666e-05   4.3434e-04   4.7590e-04   3.0185e-04   4.0533e-04
 -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
 -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
  6.6643e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
  1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7101e-04  -8.0037e-04
  1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
  1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
 -4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
```

```
-6.7101e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9299e-06  -2.6746e-04  -2.0576e-04
 5.6907e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2047e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6907e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9299e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8937e-04   2.7396e-04
-6.1577e-05   7.8937e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 26/100 μ:
```
 5.0631e-08
```

Iteration 26/100 d:
```
 0.194403
-0.395728
-0.348669
-0.114588
 0.374512
 0.208904
 0.479089
 0.055386
-0.074615
-0.521970
-0.095968
 0.194748
-0.397552
```

-0.342591
-0.102539
0.361892
0.214143
0.470952
0.056283
-0.057758
-0.535474
-0.107843

μ = 0.000000 / 2 -> 0.000000

Iteration 26/100 w(t):
  -3.97449   3.68134
  -1.49723   4.28253
  -7.92532   5.30792
 -10.94384   -0.57096
  -7.68406   2.77171
  -4.74599   11.32813
   5.47837   14.41716
   5.56050   17.83513
  11.57845   23.98549
   3.20403   7.85784
   2.68362   10.26679

Iteration 26/100 error:
  2.3376e-07

Iteration 26/100 gradient:
 -9.7631e-09
  1.9681e-08
  1.7595e-08
  5.6801e-09
 -1.9152e-08
 -1.0317e-08
 -2.3900e-08
 -2.7505e-09
  3.2495e-09
  2.6488e-08
  4.7662e-09
 -9.8588e-09
  2.0128e-08
  1.7505e-08
  5.4716e-09
 -1.8773e-08
 -1.0807e-08
 -2.3738e-08
 -2.6020e-09
  2.7936e-09

2.7128e-08
5.4047e-09

Iteration 26/100 gradient norm:
  7.2543e-08

Iteration 27/100 Hessian matrix:
 Columns 1 through 6:

   3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05 -2.3238e-04 -2.8868e-04
   6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7102e-04
   4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1091e-04 -7.6357e-04
   5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7771e-04
  -2.3238e-04 -4.1105e-04 -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
  -2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04   3.8039e-04   1.3046e-03
  -3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04   4.2435e-04   1.4520e-03
  -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05   5.6862e-04   8.4949e-04
  -1.7886e-04 -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
   3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9301e-06 -2.6746e-04
   2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04 -5.4213e-05 -1.4851e-04
  -8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04   5.1787e-05   5.0714e-04
  -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04   1.9424e-04   1.1221e-03
  -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4880e-04
  -3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
   5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04 -1.7934e-04
   5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04 -1.7934e-04 -3.2362e-04
   5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04 -1.5142e-04 -3.4620e-04
   1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04
  -2.8543e-04 -4.9078e-04 -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
  -4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6337e-04   1.3233e-03
  -1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04   2.4936e-04   7.5575e-04

 Columns 7 through 12:

  -3.3038e-04 -4.8719e-04 -1.7886e-04   3.3147e-04   2.2919e-04 -8.4277e-05
  -8.0037e-04 -9.5258e-04 -2.8896e-04   8.1311e-04   5.6906e-04 -2.1362e-04
  -9.0614e-04 -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04 -3.4233e-04
  -5.1344e-04 -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04 -3.4667e-04
   4.2435e-04   5.6862e-04   3.6298e-04   6.9301e-06 -5.4213e-05   5.1787e-05
   1.4520e-03   8.4949e-04   1.0624e-04 -2.6746e-04 -1.4851e-04   5.0714e-04
   1.6834e-03   1.0289e-03   2.3831e-04 -2.0576e-04 -1.4810e-04   5.0395e-04
   1.0289e-03   1.1579e-03   6.5602e-04 -6.1577e-05 -1.4344e-04   1.5422e-04
   2.3831e-04   6.5602e-04   9.5109e-04   7.8937e-04   2.7396e-04 -2.8543e-04
  -2.0576e-04 -6.1577e-05   7.8937e-04   1.6643e-03   8.5857e-04 -4.5060e-04
  -1.4810e-04 -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04 -1.9323e-04
   5.0395e-04   1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04   3.4152e-04
   1.1859e-03   4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04   6.6643e-04
   1.0762e-03   7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04   4.4617e-04
   3.8662e-04   6.7719e-04   4.3434e-04 -2.7147e-04 -2.7150e-04   5.3246e-05

```
-1.5142e-04  1.7766e-04  4.7591e-04  5.6337e-04  2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4451e-04  3.0185e-04  1.3233e-03  7.5575e-04 -2.8868e-04
-3.8231e-04 -4.3738e-04  4.0533e-04  1.5384e-03  8.7551e-04 -3.3038e-04
-4.3738e-04  3.6464e-05  7.4603e-04  1.1903e-03  5.7302e-04 -4.8719e-04
 4.0533e-04  7.4603e-04  8.7304e-04  5.8688e-04  1.7313e-04 -1.7886e-04
 1.5384e-03  1.1903e-03  5.8688e-04  1.0772e-04 -2.2047e-05  3.3148e-04
 8.7551e-04  5.7302e-04  1.7313e-04 -2.2048e-05 -2.3998e-05  2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04 -3.4233e-04 -3.4667e-04  5.1787e-05  5.0714e-04  5.0395e-04
-5.4697e-04 -8.4199e-04 -7.2343e-04  1.9424e-04  1.1221e-03  1.1859e-03
-8.4199e-04 -8.6723e-04 -3.8511e-04  3.2605e-04  9.4880e-04  1.0762e-03
-7.2343e-04 -3.8511e-04  1.8537e-04  3.6075e-04  3.1077e-04  3.8662e-04
 1.9424e-04  3.2605e-04  3.6075e-04  1.6499e-04 -1.7934e-04 -1.5142e-04
 1.1221e-03  9.4880e-04  3.1077e-04 -1.7934e-04 -3.2362e-04 -3.4620e-04
 1.1859e-03  1.0762e-03  3.8662e-04 -1.5142e-04 -3.4620e-04 -3.8231e-04
 4.9291e-04  7.3882e-04  6.7719e-04  1.7766e-04 -4.4451e-04 -4.3738e-04
-4.9078e-04 -6.3666e-05  4.3434e-04  4.7591e-04  3.0185e-04  4.0533e-04
-9.3626e-04 -8.0241e-04 -2.7147e-04  5.6337e-04  1.3233e-03  1.5384e-03
-4.2539e-04 -4.7095e-04 -2.7150e-04  2.4936e-04  7.5575e-04  8.7551e-04
 6.6643e-04  4.4617e-04  5.3246e-05 -2.3237e-04 -2.8868e-04 -3.3038e-04
 1.4323e-03  1.0522e-03  1.6544e-04 -4.1105e-04 -6.7101e-04 -8.0037e-04
 1.0522e-03  1.0387e-03  4.8465e-04 -2.1091e-04 -7.6357e-04 -9.0614e-04
 1.6544e-04  4.8465e-04  6.5957e-04  1.4067e-04 -4.7771e-04 -5.1344e-04
-4.1105e-04 -2.1091e-04  1.4067e-04  3.9572e-04  3.8039e-04  4.2435e-04
-6.7101e-04 -7.6357e-04 -4.7771e-04  3.8039e-04  1.3046e-03  1.4520e-03
-8.0037e-04 -9.0614e-04 -5.1344e-04  4.2435e-04  1.4520e-03  1.6834e-03
-9.5258e-04 -6.7142e-04 -4.1685e-05  5.6862e-04  8.4949e-04  1.0289e-03
-2.8896e-04  8.2024e-05  4.6685e-04  3.6298e-04  1.0624e-04  2.3831e-04
 8.1311e-04  8.5539e-04  4.8756e-04  6.9304e-06 -2.6746e-04 -2.0576e-04
 5.6907e-04  5.0739e-04  1.6120e-04 -5.4212e-05 -1.4851e-04 -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04
 4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04
 7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04
 6.7719e-04  4.3434e-04 -2.7147e-04 -2.7150e-04
 1.7766e-04  4.7591e-04  5.6337e-04  2.4936e-04
-4.4451e-04  3.0185e-04  1.3233e-03  7.5575e-04
-4.3738e-04  4.0533e-04  1.5384e-03  8.7551e-04
 3.6464e-05  7.4603e-04  1.1903e-03  5.7302e-04
 7.4603e-04  8.7304e-04  5.8688e-04  1.7313e-04
 1.1903e-03  5.8688e-04  1.0772e-04 -2.2048e-05
 5.7302e-04  1.7313e-04 -2.2047e-05 -2.3998e-05
-4.8719e-04 -1.7886e-04  3.3148e-04  2.2919e-04
-9.5258e-04 -2.8896e-04  8.1311e-04  5.6907e-04
-6.7142e-04  8.2024e-05  8.5539e-04  5.0739e-04
```

```
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9304e-06  -5.4212e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04
```

Iteration 27/100 μ:
```
 2.5315e-08
```

Iteration 27/100 d:
```
 0.158572
-0.805886
-0.488295
-0.151610
 0.819203
 0.322326
 0.949212
-0.042627
-0.299430
-0.877224
-0.084161
 0.151482
-0.833418
-0.496736
-0.134051
 0.807658
 0.300399
 0.946775
-0.043907
-0.296474
-0.882665
-0.067024
```

μ = 0.000000 / 2 -> 0.000000

Iteration 27/100 w(t):
```
 -3.81592    3.83282
 -2.30312    3.44911
 -8.41361    4.81119
-11.09545   -0.70501
 -6.86486    3.57937
 -4.42367   11.62853
  6.42758   15.36394
  5.51788   17.79122
 11.27902   23.68902
  2.32681    6.97517
```

2.59946   10.19976

Iteration 27/100 error:
   1.7542e-07

Iteration 27/100 gradient:
  -3.6176e-09
   2.0991e-08
   1.3189e-08
   4.0750e-09
  -2.0130e-08
  -7.6524e-09
  -2.3900e-08
   1.5478e-09
   7.6094e-09
   2.2529e-08
   2.3549e-09
  -3.2816e-09
   2.1215e-08
   1.3144e-08
   4.3599e-09
  -2.0234e-08
  -7.8121e-09
  -2.3882e-08
   1.2413e-09
   7.6663e-09
   2.2691e-08
   2.2972e-09

Iteration 27/100 gradient norm:
   6.7280e-08

Iteration 28/100 Hessian matrix:
 Columns 1 through 6:

   3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05 -2.3237e-04 -2.8868e-04
   6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7102e-04
   4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1091e-04 -7.6357e-04
   5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7771e-04
  -2.3237e-04 -4.1105e-04 -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
  -2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04   3.8039e-04   1.3046e-03
  -3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04   4.2435e-04   1.4520e-03
  -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05   5.6862e-04   8.4949e-04
  -1.7886e-04 -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
   3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9303e-06 -2.6746e-04
   2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04 -5.4213e-05 -1.4851e-04
  -8.4276e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04   5.1787e-05   5.0714e-04
  -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04   1.9424e-04   1.1221e-03
  -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4880e-04

-3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
 5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04 -1.7934e-04
 5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04 -1.7934e-04 -3.2362e-04
 5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04 -1.5142e-04 -3.4620e-04
 1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04
-2.8543e-04 -4.9078e-04 -6.3666e-05   4.3434e-04   4.7590e-04   3.0185e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04   2.4936e-04   7.5575e-04

Columns 7 through 12:

-3.3038e-04 -4.8719e-04 -1.7886e-04   3.3147e-04   2.2919e-04 -8.4276e-05
-8.0037e-04 -9.5258e-04 -2.8896e-04   8.1311e-04   5.6906e-04 -2.1362e-04
-9.0614e-04 -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04 -3.4233e-04
-5.1344e-04 -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04 -3.4667e-04
 4.2435e-04   5.6862e-04   3.6298e-04   6.9303e-06 -5.4213e-05   5.1787e-05
 1.4520e-03   8.4949e-04   1.0624e-04 -2.6746e-04 -1.4851e-04   5.0714e-04
 1.6834e-03   1.0289e-03   2.3831e-04 -2.0576e-04 -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04 -6.1577e-05 -1.4344e-04   1.5422e-04
 2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04 -2.8543e-04
-2.0576e-04 -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04 -4.5060e-04
-1.4810e-04 -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04 -1.9323e-04
 5.0395e-04   1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04   6.6642e-04
 1.0762e-03   7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04 -2.7147e-04 -2.7150e-04   5.3246e-05
-1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04 -2.8868e-04
-3.8231e-04 -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04 -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04 -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04 -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04 -2.2048e-05   3.3148e-04
 8.7551e-04   5.7302e-04   1.7313e-04 -2.2048e-05 -2.3998e-05   2.2919e-04

Columns 13 through 18:

-2.1362e-04 -3.4233e-04 -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04 -8.4199e-04 -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04 -1.7934e-04 -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04 -1.7934e-04 -3.2362e-04 -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04 -1.5142e-04 -3.4620e-04 -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04 -4.3738e-04
-4.9078e-04 -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04 -8.0241e-04 -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04 -4.7095e-04 -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05 -2.3237e-04 -2.8868e-04 -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7102e-04 -8.0037e-04

```
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2023e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7590e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2023e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8865e-04
```

Iteration 28/100 μ:
```
 1.2658e-08
```

Iteration 28/100 d:
```
 0.225707
-1.491272
-0.862298
-0.245141
 1.553337
 0.490885
 1.749228
-0.132988
-0.471552
-1.635445
```

-0.076092
    0.298058
    -1.532964
    -0.821693
    -0.302174
    1.482007
    0.544292
    1.770371
    -0.162452
    -0.556907
    -1.623347
    -0.035176

μ = 0.000000 / 2 -> 0.000000

Iteration 28/100 w(t):
    -3.59021   4.13088
    -3.79439   1.91615
    -9.27591   3.98950
    -11.34059   -1.00719
    -5.31152   5.06138
    -3.93278   12.17282
    8.17681   17.13431
    5.38489   17.62877
    10.80747   23.13211
    0.69136   5.35183
    2.52336   10.16459

Iteration 28/100 error:
    9.2257e-08

Iteration 28/100 gradient:
    -3.1814e-09
    1.8183e-08
    1.0172e-08
    3.2755e-09
    -1.9913e-08
    -6.9688e-09
    -2.3455e-08
    1.4005e-09
    5.7049e-09
    1.9299e-08
    -1.2296e-10
    -2.9811e-09
    1.8896e-08
    1.0486e-08
    3.0585e-09
    -2.0176e-08
    -7.7316e-09

-2.3822e-08
1.4252e-09
5.8614e-09
2.0167e-08
4.6196e-10

Iteration 28/100 gradient norm:
6.1807e-08

Iteration 29/100 Hessian matrix:
Columns 1 through 6:

```
 3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04
 6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7101e-04
 4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04
 5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04
-2.3237e-04  -4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
-2.8868e-04  -6.7101e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03
-3.3038e-04  -8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03
-4.8719e-04  -9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04
-1.7886e-04  -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
 3.3148e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9303e-06  -2.6746e-04
 2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04
-8.4276e-05  -2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04
-2.1362e-04  -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03
-3.4233e-04  -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04
-3.4667e-04  -7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
 5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04
 5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04
 5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04
 1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04
-2.8543e-04  -4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
-4.5060e-04  -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
-3.3038e-04  -4.8719e-04  -1.7886e-04   3.3148e-04   2.2919e-04  -8.4276e-05
-8.0037e-04  -9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04  -2.1362e-04
-9.0614e-04  -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04  -3.4233e-04
-5.1344e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6862e-04   3.6298e-04   6.9303e-06  -5.4213e-05   5.1787e-05
 1.4520e-03   8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04   5.0714e-04
 1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04   1.5422e-04
 2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
-2.0576e-04  -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
```

```
 1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
 1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
-1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04  -2.3237e-04
-3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3147e-04
 8.7551e-04   5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7101e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7101e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9304e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
```

```
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9304e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1578e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1578e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 29/100 μ:
```
  6.3288e-09
```

Iteration 29/100 d:
```
  0.51646
 -2.58531
 -1.39125
 -0.47377
  2.63326
  0.76519
  2.95761
 -0.39147
 -0.63210
 -2.94341
  0.28302
  0.41794
 -2.54247
 -1.21583
 -0.59149
  2.60951
  0.67191
  3.18481
 -0.52192
 -0.62123
 -2.96579
  0.17470
```

μ = 0.000000 / 2 -> 0.000000

Iteration 29/100 w(t):
```
  -3.07376    4.54882
  -6.37970   -0.62632
 -10.66716    2.77366
 -11.81436   -1.59868
  -2.67826    7.67089
  -3.16759   12.84473
  11.13442   20.31911
```

```
  4.99341  17.10685
 10.17537  22.51088
 -2.25205   2.38604
  2.80638  10.33929
```

Iteration 29/100 error:
```
  1.3594e-08
```

Iteration 29/100 gradient:
```
 -3.3225e-09
  1.5236e-08
  7.6436e-09
  2.8898e-09
 -1.6710e-08
 -3.7243e-09
 -2.0380e-08
  2.4481e-09
  3.7942e-09
  1.8183e-08
 -1.9775e-09
 -2.9274e-09
  1.6552e-08
  7.7379e-09
  3.2103e-09
 -1.6144e-08
 -4.9627e-09
 -2.0371e-08
  1.9360e-09
  2.9667e-09
  1.9649e-08
 -8.6371e-10
```

Iteration 29/100 gradient norm:
```
  5.3157e-08
```

Iteration 30/100 Hessian matrix:
 Columns 1 through 6:

```
  3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04
  6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04
  4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04
  5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04
 -2.3237e-04  -4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
 -2.8868e-04  -6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03
 -3.3038e-04  -8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03
 -4.8719e-04  -9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04
 -1.7886e-04  -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
  3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04
  2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04
```

-8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04 5.1787e-05 5.0714e-04
-2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04
-3.4667e-04 -7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04
 5.1787e-05 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04
 5.0714e-04 1.1221e-03 9.4880e-04 3.1077e-04 -1.7934e-04 -3.2362e-04
 5.0395e-04 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04
 1.5422e-04 4.9291e-04 7.3882e-04 6.7719e-04 1.7766e-04 -4.4451e-04
-2.8543e-04 -4.9078e-04 -6.3666e-05 4.3434e-04 4.7591e-04 3.0185e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04 5.6337e-04 1.3233e-03
-1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04 2.4936e-04 7.5575e-04

Columns 7 through 12:

-3.3038e-04 -4.8719e-04 -1.7886e-04 3.3147e-04 2.2919e-04 -8.4277e-05
-8.0037e-04 -9.5258e-04 -2.8896e-04 8.1311e-04 5.6906e-04 -2.1362e-04
-9.0614e-04 -6.7142e-04 8.2024e-05 8.5539e-04 5.0739e-04 -3.4233e-04
-5.1344e-04 -4.1685e-05 4.6685e-04 4.8756e-04 1.6120e-04 -3.4667e-04
 4.2435e-04 5.6862e-04 3.6298e-04 6.9302e-06 -5.4213e-05 5.1787e-05
 1.4520e-03 8.4949e-04 1.0624e-04 -2.6746e-04 -1.4851e-04 5.0714e-04
 1.6834e-03 1.0289e-03 2.3831e-04 -2.0576e-04 -1.4810e-04 5.0395e-04
 1.0289e-03 1.1579e-03 6.5602e-04 -6.1577e-05 -1.4344e-04 1.5422e-04
 2.3831e-04 6.5602e-04 9.5109e-04 7.8936e-04 2.7396e-04 -2.8543e-04
-2.0576e-04 -6.1577e-05 7.8936e-04 1.6643e-03 8.5857e-04 -4.5060e-04
-1.4810e-04 -1.4344e-04 2.7396e-04 8.5857e-04 4.8864e-04 -1.9323e-04
 5.0395e-04 1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04 3.4152e-04
 1.1859e-03 4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04 6.6642e-04
 1.0762e-03 7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04 4.4617e-04
 3.8662e-04 6.7719e-04 4.3434e-04 -2.7147e-04 -2.7150e-04 5.3246e-05
-1.5142e-04 1.7766e-04 4.7591e-04 5.6337e-04 2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4451e-04 3.0185e-04 1.3233e-03 7.5575e-04 -2.8868e-04
-3.8231e-04 -4.3738e-04 4.0533e-04 1.5384e-03 8.7551e-04 -3.3038e-04
-4.3738e-04 3.6464e-05 7.4603e-04 1.1903e-03 5.7302e-04 -4.8719e-04
 4.0533e-04 7.4603e-04 8.7304e-04 5.8688e-04 1.7313e-04 -1.7886e-04
 1.5384e-03 1.1903e-03 5.8688e-04 1.0772e-04 -2.2048e-05 3.3147e-04
 8.7551e-04 5.7302e-04 1.7313e-04 -2.2048e-05 -2.3998e-05 2.2919e-04

Columns 13 through 18:

-2.1362e-04 -3.4233e-04 -3.4667e-04 5.1787e-05 5.0714e-04 5.0395e-04
-5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03 1.1859e-03
-8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04 1.0762e-03
-7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04 3.8662e-04
 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04 -1.5142e-04
 1.1221e-03 9.4880e-04 3.1077e-04 -1.7934e-04 -3.2362e-04 -3.4620e-04
 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04 -3.8231e-04
 4.9291e-04 7.3882e-04 6.7719e-04 1.7766e-04 -4.4451e-04 -4.3738e-04
-4.9078e-04 -6.3666e-05 4.3434e-04 4.7591e-04 3.0185e-04 4.0533e-04
-9.3626e-04 -8.0241e-04 -2.7147e-04 5.6337e-04 1.3233e-03 1.5384e-03

```
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 30/100 μ:
  3.1644e-09

Iteration 30/100 d:
  0.716445
 -3.857069
 -1.646947
 -0.861091
  4.046724
  0.508305
  4.914047

-1.302309
-0.064337
-5.218456
1.574420
0.812738
-3.819132
-1.538748
-1.168526
4.147629
0.625523
4.951349
-1.470346
-0.106877
-5.095838
1.378367

μ = 0.000000 * 2 -> 0.000000

Iteration 30/100 d:
0.40969
-2.18924
-1.01029
-0.48024
2.27119
0.43805
2.71077
-0.58047
-0.26406
-2.75273
0.56965
0.43674
-2.17933
-0.97877
-0.56788
2.29879
0.46589
2.72178
-0.62901
-0.27530
-2.72275
0.51226

μ = 0.000000 / 2 -> 0.000000

Iteration 30/100 w(t):
-2.66407   4.98556
-8.56894   -2.80565
-11.67746   1.79489
-12.29460   -2.16656

```
-0.40707    9.96968
-2.72954   13.31062
13.84519   23.04089
 4.41294   16.47785
 9.91131   22.23559
-5.00478   -0.33671
 3.37603   10.85155
```

Iteration 30/100 error:
  1.3769e-09

Iteration 30/100 gradient:
```
-3.0926e-09
 1.3685e-08
 5.7368e-09
 3.4846e-09
-1.4665e-08
-2.8565e-09
-1.6987e-08
 3.5786e-09
 1.8163e-09
 1.7326e-08
-3.5764e-09
-3.3791e-09
 1.3634e-08
 5.9477e-09
 3.3042e-09
-1.4539e-08
-2.8467e-09
-1.7164e-08
 3.7379e-09
 1.6983e-09
 1.7310e-08
-3.4095e-09
```

Iteration 30/100 gradient norm:
  4.6568e-08

Iteration 31/100 Hessian matrix:
 Columns 1 through 6:

```
 3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04
 6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04
 4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04
 5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04
-2.3237e-04  -4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
-2.8868e-04  -6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03
-3.3038e-04  -8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03
-4.8719e-04  -9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04
```

```
 -1.7886e-04  -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
  3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04
  2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04
 -8.4277e-05  -2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04
 -2.1362e-04  -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03
 -3.4233e-04  -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04
 -3.4667e-04  -7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
  5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04
  5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04
  5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04
  1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04
 -2.8543e-04  -4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
 -4.5060e-04  -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03
 -1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
 -3.3038e-04  -4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04  -8.4277e-05
 -8.0037e-04  -9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04  -2.1362e-04
 -9.0614e-04  -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04  -3.4233e-04
 -5.1344e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
  4.2435e-04   5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05   5.1787e-05
  1.4520e-03   8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04   5.0714e-04
  1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
  1.0289e-03   1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04   1.5422e-04
  2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
 -2.0576e-04  -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
 -1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
  5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
  1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
  1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
  3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
 -1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04  -2.3237e-04
 -3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
 -3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
 -4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
  4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
  1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3147e-04
  8.7551e-04   5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
 -2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
 -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
 -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
 -7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
  1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
  1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
  1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
```

```
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 31/100 μ:
```
 3.1644e-09
```

Iteration 31/100 d:
```
 0.851149
-3.391552
-1.001418
-1.120397
```

3.648868
0.106853
4.397048
-1.591590
0.404901
-4.696420
1.789045
0.866504
-3.376091
-0.995029
-1.110234
3.660491
0.091867
4.401933
-1.571920
0.416341
-4.734190
1.805953

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
0.439542
-1.898066
-0.682068
-0.555931
2.012590
0.202278
2.404482
-0.719862
0.017219
-2.495287
0.747357
0.444717
-1.894915
-0.680615
-0.555156
2.015437
0.197944
2.404972
-0.715749
0.019062
-2.505235
0.751048

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
0.224564

-1.015889
-0.401023
-0.276975
1.068086
0.150222
1.269875
-0.335196
-0.052703
-1.295899
0.325053
0.226101
-1.015251
-0.400648
-0.277046
1.068718
0.149081
1.269832
-0.334327
-0.052336
-1.298525
0.325820

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
0.113837
-0.527478
-0.218130
-0.138250
0.552016
0.089448
0.654639
-0.160336
-0.044269
-0.662043
0.148351
0.114280
-0.527372
-0.218000
-0.138281
0.552095
0.089191
0.654558
-0.160167
-0.044118
-0.662774
0.148453

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
  0.057480
 -0.269036
 -0.113929
 -0.069061
  0.280846
  0.048617
  0.332651
 -0.078118
 -0.026990
 -0.334876
  0.070369
  0.057621
 -0.269047
 -0.113859
 -0.069047
  0.280791
  0.048592
  0.332577
 -0.078108
 -0.026873
 -0.335122
  0.070317

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
  0.029001
 -0.135894
 -0.058297
 -0.034506
  0.141654
  0.025322
  0.167704
 -0.038456
 -0.014757
 -0.168466
  0.034236
  0.029061
 -0.135929
 -0.058245
 -0.034478
  0.141571
  0.025353
  0.167638
 -0.038480
 -0.014653
 -0.168584

0.034154

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
  0.0146487
 -0.0682966
 -0.0295317
 -0.0172364
  0.0711216
  0.0129143
  0.0841960
 -0.0190242
 -0.0077060
 -0.0845070
  0.0169157
  0.0146842
 -0.0683332
 -0.0294892
 -0.0172073
  0.0710422
  0.0129542
  0.0841390
 -0.0190529
 -0.0076164
 -0.0845845
  0.0168364

μ = 0.000000 * 2 -> 0.000000

Iteration 31/100 d:
  0.0074088
 -0.0342388
 -0.0148857
 -0.0086036
  0.0356254
  0.0065160
  0.0421797
 -0.0094316
 -0.0039470
 -0.0423258
  0.0084379
  0.0074337
 -0.0342691
 -0.0148528
 -0.0085792
  0.0355606
  0.0065505
  0.0421347

-0.0094563
-0.0038758
-0.0423819
0.0083730

μ = 0.000000 * 2 -> 0.000001

Iteration 31/100 d:
0.0037470
-0.0171453
-0.0074818
-0.0042912
0.0178254
0.0032700
0.0211071
-0.0046820
-0.0020068
-0.0211808
0.0042327
0.0037644
-0.0171670
-0.0074589
-0.0042733
0.0177789
0.0032950
0.0210755
-0.0047002
-0.0019562
-0.0212194
0.0041860

μ = 0.000001 * 2 -> 0.000002

Iteration 31/100 d:
1.8914e-03
-8.5816e-03
-3.7524e-03
-2.1402e-03
8.9149e-03
1.6379e-03
1.0555e-02
-2.3275e-03
-1.0167e-03
-1.0595e-02
2.1283e-03
1.9029e-03
-8.5951e-03
-3.7385e-03
-2.1283e-03

8.8853e-03
1.6538e-03
1.0536e-02
-2.3395e-03
-9.8460e-04
-1.0619e-02
2.0983e-03

μ = 0.000002 * 2 -> 0.000003

Iteration 31/100 d:
9.5185e-04
-4.2944e-03
-1.8785e-03
-1.0683e-03
4.4579e-03
8.2087e-04
5.2764e-03
-1.1586e-03
-5.1336e-04
-5.2986e-03
1.0702e-03
9.5912e-04
-4.3021e-03
-1.8711e-03
-1.0609e-03
4.4407e-03
8.2998e-04
5.2658e-03
-1.1660e-03
-4.9480e-04
-5.3123e-03
1.0526e-03

μ = 0.000003 * 2 -> 0.000006

Iteration 31/100 d:
4.7752e-04
-2.1489e-03
-9.3888e-04
-5.3396e-04
2.2291e-03
4.1215e-04
2.6366e-03
-5.7733e-04
-2.5841e-04
-2.6501e-03
5.3774e-04
4.8217e-04

-2.1528e-03
-9.3550e-04
-5.2945e-04
2.2197e-03
4.1699e-04
2.6314e-03
-5.8180e-04
-2.4831e-04
-2.6573e-03
5.2792e-04

μ = 0.000006 * 2 -> 0.000013

Iteration 31/100 d:
2.3891e-04
-1.0752e-03
-4.6859e-04
-2.6728e-04
1.1147e-03
2.0726e-04
1.3171e-03
-2.8772e-04
-1.2981e-04
-1.3256e-03
2.7003e-04
2.4204e-04
-1.0771e-03
-4.6745e-04
-2.6441e-04
1.1097e-03
2.0970e-04
1.3150e-03
-2.9051e-04
-1.2449e-04
-1.3292e-03
2.6461e-04

μ = 0.000013 * 2 -> 0.000026

Iteration 31/100 d:
1.1925e-04
-5.3789e-04
-2.3359e-04
-1.3395e-04
5.5758e-04
1.0427e-04
6.5780e-04
-1.4330e-04
-6.5147e-05

-6.6314e-04
 1.3554e-04
 1.2150e-04
-5.3863e-04
-2.3358e-04
-1.3202e-04
 5.5494e-04
 1.0542e-04
 6.5724e-04
-1.4513e-04
-6.2383e-05
-6.6487e-04
 1.3251e-04

$\mu = 0.000026 * 2 \rightarrow 0.000052$

Iteration 31/100 d:
 5.9400e-05
-2.6898e-04
-1.1630e-04
-6.7193e-05
 2.7901e-04
 5.2411e-05
 3.2847e-04
-7.1269e-05
-3.2702e-05
-3.3181e-04
 6.8021e-05
 6.1067e-05
-2.6918e-04
-1.1677e-04
-6.5841e-05
 2.7760e-04
 5.2916e-05
 3.2862e-04
-7.2520e-05
-3.1257e-05
-3.3256e-04
 6.6274e-05

$\mu = 0.000052 * 2 \rightarrow 0.000104$

Iteration 31/100 d:
 2.9545e-05
-1.3442e-04
-5.7825e-05
-3.3709e-05
 1.3970e-04
 2.6321e-05

```
   1.6399e-04
  -3.5388e-05
  -1.6434e-05
  -1.6606e-04
   3.4129e-05
   3.0758e-05
  -1.3440e-04
  -5.8393e-05
  -3.2778e-05
   1.3893e-04
   2.6516e-05
   1.6438e-04
  -3.6236e-05
  -1.5664e-05
  -1.6635e-04
   3.3103e-05
```

μ = 0.000104 * 2 -> 0.000207

Iteration 31/100 d:
```
   1.4697e-05
  -6.7115e-05
  -2.8707e-05
  -1.6888e-05
   6.9999e-05
   1.3216e-05
   8.1877e-05
  -1.7553e-05
  -8.2728e-06
  -8.3134e-05
   1.7114e-05
   1.5522e-05
  -6.7038e-05
  -2.9187e-05
  -1.6287e-05
   6.9566e-05
   1.3276e-05
   8.2248e-05
  -1.8096e-05
  -7.8535e-06
  -8.3225e-05
   1.6517e-05
```

μ = 0.000207 * 2 -> 0.000415

Iteration 31/100 d:
```
   7.3277e-06
  -3.3480e-05
  -1.4236e-05
```

-8.4376e-06
3.5093e-05
6.6409e-06
4.0890e-05
-8.7098e-06
-4.1712e-06
-4.1628e-05
8.5721e-06
7.8404e-06
-3.3409e-05
-1.4567e-05
-8.0805e-06
3.4850e-05
6.6515e-06
4.1158e-05
-9.0299e-06
-3.9405e-06
-4.1645e-05
8.2361e-06

μ = 0.000415 * 2 -> 0.000830

Iteration 31/100 d:
3.6653e-06
-1.6691e-05
-7.0588e-06
-4.2058e-06
1.7594e-05
3.3406e-06
2.0432e-05
-4.3291e-06
-2.1050e-06
-2.0844e-05
4.2890e-06
3.9593e-06
-1.6643e-05
-7.2594e-06
-4.0086e-06
1.7461e-05
3.3379e-06
2.0597e-05
-4.5052e-06
-1.9798e-06
-2.0841e-05
4.1076e-06

μ = 0.000830 * 2 -> 0.001659

Iteration 31/100 d:

1.8379e-06
-8.3193e-06
-3.5041e-06
-2.0964e-06
8.8158e-06
1.6819e-06
1.0216e-05
-2.1568e-06
-1.0625e-06
-1.0434e-05
2.1453e-06
1.9969e-06
-8.2913e-06
-3.6157e-06
-1.9925e-06
8.7454e-06
1.6778e-06
1.0308e-05
-2.2494e-06
-9.9623e-07
-1.0428e-05
2.0505e-06

μ = 0.001659 * 2 -> 0.003318

Iteration 31/100 d:
9.2254e-07
-4.1481e-06
-1.7428e-06
-1.0468e-06
4.4140e-06
8.4681e-07
5.1100e-06
-1.0768e-06
-5.3603e-07
-5.2202e-06
1.0735e-06
1.0054e-06
-4.1330e-06
-1.8019e-06
-9.9346e-07
4.3775e-06
8.4402e-07
5.1593e-06
-1.1243e-06
-5.0176e-07
-5.2162e-06
1.0249e-06

μ = 0.003318 * 2 -> 0.006636

Iteration 31/100 d:
  4.6294e-07
 -2.0695e-06
 -8.6838e-07
 -5.2354e-07
  2.2086e-06
  4.2597e-07
  2.5565e-06
 -5.3838e-07
 -2.7007e-07
 -2.6108e-06
  5.3737e-07
  5.0529e-07
 -2.0617e-06
 -8.9890e-07
 -4.9656e-07
  2.1900e-06
  4.2441e-07
  2.5820e-06
 -5.6235e-07
 -2.5261e-07
 -2.6085e-06
  5.1272e-07

μ = 0.006636 * 2 -> 0.013273

Iteration 31/100 d:
  2.3210e-07
 -1.0332e-06
 -4.3329e-07
 -2.6201e-07
  1.1046e-06
  2.1392e-07
  1.2789e-06
 -2.6931e-07
 -1.3579e-07
 -1.3055e-06
  2.6897e-07
  2.5350e-07
 -1.0293e-06
 -4.4883e-07
 -2.4845e-07
  1.0953e-06
  2.1312e-07
  1.2919e-06
 -2.8133e-07
 -1.2697e-07

-1.3043e-06
 2.5654e-07

μ = 0.013273 / 2 -> 0.006636

Iteration 31/100 w(t):
  -2.66407   4.98556
  -8.56894   -2.80565
 -11.67746   1.79489
 -12.29460   -2.16656
  -0.40707   9.96968
  -2.72954   13.31062
  13.84519   23.04089
   4.41294   16.47784
   9.91131   22.23559
  -5.00479   -0.33671
   3.37603   10.85155

Iteration 31/100 error:
  1.3769e-09

Iteration 31/100 gradient:
 -3.0806e-09
  1.3713e-08
  5.7509e-09
  3.4775e-09
 -1.4661e-08
 -2.8393e-09
 -1.6974e-08
  3.5744e-09
  1.8022e-09
  1.7327e-08
 -3.5699e-09
 -3.3645e-09
  1.3661e-08
  5.9571e-09
  3.2975e-09
 -1.4537e-08
 -2.8287e-09
 -1.7147e-08
  3.7340e-09
  1.6853e-09
  1.7311e-08
 -3.4050e-09

Iteration 31/100 gradient norm:
  4.6567e-08

Iteration 32/100 Hessian matrix:

Columns 1 through 6:

```
 3.4152e-04  6.6642e-04  4.4617e-04  5.3246e-05 -2.3237e-04 -2.8868e-04
 6.6642e-04  1.4323e-03  1.0522e-03  1.6544e-04 -4.1105e-04 -6.7102e-04
 4.4617e-04  1.0522e-03  1.0387e-03  4.8465e-04 -2.1091e-04 -7.6357e-04
 5.3246e-05  1.6544e-04  4.8465e-04  6.5957e-04  1.4067e-04 -4.7771e-04
-2.3237e-04 -4.1105e-04 -2.1091e-04  1.4067e-04  3.9572e-04  3.8039e-04
-2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04  3.8039e-04  1.3046e-03
-3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04  4.2435e-04  1.4520e-03
-4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05  5.6862e-04  8.4949e-04
-1.7886e-04 -2.8896e-04  8.2024e-05  4.6685e-04  3.6298e-04  1.0624e-04
 3.3147e-04  8.1311e-04  8.5539e-04  4.8756e-04  6.9302e-06 -2.6746e-04
 2.2919e-04  5.6906e-04  5.0739e-04  1.6120e-04 -5.4213e-05 -1.4851e-04
-8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04  5.1787e-05  5.0714e-04
-2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04  1.9424e-04  1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04  3.2605e-04  9.4880e-04
-3.4667e-04 -7.2343e-04 -3.8511e-04  1.8537e-04  3.6075e-04  3.1077e-04
 5.1787e-05  1.9424e-04  3.2605e-04  3.6075e-04  1.6499e-04 -1.7934e-04
 5.0714e-04  1.1221e-03  9.4880e-04  3.1077e-04 -1.7934e-04 -3.2362e-04
 5.0395e-04  1.1859e-03  1.0762e-03  3.8662e-04 -1.5142e-04 -3.4620e-04
 1.5422e-04  4.9291e-04  7.3882e-04  6.7719e-04  1.7766e-04 -4.4451e-04
-2.8543e-04 -4.9078e-04 -6.3666e-05  4.3434e-04  4.7591e-04  3.0185e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04  5.6337e-04  1.3233e-03
-1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04  2.4936e-04  7.5575e-04
```

Columns 7 through 12:

```
-3.3038e-04 -4.8719e-04 -1.7886e-04  3.3147e-04  2.2919e-04 -8.4277e-05
-8.0037e-04 -9.5258e-04 -2.8896e-04  8.1311e-04  5.6906e-04 -2.1362e-04
-9.0614e-04 -6.7142e-04  8.2024e-05  8.5539e-04  5.0739e-04 -3.4233e-04
-5.1344e-04 -4.1685e-05  4.6685e-04  4.8756e-04  1.6120e-04 -3.4667e-04
 4.2435e-04  5.6862e-04  3.6298e-04  6.9302e-06 -5.4213e-05  5.1787e-05
 1.4520e-03  8.4949e-04  1.0624e-04 -2.6746e-04 -1.4851e-04  5.0714e-04
 1.6834e-03  1.0289e-03  2.3831e-04 -2.0576e-04 -1.4810e-04  5.0395e-04
 1.0289e-03  1.1579e-03  6.5602e-04 -6.1577e-05 -1.4344e-04  1.5422e-04
 2.3831e-04  6.5602e-04  9.5109e-04  7.8936e-04  2.7396e-04 -2.8543e-04
-2.0576e-04 -6.1577e-05  7.8936e-04  1.6643e-03  8.5857e-04 -4.5060e-04
-1.4810e-04 -1.4344e-04  2.7396e-04  8.5857e-04  4.8864e-04 -1.9323e-04
 5.0395e-04  1.5422e-04 -2.8543e-04 -4.5060e-04 -1.9323e-04  3.4152e-04
 1.1859e-03  4.9291e-04 -4.9078e-04 -9.3626e-04 -4.2539e-04  6.6642e-04
 1.0762e-03  7.3882e-04 -6.3666e-05 -8.0241e-04 -4.7095e-04  4.4617e-04
 3.8662e-04  6.7719e-04  4.3434e-04 -2.7147e-04 -2.7150e-04  5.3246e-05
-1.5142e-04  1.7766e-04  4.7591e-04  5.6337e-04  2.4936e-04 -2.3237e-04
-3.4620e-04 -4.4451e-04  3.0185e-04  1.3233e-03  7.5575e-04 -2.8868e-04
-3.8231e-04 -4.3738e-04  4.0533e-04  1.5384e-03  8.7551e-04 -3.3038e-04
-4.3738e-04  3.6464e-05  7.4603e-04  1.1903e-03  5.7302e-04 -4.8719e-04
 4.0533e-04  7.4603e-04  8.7304e-04  5.8688e-04  1.7313e-04 -1.7886e-04
 1.5384e-03  1.1903e-03  5.8688e-04  1.0772e-04 -2.2048e-05  3.3147e-04
 8.7551e-04  5.7302e-04  1.7313e-04 -2.2048e-05 -2.3998e-05  2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
```

-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04

Iteration 32/100 µ:
 0.0066363

Iteration 32/100 d:
   4.6168e-07
  -2.0726e-06
  -8.7018e-07
  -5.2306e-07
   2.2079e-06
   4.2409e-07
   2.5552e-06
  -5.3815e-07
  -2.6856e-07
  -2.6106e-06
   5.3679e-07
   5.0358e-07
  -2.0649e-06
  -9.0015e-07
  -4.9621e-07
   2.1894e-06
   4.2257e-07
   2.5802e-06
  -5.6203e-07
  -2.5127e-07
  -2.6085e-06
   5.1235e-07

µ = 0.006636 * 2 -> 0.013273

Iteration 32/100 d:
   2.3136e-07
  -1.0350e-06
  -4.3426e-07
  -2.6165e-07
   1.1043e-06
   2.1283e-07
   1.2781e-06
  -2.6912e-07
  -1.3491e-07
  -1.3055e-06
   2.6861e-07
   2.5254e-07
  -1.0311e-06
  -4.4950e-07
  -2.4815e-07
   1.0950e-06
   2.1203e-07

1.2908e-06
  -2.8112e-07
  -1.2618e-07
  -1.3043e-06
   2.5629e-07

μ = 0.013273 * 2 -> 0.026545

Iteration 32/100 d:
   1.1585e-07
  -5.1708e-07
  -2.1690e-07
  -1.3090e-07
   5.5224e-07
   1.0666e-07
   6.3923e-07
  -1.3459e-07
  -6.7653e-08
  -6.5274e-07
   1.3438e-07
   1.2649e-07
  -5.1511e-07
  -2.2459e-07
  -1.2413e-07
   5.4757e-07
   1.0626e-07
   6.4565e-07
  -1.4060e-07
  -6.3267e-08
  -6.5215e-07
   1.2820e-07

μ = 0.026545 / 2 -> 0.013273

Iteration 32/100 w(t):
  -2.66407   4.98556
  -8.56894   -2.80565
 -11.67746   1.79489
 -12.29460   -2.16656
  -0.40707   9.96968
  -2.72954   13.31062
  13.84519   23.04090
   4.41294   16.47784
   9.91131   22.23559
  -5.00479   -0.33671
   3.37603   10.85155

Iteration 32/100 error:
   1.3769e-09

Iteration 32/100 gradient:
 -3.0752e-09
  1.3726e-08
  5.7576e-09
  3.4746e-09
 -1.4659e-08
 -2.8314e-09
 -1.6968e-08
  3.5728e-09
  1.7958e-09
  1.7327e-08
 -3.5672e-09
 -3.3578e-09
  1.3674e-08
  5.9617e-09
  3.2950e-09
 -1.4535e-08
 -2.8207e-09
 -1.7139e-08
  3.7323e-09
  1.6794e-09
  1.7311e-08
 -3.4031e-09

Iteration 32/100 gradient norm:
  4.6567e-08

Iteration 33/100 Hessian matrix:
 Columns 1 through 6:

  3.4152e-04 6.6642e-04 4.4617e-04 5.3246e-05 -2.3237e-04 -2.8868e-04
  6.6642e-04 1.4323e-03 1.0522e-03 1.6544e-04 -4.1105e-04 -6.7102e-04
  4.4617e-04 1.0522e-03 1.0387e-03 4.8465e-04 -2.1091e-04 -7.6357e-04
  5.3246e-05 1.6544e-04 4.8465e-04 6.5957e-04 1.4067e-04 -4.7771e-04
 -2.3237e-04 -4.1105e-04 -2.1091e-04 1.4067e-04 3.9572e-04 3.8039e-04
 -2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04 3.8039e-04 1.3046e-03
 -3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04 4.2435e-04 1.4520e-03
 -4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05 5.6862e-04 8.4949e-04
 -1.7886e-04 -2.8896e-04 8.2024e-05 4.6685e-04 3.6298e-04 1.0624e-04
  3.3147e-04 8.1311e-04 8.5539e-04 4.8756e-04 6.9302e-06 -2.6746e-04
  2.2919e-04 5.6906e-04 5.0739e-04 1.6120e-04 -5.4213e-05 -1.4851e-04
 -8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04 5.1787e-05 5.0714e-04
 -2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04 1.9424e-04 1.1221e-03
 -3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04 3.2605e-04 9.4880e-04
 -3.4667e-04 -7.2343e-04 -3.8511e-04 1.8537e-04 3.6075e-04 3.1077e-04
  5.1787e-05 1.9424e-04 3.2605e-04 3.6075e-04 1.6499e-04 -1.7934e-04
  5.0714e-04 1.1221e-03 9.4880e-04 3.1077e-04 -1.7934e-04 -3.2362e-04
  5.0395e-04 1.1859e-03 1.0762e-03 3.8662e-04 -1.5142e-04 -3.4620e-04

```
 1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04
-2.8543e-04  -4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
-4.5060e-04  -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
-3.3038e-04  -4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04  -8.4277e-05
-8.0037e-04  -9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04  -2.1362e-04
-9.0614e-04  -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04  -3.4233e-04
-5.1344e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05   5.1787e-05
 1.4520e-03   8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04   5.0714e-04
 1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04   1.5422e-04
 2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
-2.0576e-04  -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
 1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
-1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04  -2.3237e-04
-3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3147e-04
 8.7551e-04   5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
```

```
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 33/100 μ:
 0.013273

Iteration 33/100 d:
```
  2.3103e-07
 -1.0358e-06
 -4.3472e-07
 -2.6151e-07
  1.1041e-06
  2.1233e-07
  1.2778e-06
 -2.6905e-07
 -1.3451e-07
 -1.3054e-06
  2.6845e-07
  2.5210e-07
 -1.0319e-06
 -4.4982e-07
```

-2.4805e-07
1.0949e-06
2.1155e-07
1.2903e-06
-2.8103e-07
-1.2582e-07
-1.3043e-06
2.5619e-07

μ = 0.013273 * 2 -> 0.026545

Iteration 33/100 d:
1.1567e-07
-5.1752e-07
-2.1714e-07
-1.3081e-07
5.5216e-07
1.0639e-07
6.3903e-07
-1.3455e-07
-6.7435e-08
-6.5274e-07
1.3429e-07
1.2626e-07
-5.1555e-07
-2.2475e-07
-1.2406e-07
5.4751e-07
1.0599e-07
6.4539e-07
-1.4055e-07
-6.3071e-08
-6.5215e-07
1.2814e-07

μ = 0.026545 * 2 -> 0.053090

Iteration 33/100 d:
5.7876e-08
-2.5865e-07
-1.0851e-07
-6.5424e-08
2.7610e-07
5.3261e-08
3.1956e-07
-6.7284e-08
-3.3769e-08
-3.2637e-07
6.7167e-08

```
  6.3185e-08
 -2.5767e-07
 -1.1234e-07
 -6.2043e-08
  2.7377e-07
  5.3059e-08
  3.2276e-07
 -7.0287e-08
 -3.1582e-08
 -3.2608e-07
  6.4083e-08
```

μ = 0.053090 * 2 -> 0.106180

Iteration 33/100 d:
```
  2.8950e-08
 -1.2930e-07
 -5.4240e-08
 -3.2718e-08
  1.3806e-07
  2.6648e-08
  1.5979e-07
 -3.3645e-08
 -1.6899e-08
 -1.6319e-07
  3.3589e-08
  3.1608e-08
 -1.2881e-07
 -5.6157e-08
 -3.1027e-08
  1.3689e-07
  2.6547e-08
  1.6139e-07
 -3.5147e-08
 -1.5803e-08
 -1.6304e-07
  3.2045e-08
```

μ = 0.106180 * 2 -> 0.212361

Iteration 33/100 d:
```
  1.4478e-08
 -6.4642e-08
 -2.7116e-08
 -1.6360e-08
  6.9029e-08
  1.3328e-08
  7.9900e-08
 -1.6823e-08
```

-8.4529e-09
-8.1593e-08
1.6796e-08
1.5808e-08
-6.4396e-08
-2.8076e-08
-1.5515e-08
6.8446e-08
1.3278e-08
8.0702e-08
-1.7574e-08
-7.9050e-09
-8.1519e-08
1.6024e-08

$\mu = 0.212361 / 2 \rightarrow 0.106180$

Iteration 33/100 w(t):
-2.66407   4.98556
-8.56894   -2.80565
-11.67746   1.79489
-12.29460   -2.16656
-0.40707   9.96968
-2.72954   13.31062
13.84519   23.04090
4.41294   16.47784
9.91131   22.23559
-5.00479   -0.33671
3.37603   10.85155

Iteration 33/100 error:
1.3769e-09

Iteration 33/100 gradient:
-3.0745e-09
1.3727e-08
5.7584e-09
3.4743e-09
-1.4659e-08
-2.8304e-09
-1.6968e-08
3.5726e-09
1.7951e-09
1.7327e-08
-3.5668e-09
-3.3569e-09
1.3675e-08
5.9622e-09
3.2947e-09

-1.4535e-08
-2.8197e-09
-1.7138e-08
3.7321e-09
1.6787e-09
1.7311e-08
-3.4028e-09

Iteration 33/100 gradient norm:
4.6567e-08

Iteration 34/100 Hessian matrix:
Columns 1 through 6:

3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05 -2.3237e-04 -2.8868e-04
6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04 -4.1105e-04 -6.7102e-04
4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04 -2.1091e-04 -7.6357e-04
5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04 -4.7771e-04
-2.3237e-04 -4.1105e-04 -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
-2.8868e-04 -6.7102e-04 -7.6357e-04 -4.7771e-04   3.8039e-04   1.3046e-03
-3.3038e-04 -8.0037e-04 -9.0614e-04 -5.1344e-04   4.2435e-04   1.4520e-03
-4.8719e-04 -9.5258e-04 -6.7142e-04 -4.1685e-05   5.6862e-04   8.4949e-04
-1.7886e-04 -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06 -2.6746e-04
2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04 -5.4213e-05 -1.4851e-04
-8.4277e-05 -2.1362e-04 -3.4233e-04 -3.4667e-04   5.1787e-05   5.0714e-04
-2.1362e-04 -5.4697e-04 -8.4199e-04 -7.2343e-04   1.9424e-04   1.1221e-03
-3.4233e-04 -8.4199e-04 -8.6723e-04 -3.8511e-04   3.2605e-04   9.4880e-04
-3.4667e-04 -7.2343e-04 -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04 -1.7934e-04
5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04 -1.7934e-04 -3.2362e-04
5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04 -1.5142e-04 -3.4620e-04
1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04 -4.4451e-04
-2.8543e-04 -4.9078e-04 -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
-4.5060e-04 -9.3626e-04 -8.0241e-04 -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04 -4.2539e-04 -4.7095e-04 -2.7150e-04   2.4936e-04   7.5575e-04

Columns 7 through 12:

-3.3038e-04 -4.8719e-04 -1.7886e-04   3.3147e-04   2.2919e-04 -8.4277e-05
-8.0037e-04 -9.5258e-04 -2.8896e-04   8.1311e-04   5.6906e-04 -2.1362e-04
-9.0614e-04 -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04 -3.4233e-04
-5.1344e-04 -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04 -3.4667e-04
4.2435e-04   5.6862e-04   3.6298e-04   6.9302e-06 -5.4213e-05   5.1787e-05
1.4520e-03   8.4949e-04   1.0624e-04 -2.6746e-04 -1.4851e-04   5.0714e-04
1.6834e-03   1.0289e-03   2.3831e-04 -2.0576e-04 -1.4810e-04   5.0395e-04
1.0289e-03   1.1579e-03   6.5602e-04 -6.1577e-05 -1.4344e-04   1.5422e-04
2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04 -2.8543e-04
-2.0576e-04 -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04 -4.5060e-04

```
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
 1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
-1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04  -2.3237e-04
-3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3147e-04
 8.7551e-04   5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
```

```
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 34/100 μ:
 0.10618

Iteration 34/100 d:
  2.8944e-08
 -1.2931e-07
 -5.4248e-08
 -3.2714e-08
  1.3805e-07
  2.6639e-08
  1.5979e-07
 -3.3643e-08
 -1.6891e-08
 -1.6319e-07
  3.3586e-08
  3.1600e-08
 -1.2882e-07
 -5.6163e-08
 -3.1024e-08
  1.3689e-07
  2.6538e-08
  1.6139e-07
 -3.5145e-08
 -1.5797e-08
 -1.6304e-07
  3.2043e-08

μ = 0.106180 * 2 -> 0.212361

Iteration 34/100 d:
  1.4475e-08
 -6.4649e-08
 -2.7120e-08
 -1.6359e-08
  6.9028e-08

1.3324e-08
7.9897e-08
-1.6822e-08
-8.4492e-09
-8.1593e-08
1.6795e-08
1.5804e-08
-6.4403e-08
-2.8079e-08
-1.5513e-08
6.8445e-08
1.3273e-08
8.0697e-08
-1.7573e-08
-7.9017e-09
-8.1519e-08
1.6023e-08

μ = 0.212361 * 2 -> 0.424721

Iteration 34/100 d:
7.2382e-09
-3.2323e-08
-1.3559e-08
-8.1798e-09
3.4514e-08
6.6631e-09
3.9949e-08
-8.4114e-09
-4.2255e-09
-4.0796e-08
8.3976e-09
7.9029e-09
-3.2200e-08
-1.4039e-08
-7.7569e-09
3.4223e-08
6.6378e-09
4.0350e-08
-8.7870e-09
-3.9517e-09
-4.0759e-08
8.0116e-09

μ = 0.424721 / 2 -> 0.212361

Iteration 34/100 w(t):
-2.66407   4.98556
-8.56894   -2.80565

```
 -11.67746   1.79489
 -12.29460  -2.16656
  -0.40707   9.96968
  -2.72954  13.31062
  13.84519  23.04090
   4.41294  16.47784
   9.91131  22.23559
  -5.00479  -0.33671
   3.37603  10.85155
```

Iteration 34/100 error:
  1.3769e-09

Iteration 34/100 gradient:
```
 -3.0742e-09
  1.3728e-08
  5.7589e-09
  3.4741e-09
 -1.4659e-08
 -2.8300e-09
 -1.6967e-08
  3.5725e-09
  1.7947e-09
  1.7327e-08
 -3.5667e-09
 -3.3565e-09
  1.3676e-08
  5.9625e-09
  3.2945e-09
 -1.4535e-08
 -2.8192e-09
 -1.7137e-08
  3.7320e-09
  1.6784e-09
  1.7311e-08
 -3.4027e-09
```

Iteration 34/100 gradient norm:
  4.6567e-08

Iteration 35/100 Hessian matrix:
 Columns 1 through 6:

```
  3.4152e-04   6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04
  6.6642e-04   1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04
  4.4617e-04   1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04
  5.3246e-05   1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04
 -2.3237e-04  -4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04
 -2.8868e-04  -6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03
```

```
-3.3038e-04  -8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03
-4.8719e-04  -9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04
-1.7886e-04  -2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04
 3.3147e-04   8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04
 2.2919e-04   5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04
-8.4277e-05  -2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04
-2.1362e-04  -5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03
-3.4233e-04  -8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04
-3.4667e-04  -7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04
 5.1787e-05   1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04
 5.0714e-04   1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04
 5.0395e-04   1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04
 1.5422e-04   4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04
-2.8543e-04  -4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04
-4.5060e-04  -9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03
-1.9323e-04  -4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04
```

Columns 7 through 12:

```
-3.3038e-04  -4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04  -8.4277e-05
-8.0037e-04  -9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04  -2.1362e-04
-9.0614e-04  -6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04  -3.4233e-04
-5.1344e-04  -4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04  -3.4667e-04
 4.2435e-04   5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05   5.1787e-05
 1.4520e-03   8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04   5.0714e-04
 1.6834e-03   1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04   5.0395e-04
 1.0289e-03   1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04   1.5422e-04
 2.3831e-04   6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04  -2.8543e-04
-2.0576e-04  -6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04  -4.5060e-04
-1.4810e-04  -1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04  -1.9323e-04
 5.0395e-04   1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04   3.4152e-04
 1.1859e-03   4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04   6.6642e-04
 1.0762e-03   7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04   4.4617e-04
 3.8662e-04   6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04   5.3246e-05
-1.5142e-04   1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04  -2.3237e-04
-3.4620e-04  -4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04  -2.8868e-04
-3.8231e-04  -4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04  -3.3038e-04
-4.3738e-04   3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04  -4.8719e-04
 4.0533e-04   7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04  -1.7886e-04
 1.5384e-03   1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05   3.3147e-04
 8.7551e-04   5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05   2.2919e-04
```

Columns 13 through 18:

```
-2.1362e-04  -3.4233e-04  -3.4667e-04   5.1787e-05   5.0714e-04   5.0395e-04
-5.4697e-04  -8.4199e-04  -7.2343e-04   1.9424e-04   1.1221e-03   1.1859e-03
-8.4199e-04  -8.6723e-04  -3.8511e-04   3.2605e-04   9.4880e-04   1.0762e-03
-7.2343e-04  -3.8511e-04   1.8537e-04   3.6075e-04   3.1077e-04   3.8662e-04
 1.9424e-04   3.2605e-04   3.6075e-04   1.6499e-04  -1.7934e-04  -1.5142e-04
```

```
 1.1221e-03   9.4880e-04   3.1077e-04  -1.7934e-04  -3.2362e-04  -3.4620e-04
 1.1859e-03   1.0762e-03   3.8662e-04  -1.5142e-04  -3.4620e-04  -3.8231e-04
 4.9291e-04   7.3882e-04   6.7719e-04   1.7766e-04  -4.4451e-04  -4.3738e-04
-4.9078e-04  -6.3666e-05   4.3434e-04   4.7591e-04   3.0185e-04   4.0533e-04
-9.3626e-04  -8.0241e-04  -2.7147e-04   5.6337e-04   1.3233e-03   1.5384e-03
-4.2539e-04  -4.7095e-04  -2.7150e-04   2.4936e-04   7.5575e-04   8.7551e-04
 6.6642e-04   4.4617e-04   5.3246e-05  -2.3237e-04  -2.8868e-04  -3.3038e-04
 1.4323e-03   1.0522e-03   1.6544e-04  -4.1105e-04  -6.7102e-04  -8.0037e-04
 1.0522e-03   1.0387e-03   4.8465e-04  -2.1091e-04  -7.6357e-04  -9.0614e-04
 1.6544e-04   4.8465e-04   6.5957e-04   1.4067e-04  -4.7771e-04  -5.1344e-04
-4.1105e-04  -2.1091e-04   1.4067e-04   3.9572e-04   3.8039e-04   4.2435e-04
-6.7102e-04  -7.6357e-04  -4.7771e-04   3.8039e-04   1.3046e-03   1.4520e-03
-8.0037e-04  -9.0614e-04  -5.1344e-04   4.2435e-04   1.4520e-03   1.6834e-03
-9.5258e-04  -6.7142e-04  -4.1685e-05   5.6862e-04   8.4949e-04   1.0289e-03
-2.8896e-04   8.2024e-05   4.6685e-04   3.6298e-04   1.0624e-04   2.3831e-04
 8.1311e-04   8.5539e-04   4.8756e-04   6.9302e-06  -2.6746e-04  -2.0576e-04
 5.6906e-04   5.0739e-04   1.6120e-04  -5.4213e-05  -1.4851e-04  -1.4810e-04
```

Columns 19 through 22:

```
 1.5422e-04  -2.8543e-04  -4.5060e-04  -1.9323e-04
 4.9291e-04  -4.9078e-04  -9.3626e-04  -4.2539e-04
 7.3882e-04  -6.3666e-05  -8.0241e-04  -4.7095e-04
 6.7719e-04   4.3434e-04  -2.7147e-04  -2.7150e-04
 1.7766e-04   4.7591e-04   5.6337e-04   2.4936e-04
-4.4451e-04   3.0185e-04   1.3233e-03   7.5575e-04
-4.3738e-04   4.0533e-04   1.5384e-03   8.7551e-04
 3.6464e-05   7.4603e-04   1.1903e-03   5.7302e-04
 7.4603e-04   8.7304e-04   5.8688e-04   1.7313e-04
 1.1903e-03   5.8688e-04   1.0772e-04  -2.2048e-05
 5.7302e-04   1.7313e-04  -2.2048e-05  -2.3998e-05
-4.8719e-04  -1.7886e-04   3.3147e-04   2.2919e-04
-9.5258e-04  -2.8896e-04   8.1311e-04   5.6906e-04
-6.7142e-04   8.2024e-05   8.5539e-04   5.0739e-04
-4.1685e-05   4.6685e-04   4.8756e-04   1.6120e-04
 5.6862e-04   3.6298e-04   6.9302e-06  -5.4213e-05
 8.4949e-04   1.0624e-04  -2.6746e-04  -1.4851e-04
 1.0289e-03   2.3831e-04  -2.0576e-04  -1.4810e-04
 1.1579e-03   6.5602e-04  -6.1577e-05  -1.4344e-04
 6.5602e-04   9.5109e-04   7.8936e-04   2.7396e-04
-6.1577e-05   7.8936e-04   1.6643e-03   8.5857e-04
-1.4344e-04   2.7396e-04   8.5857e-04   4.8864e-04
```

Iteration 35/100 μ:
 0.21236

Iteration 35/100 d:
  1.4473e-08
 -6.4653e-08

-2.7122e-08
-1.6358e-08
6.9027e-08
1.3322e-08
7.9895e-08
-1.6822e-08
-8.4474e-09
-8.1593e-08
1.6794e-08
1.5802e-08
-6.4407e-08
-2.8080e-08
-1.5513e-08
6.8445e-08
1.3271e-08
8.0695e-08
-1.7573e-08
-7.9000e-09
-8.1519e-08
1.6022e-08

μ = 0.212361 * 2 -> 0.424721

Iteration 35/100 d:
7.2374e-09
-3.2325e-08
-1.3560e-08
-8.1794e-09
3.4514e-08
6.6620e-09
3.9948e-08
-8.4112e-09
-4.2246e-09
-4.0796e-08
8.3973e-09
7.9019e-09
-3.2202e-08
-1.4039e-08
-7.7566e-09
3.4223e-08
6.6367e-09
4.0349e-08
-8.7867e-09
-3.9508e-09
-4.0759e-08
8.0114e-09

μ = 0.424721 * 2 -> 0.849443

Iteration 35/100 d:
  3.6189e-09
  -1.6162e-08
  -6.7798e-09
  -4.0898e-09
  1.7257e-08
  3.3313e-09
  1.9974e-08
  -4.2057e-09
  -2.1125e-09
  -2.0398e-08
  4.1987e-09
  3.9512e-09
  -1.6100e-08
  -7.0195e-09
  -3.8784e-09
  1.7111e-08
  3.3186e-09
  2.0175e-08
  -4.3934e-09
  -1.9756e-09
  -2.0380e-08
  4.0057e-09

μ = 0.849443 * 2 -> 1.698885

Iteration 35/100 d:
  1.8095e-09
  -8.0808e-09
  -3.3898e-09
  -2.0449e-09
  8.6286e-09
  1.6657e-09
  9.9872e-09
  -2.1028e-09
  -1.0563e-09
  -1.0199e-08
  2.0994e-09
  1.9757e-09
  -8.0501e-09
  -3.5097e-09
  -1.9392e-09
  8.5557e-09
  1.6594e-09
  1.0087e-08
  -2.1967e-09
  -9.8786e-10
  -1.0190e-08
  2.0029e-09

μ = 1.698885 * 2 -> 3.397771

Iteration 35/100 d:
   9.0476e-10
  -4.0404e-09
  -1.6949e-09
  -1.0225e-09
   4.3143e-09
   8.3287e-10
   4.9936e-09
  -1.0514e-09
  -5.2818e-10
  -5.0995e-09
   1.0497e-09
   9.8784e-10
  -4.0250e-09
  -1.7548e-09
  -9.6961e-10
   4.2778e-09
   8.2971e-10
   5.0437e-09
  -1.0984e-09
  -4.9394e-10
  -5.0949e-09
   1.0014e-09

μ = 3.397771 / 2 -> 1.698885

Iteration 35/100 w(t):
   -2.66407   4.98556
   -8.56894   -2.80565
  -11.67746   1.79489
  -12.29460   -2.16656
   -0.40707   9.96968
   -2.72954   13.31062
   13.84519   23.04090
    4.41294   16.47784
    9.91131   22.23559
   -5.00479   -0.33671
    3.37603   10.85155

Iteration 35/100 error:
  1.3769e-09

Iteration 35/100 gradient:
  -3.0742e-09
   1.3728e-08
   5.7589e-09

3.4741e-09
-1.4659e-08
-2.8299e-09
-1.6967e-08
3.5725e-09
1.7946e-09
1.7327e-08
-3.5666e-09
-3.3565e-09
1.3676e-08
5.9626e-09
3.2945e-09
-1.4535e-08
-2.8192e-09
-1.7137e-08
3.7320e-09
1.6783e-09
1.7311e-08
-3.4027e-09

Iteration 35/100 gradient norm:
4.6567e-08