```
In training -->>
iter:
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
      1 1]
 [ 1
       3 1]
 \begin{bmatrix} \bar{4} & \bar{4} & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01 -0.02]
bUpdate: 0.01
iter: 1
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.030002 0.040004]
bUpdate: -0.01
iter: 2
XY_tmp:
[[2 3 -1]
[2 1 1]
[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.039996 0.039996]
bUpdate: -0.01
iter: 3
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.010012 -0.030012]
bUpdate: 0.01
iter: 4
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.01999 0.029994]
bUpdate: -0.01
iter: 5
XY_tmp:
[[3 4 -1]
[2 3 -1]
```

```
2
1
       1
2
           1]
          1]
 [ 1
       \bar{3} \bar{1}
      4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.020014 -0.010012]
bUpdate: 0.01
iter: 6
XY_tmp:
[ 2 [ 2
      3 -1]
       1 1]
       2 1]
       \bar{3} \bar{1}
   1
      4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02999001 0.03999001]
bUpdate: -0.01
iter: 7
XY_tmp:
[[2 3 -1]
 [ 2
       1 1]
 [ 1
      3 11
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01001599 -0.02001799]
bUpdate: 0.01
iter: 8
XY_tmp:
[[2 3 -1]
[2 1 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.03998601 0.03998601]
bUpdate: -0.01
iter:
\begin{array}{c} XY \underline{\hspace{0.1cm}} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,] \end{array}
 [1 \ 3 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01997802 0.02997801]
bUpdate: -0.01
iter: 10
XY_tmp:
[[1 3 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02002598 -0.01002798]
bUpdate: 0.01
iter: 11
4 -1]
      3 -1]
 [ 2
     1 11
   1
      2
         1]
      3
   1
          11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01002197 -0.03002598]
bUpdate: 0.01
iter: 12
XY_tmp:
[ 3
      4 -11
      1
          1]
 [ 1
      2
         1]
      3 1]
 [ 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01998003 0.02998003]
bUpdate: -0.01
iter: 13
XY_{tmp}: [ 2 1
          1]
      2 1]
 [ 1
      3 1
 [ 1
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997603 0.03997403]
bUpdate: -0.01
iter: 14
XY_tmp:
[\overline{2} \ 1 \ 1]
 [1 2 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-2.99616323e-05 -3.39612303e-05]
bUpdate: 0.0
iter: 15
XY_tmp:
[[\overline{1} \ 2' \ 1] \ [1 \ 3 \ 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02002996 -0.01003395]
bUpdate: 0.01
iter: 16
XY_tmp:
[[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01002595 -0.03003195]
bUpdate: 0.01
iter: 17
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1]
 [ 2
      1 1]
     2 1]
 [ 1
      3 1
 [ 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01002394 -0.02002594]
bUpdate: 0.01
iter: 18
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
[ 1 2 1]
[ 1 3 1]
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02002194 -0.01002194]
bUpdate: 0.01
iter: 19
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 1
     3 1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01001794 -0.02001993]
bUpdate: 0.01
iter: 20
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [4 4 -1]]
vDatum: 1
yEst: False
```

```
wUpdate: [-0.01001593 -0.03001593]
bUpdate: 0.01
iter: 21
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.03998607 0.03999008]
bUpdate: -0.01
iter: 22
XY_tmp:
[[3 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01997807 0.02998208]
bUpdate: -0.01
iter: 23
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
      2 1]
      \bar{3} \bar{1}
   1
      4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02997408 0.03997608]
bUpdate: -0.01
iter: 24
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
      3 1
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003192 -0.02003191]
bUpdate: 0.01
iter: 25
XY_tmp:
[[3 \ 4 \ -1]
 [2 \ 3 \ -1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02002991 -0.01002791]
bUpdate: 0.01
```

```
iter: 26
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100259 -0.0300259]
bUpdate: 0.01
iter: 27
XY_tmp:
[[3 4 -1]
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199761 0.0299801]
bUpdate: -0.01
iter: 28
XY_tmp:
[[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997211 0.03997411]
bUpdate: -0.01
iter: 29
XY_tmp:
[ 2 [ 2
      4 -1]
      3 -1]
      1 11
  1
      \overline{2} \overline{1}
      3
 [ 1
         11
 [4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.38882492e-05 -3.38878543e-05]
bUpdate: 0.0
iter: 30
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
      2 1]
       3
   1
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996612 0.02996612]
bUpdate: -0.01
```

```
XY_tmp:
[[ 2
      1
         1]
 [ 1
      2
        1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.78746952e-05 -3.98743005e-05]
bUpdate: 0.0
iter: 32
XY_tmp:
[ [ 2
      1
         1]
 [ 1
      3
        11
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003787 -0.02003987]
bUpdate: 0.01
iter: 33
XY_tmp:
[[2 1 1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003586 -0.03003586]
bUpdate: 0.01
iter: 34
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-3.38523749e-05 -2.98511807e-05]
bUpdate: 0.0
iter: 35
XY_tmp:
[ 3 [ 2
     4 -11
      3 -1]
     1
        1]
 [ 1
      2 1]
      3
   1
        11
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02003385 -0.01002985]
bUpdate: 0.01
iter: 36
XY_tmp:
[ 2 [ 1
     ·3 -1]
      1
         11
      2
         11
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997016 0.03997216]
bUpdate: -0.01
iter: 37
XY_tmp:
[ 2
     3 -1]
      1 1]
 [ 1
      2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-3.58328676e-05 -3.58336736e-05]
bUpdate: 0.0
iter: 38
XY_tmp:
[[2 1 1]
[1 2 1]
 [1 \ 3 \ 1]]
vDatum: -1
yEst: False
wUpdate: [0.01996417 0.02996417]
bUpdate: -0.01
iter: 39
XY_tmp:
[[1 2 1]
 [1 \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003982 -0.01004182]
bUpdate: 0.01
iter: 40
XY_tmp:
[[\overline{1} \ 3] \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003581 -0.02003981]
bUpdate: 0.01
iter: 41
XY_tmp:
[ 3
      4 -1]
      3 -1
  2
      1 1]
      2
         1]
   1
  1
      3
         1]
 [ 4
      4 -1]]
vDatum: 1
yEst: False
```

```
wUpdate: [-0.0100338 -0.0300358]
bUpdate: 0.01
iter: 42
XY_tmp:
[[ 3 4
[ 2 3
      4 -11
       3 -1]
 [ 2
      1
         11
 [ 1
       2 1
 [ 1
       3 1]]
yDatum: -1
yEst: True
wUpdate: [-3.17966494e-05 -2.97958549e-05]
bUpdate: 0.0
iter: 43
XY_tmp:
[[3 4 -1]
 \begin{bmatrix} 2 & 3 & 1 \end{bmatrix}
 \begin{bmatrix} 1 & 2 & 1 \\ 1 & 3 & 1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.02003179 -0.01002979]
bUpdate: 0.01
iter: 44
XY_tmp:
[[3 \ 4 \ -1]
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01997222 0.02997222]
bUpdate: -0.01
iter: 45
XY_tmp:
[[3 4 -1]
 [1 3 1]
yDatum: 1
yEst: False
wUpdate: [-0.01003178 -0.02003378]
bUpdate: 0.01
iter: 46
XY_tmp:
[[3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01002977 -0.03002977]
bUpdate: 0.01
```

```
XY_tmp:
[ 3
      4 -1]
      3 -1]
   2
      1 11
   1
      2
        1]
  1
      3 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997223 0.03997623]
bUpdate: -0.01
iter: 48
XY_tmp:
[[3 4
      4 -11
 [ 2
     3 -11
 [ 2
     1 1]
      2 1]
   1
 [ 4
     4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01003376 -0.03003176]
bUpdate: 0.01
iter: 49
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 1
        11
     4 -1]]
 Γ 4
yDatum: 1
yEst: False
wUpdate: [-0.01003175 -0.02002575]
bUpdate: 0.01
iter: 50
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02002975 -0.01002175]
bUpdate: 0.01
iter: 51
XY_tmp:
[[2 3 -1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997426 0.03998025]
bUpdate: -0.01
```

```
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996826 0.02997226]
bUpdate: -0.01
iter: 53
XY_tmp:
[ 3
     4 -11
      3 -1]
      1 1]
 [ 1
      2 1]
      3
   1
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.57299640e-05 -3.37355676e-05]
bUpdate: 0.0
iter: 54
XY_tmp:
[ [ 3
     4 -1]
 رِّ 2
     3 -1
      2 1]
  1
      3 1
 [ 1
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02003572 -0.01003373]
bUpdate: 0.01
iter: 55
XY_tmp:
[[3 4 -1]
 [ 2
     3 -1]
      2 1]
 [ 1
      3 1]]
 [ 1
vDatum: -1
yEst: True
wUpdate: [-3.17156734e-05 -3.17220747e-05]
bUpdate: 0.0
iter: 56
XY_tmp:
[[2 \ 3 \ -1]
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-3.17093303e-05 -3.17157303e-05]
bUpdate: 0.0
iter: 57
XY_tmp:
```

```
[[ 2 3 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100317 -0.02003171]
bUpdate: 0.01
iter: 58
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100297 -0.0300277]
bUpdate: 0.01
iter: 59
4 -11
      3 -11
     1 1]
      2
        1]
   1
  1
      3
         1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01997231 0.0299783 ]
bUpdate: -0.01
iter: 60
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
     2 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01003169 -0.03002769]
bUpdate: 0.01
iter: 61
XY_tmp:
[[3 \ 4 \ -1]
     3 -1]
2 1]
4 -1]]
   2
 [ 1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02002968 -0.01002169]
bUpdate: 0.01
iter: 62
XY_tmp:
[[3 4 -1]
[ 1 2 1]
```

```
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01997433 0.02998032]
bUpdate: -0.01
iter: 63
XY_tmp:
[[3 4 -1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01002967 -0.02002568]
bUpdate: 0.01
iter: 64
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997234 0.03997833]
bUpdate: -0.01
iter: 65
XY_tmp:
[[ 3 4
[ 2 3
     4 -11
      3 -1]
 [ 2
     1
        11
 [ 1
      2 1
   1
      3
         1]
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.36562971e-05 -2.96698816e-05]
bUpdate: 0.0
iter: 66
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
     2
         1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01003365 -0.03002966]
bUpdate: 0.01
iter: 67
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
 [ 4
     4 -111
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01003164 -0.02002366]
bUpdate: 0.01
iter: 68
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02002964 -0.01001965]
bUpdate: 0.01
iter: 69
XY_tmp:
[[3 4 -1]
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01997437 0.02998235]
bUpdate: -0.01
iter: 70
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997037 0.03997635]
bUpdate: -0.01
iter: 71
XY_tmp:
[[3 4 -1]
 [ 2
     3 -11
 [ 2
     1 1]
   1
      2 1]
      3 1
  1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.56195288e-05 -3.16410936e-05]
bUpdate: 0.0
iter: 72
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
   1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01003561 -0.02003163]
bUpdate: 0.01
```

```
iter: 73
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [1 3 1]
 \begin{bmatrix} \dot{4} & \dot{4} & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.02003361 -0.01002763]
bUpdate: 0.01
iter: 74
XY_tmp:
[[3 \ 4 \ -1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199704 0.02997438]
bUpdate: -0.01
iter: 75
XY_tmp:
[[1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.35926417e-05 -3.16177881e-05]
bUpdate: 0.0
iter: 76
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003359 -0.03003161]
bUpdate: 0.01
iter: 77
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
  2
       1 1]
      2 1]
 [ 1
 [ 1
       3 1]
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.15792060e-05 -2.56051423e-05]
bUpdate: 0.0
iter: 78
XY_tmp:
```

```
[[ 3
[ 2
[ 1
       4 -1]
       1 1]
      2 1]
3 1]
4 -1]]
   1
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01996843 0.0299744 ]
bUpdate: -0.01
iter: 79
XY_tmp:
[ [ 3
      4 -11
 [ 2
      1 1]
2 1]
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003557 -0.03003159]
bUpdate: 0.01
iter: 80
XY_tmp:
[[ 3 4 -1]
[ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003356 -0.01002559]
bUpdate: 0.01
iter: 81
XY_tmp:
[[1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997045 0.03997642]
bUpdate: -0.01
iter: 82
XY_tmp:
[[4 \ 4 \ -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01003555 -0.02003158]
bUpdate: 0.01
iter: 83
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
    1
           11
```

```
[4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.35397304e-05 -2.75724321e-05]
bUpdate: 0.0
iter: 84
XY_tmp:
[[3 4 -1]
[2 3 -1]
     3 -1]
2 1]
3 1]
   1
 [ 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003353 -0.01002757]
bUpdate: 0.01
iter: 85
XY_tmp:
[[2 3
 [ 2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02997047 0.03997444]
bUpdate: -0.01
iter: 86
XY_tmp:
[[1 2
         1]
 [1 \ 3 \ \overline{1}]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.01996448 0.02996644]
bUpdate: -0.01
iter: 87
XY_tmp:
[[1 2 1]
 [1 \ 3 \ 1]]
vDatum: -1
yEst: True
wUpdate: [-3.95133065e-05 -3.95495807e-05]
bUpdate: 0.0
iter: 88
XY_tmp:
[[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003951 -0.03003954]
bUpdate: 0.01
```

```
iter: 89
XY_tmp:
[[ 3 4
[ 2 3
      4 -1]
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
       3
 [ 1
          1]
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.0100375 -0.02003353]
bUpdate: 0.01
iter: 90
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
      3 -1]
2 1]
3 1]
 [ 1
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003549 -0.01002953]
bUpdate: 0.01
iter: 91
XY_tmp:
[[2 3 -1]
 [ 1 2 1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02996852 0.03997248]
bUpdate: -0.01
iter: 92
XY_tmp:
[[2 3 -1]
[1 2 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003748 -0.03003552] bUpdate: 0.01
iter: 93
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-3.54691134e-05 -2.95085429e-05]
bUpdate: 0.0
```

```
iter: 94
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003546 -0.0200295 ]
bUpdate: 0.01
iter: 95
XY_tmp:
[ 2 [ 2
      4 -11
       3 -11
      1
         1]
 [ 1
      2 1
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01996655 0.0299745 ]
bUpdate: -0.01
iter: 96
XY_tmp:
[ [ 2
      ·3 -11
 [ 2
      1 1]
      2
 [ 1
         1]
      3
 [ 1
         11
     4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-3.74482362e-05 -3.14916413e-05]
bUpdate: 0.0
iter: 97
XY_tmp:
[[2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003744 -0.01003149]
bUpdate: 0.01
iter: 98
XY_tmp:
 [ 1 2 1]
[ 1 3 1]
[[1 \ 1 \ 2]
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996657 0.02997052]
bUpdate: -0.01
```

```
iter: 99
XY_tmp:
[[1 2 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003743 -0.03003547]
bUpdate: 0.01
iter:100
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-3.54190864e-05 -2.94660555e-05]
bUpdate: 0.0
iter:101
4 -1]
      3 -1]
 [ 2
      1 1]
   1
      2
        1]
      3
  1
        11
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01003541 -0.02002946]
bUpdate: 0.01
iter:102
XY_tmp:
[ 3
     4 -1]
     3 -1]
     1 11
 [ 1
      2 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0100334 -0.03002545]
bUpdate: 0.01
iter:103
XY_tmp:
[ 3
     4 -11
     3 -1]
  2
      1
         1]
 Ī 1
     2 111
yDatum: -1
yEst: False
wUpdate: [0.0399686 0.03998055]
bUpdate: -0.01
```

```
XY_tmp:
      3 -1]
[[ 2
       1 1]
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.02996061 0.03997255]
bUpdate: -0.01
iter:105
XY_tmp:
[[2 3 -1]
[2 1 1]]
vDatum: 1
yEst: False
wUpdate: [-0.01004538 -0.02003544]
bUpdate: 0.01
iter:106
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,\underline{[}\,\overline{2}\,\,1\,\,1]\,] \end{array}
yDatum: -1
yEst: False
wUpdate: [0.01995662 0.02996857]
bUpdate: -0.01
iter:107
XY_tmp:
4 -1]
      3 -1]
         1]
       1
 [ 1
       2 1]
   1
       3 1]
      4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02004737 -0.01003743]
bUpdate: 0.01
iter:108
XY_tmp:
[ 3
      4 -1]
       3 -1]
   2
       1 11
   1
       2
           1]
       3
 [ 1
          1]]
yDatum: -1
yEst: True
wUpdate: [-4.33568561e-05 -3.54189407e-05]
bUpdate: 0.0
iter:109
XY_tmp:
[[3 4 -1]
[2 3 -1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004335 -0.01003541] bUpdate: 0.01
iter:110
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003934 -0.0200334 ]
bUpdate: 0.01
iter:111
XY_tmp:
[[3 4 -1]
[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01996267 0.0299706 ] bUpdate: -0.01
iter:112
XY_tmp:
[[1 \ 3 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-4.13241808e-05 -3.53922140e-05]
bUpdate: 0.0
iter:113
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       3
   1
          1]
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004132 -0.03003539] bUpdate: 0.01
iter:114
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [ 2
       1 1]
 [ 1
       2
          1]
 Ī 1
       3
           111
yDatum: -1
```

```
yEst: True
wUpdate: [-3.93076528e-05 -2.93780585e-05]
bUpdate: 0.0
iter:115
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
     3 1]]
 [ 1
yDatum: 1
yEst: False
wUpdate: [-0.0100393 -0.02002937]
bUpdate: 0.01
iter:116
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003729 -0.01002537]
bUpdate: 0.01
iter:117
XY_tmp:
[[-3 \ 4 \ -1]
 [2 \ 3 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003328 -0.03002336]
bUpdate: 0.01
iter:118
XY_tmp:
[[2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02996872 0.03998264]
bUpdate: -0.01
iter:119
XY_tmp:
[ [ 3
      4 -11
 [ 2
      3 -1]
 [ 2
      1
          11
   1
       2
         11
       3
 [ 1
         11
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996273 0.02997465]
bUpdate: -0.01
```

```
iter:120
XY_tmp:
[ 3
     4 -11
      1 1]
 [ 1
     2 1]
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01995874 0.02996865]
bUpdate: -0.01
iter:121
XY_tmp:
[[_2
         11
     1
 [ 1
      2
        1]
      3 1]
 [ 1
 [4 4 - 1]]
yDatum: -1
yEst: True
wUpdate: [-4.52558533e-05 -3.73417514e-05]
bUpdate: 0.0
iter:122
XY_tmp:
[[1 2 1]
[1 3 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004525 -0.01003733]
bUpdate: 0.01
iter:123
XY_tmp:
[[1 3 1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004124 -0.02003533]
bUpdate: 0.01
iter:124
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003923 -0.03003132]
bUpdate: 0.01
iter:125
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
      1
      2
          1]
 [ 1
      \bar{3} \bar{1}
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-3.72216594e-05 -2.53134869e-05]
bUpdate: 0.0
iter:126
XY_tmp:
[ 3
      4 -1]
      1 1]
 Ī 1
       2
         11
      \bar{3} \bar{1}
   1
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01996279 0.02997469]
bUpdate: -0.01
iter:127
XY_tmp:
[[2 1
          11
 [ 1
      2
         1]
 [1 3 1]
 [44-1]
yDatum: -1
yEst: True
wUpdate: [-4.12067722e-05 -3.13033625e-05]
bUpdate: 0.0
iter:128
XY_tmp:
[[2 1 1]
 \begin{bmatrix} 1 & 2 & 1 \end{bmatrix}
 [44-1]
yDatum: 1
yEst: False
wUpdate: [-0.0100412 -0.0300313]
bUpdate: 0.01
iter:129
XY_tmp:
[[ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02003919 -0.01002529]
bUpdate: 0.01
iter:130
XY_tmp:
[[4 4 -1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01003518 -0.02002329]
bUpdate: 0.01
iter:131
4 -1]
     3 -1]
 [ 2
     1 11
   1
      2 1]
      \bar{3} \bar{1}
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.03996682 0.03998072]
bUpdate: -0.01
iter:132
XY_tmp:
[ 2
     3 -1]
      1
        1]
 [ 1
     2
        1]
      3 1]
 [ 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02995883 0.03997272]
bUpdate: -0.01
iter:133
XY_tmp:
[[_2
     3 -1]
 [ 2
     1 1]
      2 1]
 [ 1
      3
 [ 1
        1]]
yDatum: -1
yEst: True
wUpdate: [-4.71605477e-05 -3.52718154e-05]
bUpdate: 0.0
iter:134
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004715 -0.02003526]
bUpdate: 0.01
iter:135
XY_tmp:
[[<sup>-</sup>2 '3 -1]
[ 1 3 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02004514 -0.01003126]
bUpdate: 0.01
iter:136
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004113 -0.03002925]
bUpdate: 0.01
iter:137
XY_tmp:
[ [ 3
     4 -1]
 [ 2
      3 -1]
  2
      1 1]
   1
      2 1]
 [ 1
      3 1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996088 0.02997675]
bUpdate: -0.01
iter:138
XY_tmp:
[ 3
      4 -11
      1 1]
      2 1]
3 1]
 [ 1
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01995688 0.02997076]
bUpdate: -0.01
iter:139
XY_tmp:
[ 2
          1]
      1
      2
          1]
 [ 1
       3
         1]
 [44-1]]
vDatum: -1
yEst: True
wUpdate: [-4.71079823e-05 -3.52351090e-05]
bUpdate: 0.0
iter:140
XY_tmp:
[[2 1 1]
[1 2 1]
[1 3 1]]
vDatum: -1
yEst: True
```

```
wUpdate: [-4.70985607e-05 -3.52280619e-05]
bUpdate: 0.0
iter:141
XY_tmp:
[[\overline{2} \ 1' \ 1] \\ [1 \ 2 \ 1]]
yDatum: 1
vEst: False
wUpdate: [-0.01004709 -0.03003522]
bUpdate: 0.01
iter:142
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004508 -0.01002921]
bUpdate: 0.01
iter:143
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3
   1
         1]
 [ 4
       4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01004107 -0.02002721]
bUpdate: 0.01
iter:144
XY_tmp:
[[ 2 3 -1]
 [ 2
      1 1]
2 1]
 [ 1
       3 1
 [ 1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02996094 0.0399768 ]
bUpdate: -0.01
iter:145
XY_tmp:
 [ 2 3 -1]
[ 1 2 1]
[[_2
 [ 1
       3
         1]
 \begin{bmatrix} \dot{4} & \dot{4} & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.02004505 -0.0100312 ]
bUpdate: 0.01
```

```
iter:146
XY_tmp:
[[2 3 -1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004105 -0.03002919]
bUpdate: 0.01
iter:147
XY_tmp:
[[2 3 -1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01003904 -0.02002319]
bUpdate: 0.01
iter:148
XY_tmp:
[[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996297 0.02998082]
bUpdate: -0.01
iter:149
XY_tmp:
[ 2 [ 2
      4 -1]
      3 -1]
      1 11
  1
      2 1]
      3
 [ 1
        11
 [44-1]]
yDatum: -1
yEst: True
wUpdate: [-4.10222471e-05 -2.51774957e-05]
bUpdate: 0.0
iter:150
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 1
      2 1]
  1
      3 1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004101 -0.01002517]
bUpdate: 0.01
```

```
XY_tmp:
[[_3
      4 -1]
 [ 1 2 1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01996299 0.02997683]
bUpdate: -0.01
iter:152
XY_tmp:
[ [ 3
     4 -1]
 [ 1
[ 1
      2 1]
      3 1]]
yDatum: -1
yEst: True
wUpdate: [-4.09984387e-05 -2.91627922e-05]
bUpdate: 0.0
iter:153
XY_tmp:
[[\overline{1} \ 2] 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02995901 0.03997084]
bUpdate: -0.01
iter:154
XY_tmp:
[[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004698 -0.02003715]
bUpdate: 0.01
iter:155
XY_tmp:
4 -11
      3 -1]
     1 1]
 [ 1
      2 1]
      3
   1
         11
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01004497 -0.03003314]
bUpdate: 0.01
iter:156
XY_tmp:
[ 2 [ 1
     ·3 -1]
      1
          11
      2
          11
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02995704 0.03997286]
bUpdate: -0.01
iter:157
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004896 -0.01003513]
bUpdate: 0.01
iter:158
XY_tmp:
[[2 3 -1]
 [1 3 1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01004495 -0.02003312]
bUpdate: 0.01
iter:159
XY_tmp:
[[2 3 -1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-4.29362772e-05 -2.91179907e-05]
bUpdate: 0.0
iter:160
XY_tmp:
[[\overline{1} \ 3] \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01995707 0.02997089]
bUpdate: -0.01
iter:161
XY_tmp:
[ 3
      4 -1]
     3 -1
 [ 2
      1 1]
      2
   1
         11
 [ 1
      3
         1]
 [ 4
      4 -1]]
vDatum: 1
yEst: False
```

```
wUpdate: [-0.01004692 -0.03003511]
bUpdate: 0.01
iter:162
XY_tmp:
[ [ 3
     4 -11
      3 -1]
 [ 2
     1
        11
 [ 1
      2 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004491 -0.0300291 ]
bUpdate: 0.01
iter:163
XY_tmp:
[[3 4 -1]
 [ 2
     1 1]
 [ 1
      2 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199571 0.02997691]
bUpdate: -0.01
iter:164
XY_tmp:
[[3 \ 4 \ -1]
 [ 2 1 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004689 -0.02002909]
bUpdate: 0.01
iter:165
XY_tmp:
[[3 4 -1]
[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-4.48827801e-05 -2.50830670e-05]
bUpdate: 0.0
iter:166
XY_tmp:
[[3 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004487 -0.01002508]
bUpdate: 0.01
```

```
XY_tmp:
[ 3
       4 -1]
       3 -11
   2
       1
         11
   1
       2
          1]
   1
       3
         11
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02995914 0.03997693]
bUpdate: -0.01
iter:168
XY_tmp:
[[3 4
      4 -11
 [ 2
       3 -11
 [ 2
      1
         1]
   1
       2
          11
       3
         1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-4.68566558e-05 -3.10684202e-05]
bUpdate: 0.0
iter:169
XY_tmp:
4 -1]
      3 -1]
2 1]
 Ī 1
         1]
      \bar{3} \bar{1}
 Ī 1
yDatum: 1
yEst: False
wUpdate: [-0.02004685 -0.01003106]
bUpdate: 0.01
iter:170
XY_tmp:
[[2 3 -1]
[1 2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: False
wUpdate: [0.02995716 0.03997094]
bUpdate: -0.01
iter:171
XY_tmp:
[[2 3 -1]
[1 3 1]
         111
yDatum: 1
yEst: False
wUpdate: [-0.01004883 -0.02003705]
bUpdate: 0.01
```

```
XY_tmp:
[[1 \ 3 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01995318 0.02996696]
bUpdate: -0.01
iter:173
XY_tmp:
[ 3
      4 -1]
       3 -1]
       1 1]
 [ 1
       2 1]
       3
   1
          11
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01005081 -0.03003904] bUpdate: 0.01
iter:174
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
      3 -1
  2
       1 1]
 [ 1
      3 11
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0100488 -0.02003303]
bUpdate: 0.01
iter:175
XY_tmp:
[[3 4 -1]
 [2 1 1]
 [ 1
       3 1]
 \begin{bmatrix} \bar{4} & \bar{4} & -1 \end{bmatrix}
vDatum: -1
yEst: False
wUpdate: [0.01995321 0.02997098]
bUpdate: -0.01
iter:176
XY_tmp:
[[-3 4 -1]
 [2 1 1]
 \begin{bmatrix} \overline{4} & \overline{4} & -\overline{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01005078 -0.03003502]
bUpdate: 0.01
iter:177
XY_tmp:
```

```
[[ 3 4 -1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02004877 -0.01002901] bUpdate: 0.01
iter:178
XY_tmp:
[[3 \ 4 \ -1]]
yDatum: -1
yEst: True
wUpdate: [-4.47610272e-05 -2.70031420e-05]
bUpdate: 0.0
iter:179
XY_tmp:
[ 3
      4 -11
      3 -11
 [ 2
      1 1]
      2
   1
         1]
  1
      3
         1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02995525 0.039973 ]
bUpdate: -0.01
iter:180
XY_tmp:
[[ 3 4
[ 2 3
     4 -1]
      3 -1]
 [ 2
     1 1]
      2
   1
         1]
      3
 [ 1
         1]]
yDatum: -1
yEst: True
wUpdate: [-5.07431246e-05 -3.49923419e-05]
bUpdate: 0.0
iter:181
XY_tmp:
[[3 \ 4 \ -1]
   2
      1 1
      2
  1
         1]
     3 111
 [ 1
yDatum: -1
yEst: False
wUpdate: [0.01994927 0.02996501]
bUpdate: -0.01
iter:182
XY_tmp:
[[3 4 -1]
[ 1 2 1]
```

```
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005472 -0.01004098]
bUpdate: 0.01
iter:183
XY_tmp:
[[3 4 -1]
[ 1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005071 -0.03003897]
bUpdate: 0.01
iter:184
XY_tmp:
[[3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100487 -0.02003296]
bUpdate: 0.01
iter:185
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1
        11
 [ 1
      2 11
   1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02995331 0.03997104]
bUpdate: -0.01
iter:186
XY_tmp:
[[3 4 -1]
[2 1 1]
      2
  1
         1]
 [ 1
     3
        1]
 [4 4 - 1]]
vDatum: -1
yEst: False
wUpdate: [0.01994732 0.02996305]
bUpdate: -0.01
iter:187
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
      2
        1]
      3
 [ 1
        111
yDatum: -1
```

```
yEst: True
wUpdate: [-5.66721271e-05 -4.29425830e-05]
bUpdate: 0.0
iter:188
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005666 -0.02004293]
bUpdate: 0.01
iter:189
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-5.46494605e-05 -3.89254077e-05]
bUpdate: 0.0
iter:190
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: 1
vEst: False
wUpdate: [-0.01005464 -0.03003892]
bUpdate: 0.01
iter:191
XY_tmp:
[[3 4 -1]
 [ 2
      3 -1
 [ 2
      1 1]
   1
       2
          11
       3
   1
          11
 [ 4
       4 -111
yDatum: 1
yEst: False
wUpdate: [-0.02005263 -0.01003291]
bUpdate: 0.01
iter:192
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
   1
       3
          11
      4 -1]]
   4
yDatum: 1
yEst: False
wUpdate: [-0.01004862 -0.0200309 ]
bUpdate: 0.01
```

```
iter:193
XY_tmp:
[[ 2 3 -1]
[ 2 1 1]
 [1 3 1]
 \begin{bmatrix} \dot{4} & \dot{4} & -1 \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.02995339 0.0399731 ]
bUpdate: -0.01
iter:194
XY_tmp:
[[2 1 1]
 [1 3 1]
 \begin{bmatrix} \dot{4} & \dot{4} & -1 \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.0199474 0.02996511]
bUpdate: -0.01
iter:195
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-5.65875129e-05 -4.08847187e-05]
bUpdate: 0.0
iter:196
XY_tmp:
[[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005658 -0.01004088]
bUpdate: 0.01
iter:197
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
   2
       1 1]
 [ 1
       2 1]
 [ 1
       3 1]
      \overline{4} - \overline{1}]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01005256 -0.03003887]
bUpdate: 0.01
iter:198
XY_tmp:
```

```
[[ 3
[ 2
[ 1
      4 -1]
      3 -1]
      2 1]
3 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02005055 -0.01003286]
bUpdate: 0.01
iter:199
XY_tmp:
[ 3 [ 2
      4 -11
      3 -1]
 [ 1 3 1]
[ 4 4 -1]]
 [ 1
yDatum: 1
yEst: False
wUpdate: [-0.01004654 -0.02003085]
bUpdate: 0.01
iter:200
XY_tmp:
[[ 2 3 -1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02995547 0.03997315]
bUpdate: -0.01
iter:201
XY_tmp:
[[2 3 -1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-5.05260405e-05 -3.48424803e-05]
bUpdate: 0.0
iter:202
XY_tmp:
[[2 3 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01005052 -0.03003484]
bUpdate: 0.01
iter:203
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
       23
   1
           1]
   1
           11
```

```
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01995149 0.02997117]
bUpdate: -0.01
iter:204
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [ 4
      4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.0200525 -0.01003482]
bUpdate: 0.01
iter:205
XY_tmp:
[[2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02995151 0.03996718]
bUpdate: -0.01
iter:206
XY_tmp:
[[-2 3 -1]
 \begin{bmatrix} 1 & 2 & \overline{1} \end{bmatrix}
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005448 -0.03004081]
bUpdate: 0.01
iter:207
XY_tmp:
[[1 2 1]
[4 4 -1]]
vDatum: -1
yEst: False
wUpdate: [0.01994753 0.0299652 ]
bUpdate: -0.01
iter:208
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005645 -0.02004079]
bUpdate: 0.01
```

```
iter:209
4 -11
      3 -11
 [ 2
     1 1]
 [ 1
      2
        1]
      3 1]
 [ 1
     4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-5.44432555e-05 -3.67859704e-05]
bUpdate: 0.0
iter:210
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
 [ 1
      3 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005443 -0.02003678]
bUpdate: 0.01
iter:211
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005242 -0.03003277]
bUpdate: 0.01
iter:212
XY_tmp:
[[2 3 -1]
[2 1 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994959 0.03997324]
bUpdate: -0.01
iter:213
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-5.64009139e-05 -3.47593503e-05]
bUpdate: 0.0
```

```
iter:214
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005639 -0.01003475]
bUpdate: 0.01
iter:215
XY_tmp:
[ 3 [ 2
      4 -11
       3 -11
      1
         1]
 [ 1
      2 1
 [ 1
       3 1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01994762 0.02996725]
bUpdate: -0.01
iter:216
XY_tmp:
[ 3
      4 -1]
      3 -1]
      2 1]
 [ 1
       3
 [ 1
         1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005637 -0.01003874]
bUpdate: 0.01
iter:217
XY_tmp:
[[2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-5.23566065e-05 -3.67311511e-05]
bUpdate: 0.0
iter:218
XY_tmp:
[[2 \ 3 \ -1]
 \begin{bmatrix} \bar{1} & \bar{3} & 1 \end{bmatrix}
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005235 -0.02003672]
bUpdate: 0.01
```

```
iter:219
XY_tmp:
[[ 2 3 -1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-5.03356660e-05 -3.27164601e-05]
bUpdate: 0.0
iter:220
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005033 -0.03003271]
bUpdate: 0.01
iter:221
XY_tmp:
[[ 3      4
[ 2      3
      4 -11
       3 -1]
 [ 2
      1 1]
   1
       2
         1]
       3
   1
         1]
 [ 4
      4 -111
yDatum: -1
yEst: False
wUpdate: [0.01995168 0.0299733 ]
bUpdate: -0.01
iter:222
XY_tmp:
[[ 2 3
       3 -11
 [ 2
       1
         1]
 [ 1
       2
         11
 [ 1
       3
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-5.23058706e-05 -3.26980341e-05]
bUpdate: 0.0
iter:223
XY_tmp:
[ [ 2
      3 -11
 [ 2
      1 1]
 [ 1
       3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100523 -0.02003269]
bUpdate: 0.01
```

```
XY_tmp:
     3 -1]
[[ 2
      1 1]
 Ī 1
     3 1]]
yDatum: -1
yEst: True
wUpdate: [-5.02849503e-05 -2.86849562e-05]
bUpdate: 0.0
iter:225
XY_tmp:
[[ 2 3 -1]
[ 1 3 1]]
vDatum: 1
yEst: False
wUpdate: [-0.02005027 -0.01002868]
bUpdate: 0.01
iter:226
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004626 -0.03002667]
bUpdate: 0.01
iter:227
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
      2 1]
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01995574 0.02997933]
bUpdate: -0.01
iter:228
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
   2
      1 1]
      \overline{2} \overline{1}
   1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01004825 -0.03002666]
bUpdate: 0.01
iter:229
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
[ 2 1 1]
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.03995376 0.03997934]
bUpdate: -0.01
iter:230
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.02994577 0.03997135]
bUpdate: -0.01
iter:231
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006022 -0.01003665]
bUpdate: 0.01
iter:232
XY_tmp:
[[\bar{1} \ 2 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.0199438 0.02996536]
bUpdate: -0.01
iter:233
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       3
   1
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006019 -0.02004063] bUpdate: 0.01
iter:234
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
      3 -1]
2 1]
3 1]
 [ 1
 [ 1
      4 -111
 [ 4
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02005818 -0.01003663]
bUpdate: 0.01
iter:235
XY_tmp:
[[2 3 -1]
[1 2 1]
      3 1
 [ 1
 [44-1]]
yDatum: -1
yEst: True
wUpdate: [-5.41700325e-05 -3.46191093e-05]
bUpdate: 0.0
iter:236
XY_tmp:
[[2 3 -1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005416 -0.03003461]
bUpdate: 0.01
iter:237
XY_tmp:
[[1 2 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.01994785 0.02997139]
bUpdate: -0.01
iter:238
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-5.6137937e-05 -3.4599542e-05]
bUpdate: 0.0
iter:239
XY_tmp:
[ [ 3
     4 -11
 [ 2
     3 -1]
 [ 2
      1
         11
  1
      2
         11
      3
 [ 1
         11
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005613 -0.02003459]
bUpdate: 0.01
```

```
iter:240
XY_tmp:
[ 2
       3 -1]
       1
         1]
 [ 1
      2 1
 [ 1
       3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02994588 0.03996941]
bUpdate: -0.01
iter:241
XY_tmp:
     3 -1]
[[_2
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
 [ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100601 -0.02003858]
bUpdate: 0.01
iter:242
XY_tmp:
[[2 1 1]
[1 3 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01994191 0.02996543]
bUpdate: -0.01
iter:243
XY_tmp:
[[\overline{2} \ 1]]
 [1 \ 3 \ 1]
yDatum: -1
yEst: True
wUpdate: [-6.20810215e-05 -4.05649562e-05]
bUpdate: 0.0
iter:244
XY_tmp:
[[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006207 -0.01004056]
bUpdate: 0.01
iter:245
XY_tmp:
[ 3 4 -1]
[ 2 3 -1]
```

```
2
1
         1]
      1
      2
         1]
 [ 1
      \bar{3} \bar{1}
     4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01005806 -0.03003855]
bUpdate: 0.01
iter:246
XY_tmp:
[ 3
     4 -1]
      3 -1]
 Ī 2
      1 11
  1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01005604 -0.02003254]
bUpdate: 0.01
iter:247
XY_tmp:
[[2 3 -1]
 [ 2
      1 1]
 [1 3 1]
 [44-1]
yDatum: -1
yEst: False
wUpdate: [0.02994597 0.03997147]
bUpdate: -0.01
iter:248
XY_tmp:
        1]
 [1 3 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993998 0.02996347]
bUpdate: -0.01
iter:249
XY_tmp:
[[1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006401 -0.01004252]
bUpdate: 0.01
iter:250
XY_tmp:
[[\overline{1} \ 3' \ 1]]
yDatum: -1
```

```
yEst: True
wUpdate: [-5.99977581e-05 -4.05129969e-05]
bUpdate: 0.0
iter:251
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 11
 [ 1
      2 1]
      \bar{3} \bar{1}
   1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005999 -0.0300405 ]
bUpdate: 0.01
iter:252
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
[ 2 1 1]
 [ 1
      3 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005797 -0.0200345 ]
bUpdate: 0.01
iter:253
XY_tmp:
[[ 2 3 -1]
     1 1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994404 0.03996951]
bUpdate: -0.01
iter:254
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006195 -0.03003848]
bUpdate: 0.01
iter:255
XY_tmp:
[ 2 3 -1]
[ 2 1 1]]
yDatum: -1
```

```
yEst: True
wUpdate: [-5.99385840e-05 -3.24760992e-05]
bUpdate: 0.0
iter:256
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005993 -0.01003247]
bUpdate: 0.01
iter:257
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1]
 [ 2
      1 1]
 [ 1
      2 1]
 [ 1
      3 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01994409 0.02996954]
bUpdate: -0.01
iter:258
XY_tmp:
     3 -1]
 [ 2
     1 1]
 [ 1
      2 1]
      \bar{3} \bar{1}
  1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-5.99034281e-05 -3.64570174e-05]
bUpdate: 0.0
iter:259
XY_tmp:
[ 2
      3 -1]
      1
        1]
 [ 1
      2
         1]
 [ 1
      3
         1]]
vDatum: -1
yEst: True
wUpdate: [-5.98914474e-05 -3.64497260e-05]
bUpdate: 0.0
iter:260
XY_tmp:
[[2 3 -1]
 [ 2
     1 1]
 [1 3 1]]
yDatum: 1
yEst: False
```

```
wUpdate: [-0.01005988 -0.02003644]
bUpdate: 0.01
iter:261
XY_tmp:
[ 2 3 -1]
[ 1 3 1]]
yDatum: 1
vEst: False
wUpdate: [-0.02005787 -0.01003244]
bUpdate: 0.01
iter:262
XY_tmp:
[[2 \ 3 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005386 -0.03003043]
bUpdate: 0.01
iter:263
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
      2 1]
      3 1]
   1
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01994815 0.02997558]
bUpdate: -0.01
iter:264
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
 [ 1
      2 1
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005583 -0.03003042]
bUpdate: 0.01
iter:265
XY_tmp:
[[3 \ 4 \ -1]
 [2 \ 3 \ -1]
 [ 2
     1 1]
 \begin{bmatrix} 4 & 4 & \overline{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01005382 -0.02002441]
bUpdate: 0.01
```

```
iter:266
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.03994819 0.03997959]
bUpdate: -0.01
iter:267
XY_tmp:
[[3 4 -1]
[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0200598 -0.0100284]
bUpdate: 0.01
iter:268
XY_tmp:
[[ 2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994421 0.0399736 ]
bUpdate: -0.01
iter:269
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
      1 11
  1
      2 1]
      3 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993822 0.02996561]
bUpdate: -0.01
iter:270
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
  1
      2
         1]
      3 111
 [ 1
yDatum: -1
yEst: True
wUpdate: [-6.57670108e-05 -4.03848049e-05]
bUpdate: 0.0
```

```
XY_tmp:
[ [ 3
      4 -1]
 [ 2
      3 -1]
 [ 2 1 1]
[ 1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006575 -0.03004038]
bUpdate: 0.01
iter:272
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006374 -0.01003437]
bUpdate: 0.01
iter:273
XY_tmp:
[[ 3 4 -1]
 [ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005973 -0.02003236]
bUpdate: 0.01
iter:274
XY_tmp:
[[ 2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994228 0.03997164]
bUpdate: -0.01
iter:275
XY_tmp:
4 -11
      3 -1]
     1 1]
 [ 1
      2 1]
      3 1
   1
     [4 - 1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.0199363 0.02996365]
bUpdate: -0.01
iter:276
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
```

```
[ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006769 -0.03004234]
bUpdate: 0.01
iter:277
XY_tmp:
[[3 4 -1]
[2 3 -1]
     1 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006568 -0.02003633]
bUpdate: 0.01
iter:278
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [4 4 - 1]]
vDatum: 1
yEst: False
wUpdate: [-0.02006367 -0.01003233]
bUpdate: 0.01
iter:279
XY_tmp:
[[2 3 -1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994035 0.03996968]
bUpdate: -0.01
iter:280
XY_tmp:
[[2 3 -1]]
yDatum: -1
yEst: True
wUpdate: [-6.56403913e-05 -3.83141009e-05]
bUpdate: 0.0
iter:281
XY_tmp:
[[_3
      4 -11
 \begin{bmatrix} 2 & 3 & -1 \end{bmatrix}
 [ 2
      1 1]
      2 1]
   1
 [ 1
      3 1]
 [ 4
      4 -1]]
vDatum: -1
yEst: False
```

```
wUpdate: [0.01993437 0.02996169]
bUpdate: -0.01
iter:282
XY_tmp:
[ 3
      4 -11
      3 -1]
2 1]
 [ 1
         11
       3 1
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006961 -0.0100443 ]
bUpdate: 0.01
iter:283
XY_tmp:
[[3 4 -1]
 [ 1 2 1]
[ 1 3 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.0199344 0.02995771]
bUpdate: -0.01
iter:284
XY_tmp:
[[3 \ 4 \ -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006959 -0.03004828]
bUpdate: 0.01
iter:285
XY_tmp:
\begin{bmatrix} -1 & 2 & 1 \end{bmatrix}
 [4 \ 4 \ -1]]
yDatum: -1
yEst: True
wUpdate: [-6.75731775e-05 -4.22718027e-05]
bUpdate: 0.0
iter:286
XY_tmp:
[[\overline{1} \ 2] \ 1]]
yDatum: -1
yEst: True
wUpdate: [-6.75596628e-05 -4.22633484e-05]
bUpdate: 0.0
```

```
XY_tmp:
[ 3
       4 -1]
      3 -11
   2
       1
         11
   1
       2
          1]
   1
       3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006755 -0.02004225]
bUpdate: 0.01
iter:288
XY_tmp:
[[3 4
      4 -11
 [ 2
       3 -11
 [ 1
      2
         1]
   1
       3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006553 -0.01003825]
bUpdate: 0.01
iter:289
XY_tmp:
[[ 2
      3 -1]
 [ 1
       2
         1]
  1
       3
         11
 <sup>[</sup>4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-6.15195351e-05 -3.62387954e-05]
bUpdate: 0.0
iter:290
XY_tmp:
[[2 3 -1]
[1 2 1]
     3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-6.15072312e-05 -3.62315477e-05]
bUpdate: 0.0
iter:291
XY_tmp:
[[ 2 3 -1]
[ 1 2 1]
        111
yDatum: 1
yEst: False
wUpdate: [-0.01006149 -0.03003622]
bUpdate: 0.01
```

```
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005948 -0.02003022] bUpdate: 0.01
iter:293
XY_tmp:
[ 3 4 -1]
[ 2 3 -1]
      1 1]
 [ 1
      2 1]
      3 1
   1
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01994253 0.02997379]
bUpdate: -0.01
iter:294
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1
 [ 2
      1 1]
 [ 1
      2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006146 -0.03003221]
bUpdate: 0.01
iter:295
XY_tmp:
[[3 4 -1]
 [2 \ 3 \ -\overline{1}]
 [ 2
     1 1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-5.94469483e-05 -2.61993297e-05]
bUpdate: 0.0
iter:296
XY_tmp:
[[-3 4 -1]
 [23-1]
 [2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01005944 -0.02002619]
bUpdate: 0.01
iter:297
XY_tmp:
```

```
[[ 3 4 -1]
[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02005742 -0.01002219] bUpdate: 0.01
iter:298
XY_tmp:
[[3 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01994659 0.02997982]
bUpdate: -0.01
iter:299
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
      2
   1
          11
  1
       3
         1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0299426 0.03997382]
bUpdate: -0.01
iter:300
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
     2 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006339 -0.03003418]
bUpdate: 0.01
iter:301
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 1 2 1]
[ 4 4 -1]]
 [ 2
yDatum: -1
yEst: False
wUpdate: [0.02993862 0.03997183]
bUpdate: -0.01
iter:302
XY_tmp:
[[2 3 -1]
[ 1 2 1]
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006736 -0.01003616]
bUpdate: 0.01
iter:303
XY_tmp:
[[ 2 3 -1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-6.33510985e-05 -3.41554391e-05]
bUpdate: 0.0
iter:304
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01993666 0.02996585]
bUpdate: -0.01
iter:305
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
      1
        11
 [ 1
      2 11
        1]
   1
      3
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006733 -0.02004014]
bUpdate: 0.01
iter:306
XY_tmp:
[[3 4 -1]
[2 3 -1]
  2
      1
        1]
 [ 1
      3
        1]
 [44-1]]
vDatum: 1
yEst: False
wUpdate: [-0.01006531 -0.02003613]
bUpdate: 0.01
iter:307
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
     3 1]
     4 -1]]
 [ 4
yDatum: -1
```

```
yEst: False
wUpdate: [0.0199367 0.02996787]
bUpdate: -0.01
iter:308
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006729 -0.03003812]
bUpdate: 0.01
iter:309
XY_tmp:
[[3 4 -1]
[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-6.52731158e-05 -3.21124739e-05]
bUpdate: 0.0
iter:310
XY_tmp:
[[3 4 -1]]
yDatum: 1
vEst: False
wUpdate: [-0.02006526 -0.01003211]
bUpdate: 0.01
iter:311
XY_tmp:
[[3 4 -1]
      3 -11
 [ 2
      1 1]
   1
       2 1]
      3 1
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02993875 0.0399699 ]
bUpdate: -0.01
iter:312
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
 [ 1
       2
         11
     \frac{1}{4} - \overline{1}]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006723 -0.03003809]
bUpdate: 0.01
```

```
iter:313
XY_tmp:
[[ 2 3 -1]
[ 2 1 1]
 [1 2 1]
 [4 \ 4 \ -1]]
yDatum: -1
yEst: True
wUpdate: [-6.52213129e-05 -3.20859915e-05]
bUpdate: 0.0
iter:314
XY_tmp:
[[ 2 3 -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006521 -0.01003208]
bUpdate: 0.01
iter:315
XY_tmp:
[[ 2 3 -1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-6.11952269e-05 -3.00731584e-05]
bUpdate: 0.0
iter:316
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01993882 0.02996993]
bUpdate: -0.01
iter:317
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
 [ 2
       1 1]
       2 1]
 [ 1
 [ 1
       3 1]
      \overline{4} - \overline{1}]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006517 -0.02003606]
bUpdate: 0.01
iter:318
XY_tmp:
```

```
[ [ 3 [ 2 [ 1
       4 -1]
       3 -1]
      2 1]
3 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02006316 -0.01003205]
bUpdate: 0.01
iter:319
XY_tmp:
[ [ 3
      4 -11
 [ 2
      3 -1]
 [ 1 3 1]
[ 4 4 -1]]
 [ 1
yDatum: 1
yEst: False
wUpdate: [-0.01005915 -0.02003005]
bUpdate: 0.01
iter:320
XY_tmp:
[[ 2 3 -1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994287 0.03997396]
bUpdate: -0.01
iter:321
XY_tmp:
[[1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993688 0.02996596]
bUpdate: -0.01
iter:322
XY_tmp:
[[1 \ 3 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-6.71092056e-05 -4.00294823e-05]
bUpdate: 0.0
iter:323
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
   1
           11
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100671 -0.03004002]
bUpdate: 0.01
iter:324
XY_tmp:
[[3 4 -1]
[2 3 -1]
  2
      1 1]
 [ 1
     3 1]
 [ 4
     4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01006508 -0.02003401]
bUpdate: 0.01
iter:325
XY_tmp:
[[3 4 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
 [ 1
      3 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993693 0.02996999]
bUpdate: -0.01
iter:326
XY_tmp:
[ 3 4 -1]
[ 2 1 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006706 -0.030036 ]
bUpdate: 0.01
iter:327
XY_tmp:
[[2 1 1]
 [4 4 -1]]
vDatum: -1
yEst: False
wUpdate: [0.02993496 0.03997001]
bUpdate: -0.01
iter:328
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007103 -0.01003799]
bUpdate: 0.01
```

```
iter:329
XY_tmp:
[[ 3      4
[ 2      3
      4 -11
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
       3
 [ 1
         1]
      4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-6.70161082e-05 -3.59798717e-05]
bUpdate: 0.0
iter:330
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       \bar{3} \bar{1}
 [ 1
yDatum: -1
yEst: True
wUpdate: [-6.70027049e-05 -3.59726758e-05]
bUpdate: 0.0
iter:331
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 1 2 11
 [ 1
     3 1]]
yDatum: -1
yEst: True
wUpdate: [-6.69893044e-05 -3.59654812e-05]
bUpdate: 0.0
iter:332
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
 [ 1 2
         1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006698 -0.03003596]
bUpdate: 0.01
iter:333
XY_tmp:
[[2 1 1]
[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01993504 0.02997005]
bUpdate: -0.01
```

```
iter:334
XY_{tmp}: [[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006895 -0.01003595]
bUpdate: 0.01
iter:335
XY_tmp:
[ 3 [ 2
      4 -11
      3 -11
      1
         1]
 [ 1
      2 1
 [ 1
      3
         1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006494 -0.02003394]
bUpdate: 0.01
iter:336
XY_tmp:
[ 3
      4 -11
     1 1]
 [ 1
      2
         1]
      3
 [ 1
         11
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01993708 0.02997007]
bUpdate: -0.01
iter:337
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [1 3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006691 -0.02003593]
bUpdate: 0.01
iter:338
XY_tmp:
[[-3 4 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-6.48967752e-05 -3.19179584e-05]
bUpdate: 0.0
```

```
iter:339
XY_tmp:
[[ 3 4 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006488 -0.01003191]
bUpdate: 0.01
iter:340
XY_tmp:
[[\overline{1} \ 3 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02993913 0.03997009]
bUpdate: -0.01
iter:341
4 -1]
      3 -1]
 [ 2
     1 1]
   1
      2
        1]
      3
  1
         11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006686 -0.0300379 ]
bUpdate: 0.01
iter:342
XY_tmp:
[ 3
     4 -1]
     3 -1]
 [ 2
     1 11
 [ 1
      2 1]
     4 -1]]
 [ 4
vDatum: 1
yEst: False
wUpdate: [-0.01006485 -0.03003189]
bUpdate: 0.01
iter:343
XY_tmp:
[[-3 4 -1]
 [2 \ 3 \ -1]
 [ 2
      1
         1]
 Ī 1
     2 111
yDatum: -1
yEst: True
wUpdate: [-6.28323042e-05 -2.58852533e-05]
bUpdate: 0.0
```

```
XY_tmp:
[[_3
     4 -1]
      3 -1]
     1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006282 -0.02002588]
bUpdate: 0.01
iter:345
XY_tmp:
[[3 4 -1]
[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006081 -0.01002187]
bUpdate: 0.01
iter:346
XY_tmp:
[[3 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199432 0.02998013] bUpdate: -0.01
iter:347
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
      2 1]
 [ 1
       3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02993922 0.03997413]
bUpdate: -0.01
iter:348
XY_tmp:
[[_3
     4 -1]
 [ 2 3 -1]
      2 1]
3 1]
 [ 1
   1
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.02006677 -0.01003386]
bUpdate: 0.01
iter:349
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-6.27581423e-05 -3.18546055e-05]
bUpdate: 0.0
iter:350
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006275 -0.03003185]
bUpdate: 0.01
iter:351
XY_tmp:
[[3 4 -1]
[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01993927 0.02997416] bUpdate: -0.01
iter:352
XY_tmp:
[[ 3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006472 -0.02003184]
bUpdate: 0.01
iter:353
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       \bar{3} \bar{1}
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02993729 0.03997217]
bUpdate: -0.01
iter:354
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       3 1]
      4 -111
 [ 4
yDatum: 1
```

```
yEst: False
wUpdate: [-0.0100687 -0.02003582]
bUpdate: 0.01
iter:355
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 i 1 3 1i
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006668 -0.01003182]
bUpdate: 0.01
iter:356
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006267 -0.03002981]
bUpdate: 0.01
iter:357
XY_tmp:
[[-2 3 -1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02993934 0.03997619]
bUpdate: -0.01
iter:358
XY_tmp:
[[2 3 -1]]
yDatum: -1
yEst: True
wUpdate: [-6.66436689e-05 -3.18005114e-05]
bUpdate: 0.0
iter:359
XY_tmp:
[ [ 3
     4 -11
 [ 2
     3 -1]
 [ 2
      1
         11
  1
      2
         11
      3
 [ 1
        11
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993337 0.02996821]
bUpdate: -0.01
```

```
iter:360
XY_tmp:
[ 3
     · 4 -1]
      3 -1
 [ 2
     1 1]
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01007062 -0.02003779]
bUpdate: 0.01
iter:361
XY_tmp:
[[3 \ 4 \ -1]
 [2 3 - 1]
   2
      1 1]
 [ 1
     3 1]]
yDatum: -1
yEst: True
wUpdate: [-6.86028907e-05 -3.37802349e-05]
bUpdate: 0.0
iter:362
XY_tmp:
[[3 4 -1]
[2 1 1]
 [ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01993141 0.02996623]
bUpdate: -0.01
iter:363
XY_tmp:
[[\overline{2} \ 1]]
 [1 \ 3 \ 1]
yDatum: -1
yEst: True
wUpdate: [-7.25754523e-05 -3.97667242e-05]
bUpdate: 0.0
iter:364
XY_tmp:
[[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007256 -0.03003976]
bUpdate: 0.01
iter:365
XY_tmp:
[ 3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
      1
      2
         1]
      \bar{3} \bar{1}
 [ 1
     4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02007055 -0.01003375]
bUpdate: 0.01
iter:366
XY_tmp:
[ 3
     4 -1]
     3 -1]
 [ 2
      1 11
     2 1
   1
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01006653 -0.03003174]
bUpdate: 0.01
iter:367
XY_tmp:
[[3 4 -1]
[2 3 -1]
      3 -1]
     1 1]
 [44-1]
yDatum: 1
yEst: False
wUpdate: [-0.01006452 -0.02002574]
bUpdate: 0.01
iter:368
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006251 -0.01002173]
bUpdate: 0.01
iter:369
XY_tmp:
[[ 2 3 -1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02994151 0.03998027]
bUpdate: -0.01
iter:370
XY_tmp:
[[2 3 -1]]
yDatum: -1
```

```
yEst: True
wUpdate: [-6.44819055e-05 -2.77242804e-05]
bUpdate: 0.0
iter:371
XY_tmp:
[[ 3 4
[ 2 3
      4 -1]
      3 -1]
 [ 2
      1 11
   1
       2 1]
       \bar{3} \bar{1}
   1
 [ 4
       4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993553 0.02997228]
bUpdate: -0.01
iter:372
XY_tmp:
[ 2
      3 -1]
       1
         1]
 [ 1
      2
         1]
       3 1]
 [ 1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02993154 0.03996629]
bUpdate: -0.01
iter:373
XY_tmp:
[[2 3 -1]
      1 1]
       3 1
 [ 1
 \begin{bmatrix} \overline{4} & \overline{4} & -\overline{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01007444 -0.02004171]
bUpdate: 0.01
iter:374
XY_tmp:
[[2 1 1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992757 0.0299623 ]
bUpdate: -0.01
iter:375
XY_tmp:
[[<sup>2</sup> 1 1]
[ 4 4 -1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01007641 -0.03004369]
bUpdate: 0.01
iter:376
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: -1
yEst: True
wUpdate: [-7.43977675e-05 -3.76818301e-05]
bUpdate: 0.0
iter:377
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
      3 -1]
 [ 2
       1 1]
 [ 1
       2 1]
 [ 1
       3 1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007438 -0.01003767]
bUpdate: 0.01
iter:378
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
   1
       3 1]
       4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01007037 -0.02003567]
bUpdate: 0.01
iter:379
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01006835 -0.03003166]
bUpdate: 0.01
iter:380
XY_tmp:
[[ 2 3 -1]
 [ 2
      1 1]
 [4 4 -1]]
vDatum: -1
yEst: False
```

```
wUpdate: [0.02993366 0.03997435]
bUpdate: -0.01
iter:381
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-7.23269989e-05 -3.36481630e-05]
bUpdate: 0.0
iter:382
XY_tmp:
[[\overline{2} \ 1 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01992769 0.02996636]
bUpdate: -0.01
iter:383
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3 1]
   1
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0200763 -0.01003963]
bUpdate: 0.01
iter:384
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       3 1
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007228 -0.02003763]
bUpdate: 0.01
iter:385
XY_tmp:
[[2 \ 3 \ -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
 [ 1
       3 1]
 \begin{bmatrix} \dot{4} & 4 & -1 \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.02992973 0.03996638]
bUpdate: -0.01
```

```
iter:386
XY_tmp:
[[2 1
         1]
 [1 3 1]
 [44-1]
yDatum: -1
yEst: False
wUpdate: [0.01992375 0.02995839]
bUpdate: -0.01
iter:387
XY_tmp:
[[1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008024 -0.0100476 ]
bUpdate: 0.01
iter:388
XY_tmp:
[[\bar{1} \ 3] \ 1]]
yDatum: -1
yEst: True
wUpdate: [-7.62230025e-05 -4.55946856e-05]
bUpdate: 0.0
iter:389
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
      1 11
  1
      2
        1]
      3
 [ 1
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007621 -0.03004559]
bUpdate: 0.01
iter:390
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
   1
      2
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007419 -0.03003958]
bUpdate: 0.01
```

```
XY_tmp:
[ [ 3
      4 -1]
 [ 2
     1 1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992782 0.02996643]
bUpdate: -0.01
iter:392
XY_tmp:
[ 3 [ 2
     4 -1]
     1 1
 [1 \overline{2} \overline{1}]
yDatum: -1
yEst: True
wUpdate: [-7.61632423e-05 -3.95618205e-05]
bUpdate: 0.0
iter:393
XY_tmp:
[[3 \ 4 \ -1]]
[ 1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007615 -0.01003955]
bUpdate: 0.01
iter:394
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-7.21327801e-05 -3.75459974e-05]
bUpdate: 0.0
iter:395
XY_tmp:
4 -11
      3 -1]
     1 1]
 [ 1
      2 1]
      3
   1
         11
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01007212 -0.02003754]
bUpdate: 0.01
iter:396
XY_tmp:
4 -1]
      3 -1]
2 1]
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0200701 -0.01003353]
bUpdate: 0.01
iter:397
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [ 2 3 -1]
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-6.60899091e-05 -3.15242743e-05]
bUpdate: 0.0
iter:398
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [1 2 1]
yDatum: 1
yEst: False
wUpdate: [-0.01006608 -0.03003152]
bUpdate: 0.01
iter:399
XY_tmp:
[[3 4 -1]
[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006406 -0.02002551]
bUpdate: 0.01
iter:400
XY_tmp:
[[2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02993795 0.03997849]
bUpdate: -0.01
iter:401
XY_tmp:
[[_3
      4 -1]
 \begin{bmatrix} 2 & 3 & -1 \end{bmatrix}
 [ 2
      1 1]
       2 1]
   1
 [ 1
      3
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: False
```

```
wUpdate: [0.01993196 0.0299705 ]
bUpdate: -0.01
iter:402
XY_tmp:
[ 3
      4 -11
      1
          11
 [ 1
      2
          11
 [ 1
      3
         11
     4 -111
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01992798 0.0299645 ]
bUpdate: -0.01
iter:403
XY_tmp:
[[3 4 -1]
 [ 2
      1 1]
 [ 1
      3 1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007601 -0.02004149]
bUpdate: 0.01
iter:404
XY_tmp:
         11
[[ 2 1
 [ 1
      3 1]
 \begin{bmatrix} \bar{4} & \bar{4} & -\bar{1} \end{bmatrix}
yDatum: -1
yEst: True
wUpdate: [-7.39950383e-05 -3.74809646e-05]
bUpdate: 0.0
iter:405
XY_tmp:
[[1 3 1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007398 -0.01003747]
bUpdate: 0.01
iter:406
XY_tmp:
[[\overline{1} \ 3] \ 1]]
yDatum: -1
yEst: True
wUpdate: [-6.99654432e-05 -3.54659737e-05]
bUpdate: 0.0
```

```
XY_tmp:
[ 3
       4 -1]
       3 -1]
   2
       1
         11
   1
       2
          1]
   1
       3
         1]
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006995 -0.03003546]
bUpdate: 0.01
iter:408
XY_tmp:
[[3 4
       4 -11
 [ 2
       3 -11
 [ 2
       1 1]
   1
       2
          11
       3
 [ 1
         111
yDatum: -1
yEst: True
wUpdate: [-6.79374599e-05 -2.94517887e-05]
bUpdate: 0.0
iter:409
XY_tmp:
[[ 3 4
[ 2 3
      4 -1]
      3 -1]
2 1]
 [ 1
         1]
      \bar{3} \bar{1}
 Ī 1
yDatum: 1
yEst: False
wUpdate: [-0.02006792 -0.01002945]
bUpdate: 0.01
iter:410
XY_tmp:
[[2 3 -1]
[1 2 1]
 [1 3 1]
yDatum: -1
yEst: False
wUpdate: [0.02993609 0.03997256]
bUpdate: -0.01
iter:411
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100699 -0.03003543]
bUpdate: 0.01
```

```
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006788 -0.02002943] bUpdate: 0.01
iter:413
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 1]
 [ 1
       2 1]
       3 1
   1
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01993413 0.02997458] bUpdate: -0.01
iter:414
XY_tmp:
[[3 \ 4 \ -1]
 رِ 2
      3 -1
      2 1]
3 1]
 [ 1
 [ 1
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02006986 -0.01003142]
bUpdate: 0.01
iter:415
XY_tmp:
[[3 4 -1]
 [ 1 2 1]
[ 1 3 1]
 [4 \ 4 \ -1]]
vDatum: -1
yEst: False
wUpdate: [0.01993416 0.02997059]
bUpdate: -0.01
iter:416
XY_tmp:
[[-3 4 -1]
 \begin{bmatrix} 1 & 2 & \overline{1} \end{bmatrix}
 [ \dot{4} \ \dot{4} \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006983 -0.0300354 ]
bUpdate: 0.01
iter:417
```

XY\_tmp:

```
[[ 3 4 -1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01006782 -0.0200294 ] bUpdate: 0.01
iter:418
XY_tmp:
[[3 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.0399342 0.03997461]
bUpdate: -0.01
iter:419
XY_tmp:
[ 3
      4 -11
      3 -11
 [ 2
      1 1]
      2
   1
         1]
  1
      3
         1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992621 0.03996661]
bUpdate: -0.01
iter:420
XY_tmp:
[[2 3
     3 -1]
      1 1]
      2 1]
3 1]
 [ 1
   1
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-7.97741882e-05 -4.13795834e-05]
bUpdate: 0.0
iter:421
XY_tmp:
[[2 3 -1]
     1 1]
3 1]
 [ 2
 [ 1
 [ 4
     4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01007976 -0.02004137]
bUpdate: 0.01
iter:422
XY_tmp:
[ 2 3 -1]
[ 2 1 1]
```

```
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-7.77422817e-05 -3.73630332e-05]
bUpdate: 0.0
iter:423
XY_tmp:
[[ 2 3 -1]
 [2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007773 -0.03003736]
bUpdate: 0.01
iter:424
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007571 -0.01003135]
bUpdate: 0.01
iter:425
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1
        11
 [ 1
      2 11
   1
      3 1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199283 0.02997066]
bUpdate: -0.01
iter:426
XY_tmp:
[[3 4 -1]
[2 1 1]
  1
      2
         1]
 [ 1
     3
        1]
 [4 4 - 1]]
vDatum: -1
yEst: False
wUpdate: [0.01992432 0.02996466]
bUpdate: -0.01
iter:427
XY_tmp:
[[3 4 -1]
 [ 1
     2 1]
3 1]
 [ 1
     4 -111
 [ 4
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02007967 -0.01004133]
bUpdate: 0.01
iter:428
XY_tmp:
[[ 3 4 -1]
[ 1 2 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007565 -0.03003932]
bUpdate: 0.01
iter:429
XY_tmp:
[[3 4 -1]
 [ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-7.36355066e-05 -3.33127544e-05]
bUpdate: 0.0
iter:430
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02992638 0.03996669]
bUpdate: -0.01
iter:431
XY_tmp:
[[3 4 -1]
 [ 2
      3 -11
 [ 2
      1 1]
   1
      2
         11
      3
   1
         11
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01007961 -0.0200413 ]
bUpdate: 0.01
iter:432
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
     3 -1]
2 1]
 [ 1
   1
       3
         11
     4 -1]]
  4
yDatum: 1
yEst: False
wUpdate: [-0.02007759 -0.01003729]
bUpdate: 0.01
```

```
iter:433
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
     2 1]
3 1]]
 [ 1
 [ 1
yDatum: -1
yEst: True
wUpdate: [-7.35746161e-05 -3.52837125e-05]
bUpdate: 0.0
iter:434
XY_tmp:
[[3 \ 4 \ -1]
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01992644 0.02996472]
bUpdate: -0.01
iter:435
XY_tmp:
[[-3 4 -1]
 [1 3 \overline{1}]
yDatum: 1
yEst: False
wUpdate: [-0.01007755 -0.02004127]
bUpdate: 0.01
iter:436
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-7.55296802e-05 -3.72613465e-05]
bUpdate: 0.0
iter:437
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
  2
       1 1]
 [ 1
      2 1]
   1
       3 1]
     \overline{4} - \overline{1}]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01007551 -0.03003725]
bUpdate: 0.01
iter:438
XY_tmp:
```

```
[[ 3
[ 2
[ 1
       4 -1]
       1 1]
      2 1]
3 1]
4 -1]]
   1
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.0199265 0.02996875]
bUpdate: -0.01
iter:439
XY_tmp:
[ [ 3
      4 -11
 [ 2
       1 1]
      \begin{bmatrix} 2 & \overline{1} \end{bmatrix}
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007748 -0.03003724]
bUpdate: 0.01
iter:440
XY_tmp:
[[3 4 -1]
[2 1 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007547 -0.02003123]
bUpdate: 0.01
iter:441
XY_tmp:
[[3 4 -1]
[2 1 1]]
vDatum: -1
yEst: True
wUpdate: [-7.34541806e-05 -2.72264996e-05]
bUpdate: 0.0
iter:442
XY_tmp:
[[3 \ 4 \ -1]]
vDatum: 1
yEst: False
wUpdate: [-0.02007344 -0.01002722]
bUpdate: 0.01
iter:443
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
       23
   1
           1]
   1
           11
```

```
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02993058 0.03997478] bUpdate: -0.01
iter:444
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
   2
       1 1]
 [ 1
       2 1]
 [ 1
       3 1]]
yDatum: -1
yEst: True
wUpdate: [-7.54109170e-05 -3.32105669e-05]
bUpdate: 0.0
iter:445
XY_tmp:
[[3 4 -1]
      3 -1]
      1 1]
 [ 1
      3 111
yDatum: 1
yEst: False
wUpdate: [-0.0100754 -0.0200332]
bUpdate: 0.01
iter:446
XY_tmp:
[[ 2 3 -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02992662 0.0399708 ]
bUpdate: -0.01
iter:447
XY_tmp:
[[ 2 3 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007937 -0.01003719]
bUpdate: 0.01
iter:448
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01992465 0.02996482]
bUpdate: -0.01
```

```
iter:449
XY_tmp:
[[ 3 4
[ 2 3
      · 4 -11
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
       3
 [ 1
         1]
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01007934 -0.03004118]
bUpdate: 0.01
iter:450
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
       1 1]
 [ 1
      2 1
 [ 1
       3 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.01992268 0.02996483] bUpdate: -0.01
iter:451
XY_tmp:
[[3 4 -1]
[2 1 1]
[1 2 1]
     2 1]
4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0100813 -0.03004116]
bUpdate: 0.01
iter:452
XY_tmp:
[ 2 1
          1]
 [ 1 2 1]
[ 4 4 -1]]
      2 1]
yDatum: -1
yEst: True
wUpdate: [-7.92875445e-05 -3.51534680e-05]
bUpdate: 0.0
iter:453
XY_tmp:
[[2 1 1]
[1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-7.92716870e-05 -3.51464373e-05]
bUpdate: 0.0
```

```
iter:454
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: 1
yEst: False
wUpdate: [-0.01007926 -0.02003514]
bUpdate: 0.01
iter:455
XY_tmp:
[ 2 [ 2
       4 -11
       3 -11
       1
          1]
 [ 1
       2 1
 [ 1
       3
          1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007724 -0.01003113]
bUpdate: 0.01
iter:456
XY_tmp:
[ 3
      4 -11
      3 -1]
 [ 2
       1
          11
       2
 1
          11
      \bar{3} \bar{1}
 Ī 1
yDatum: -1
yEst: True
wUpdate: [-7.32245335e-05 -2.91261537e-05]
bUpdate: 0.0
iter:457
XY_tmp:
[[2 3 -1]
 [ 2
      1 1
 [ 1 2 1]
      3
 [ 1
         1]]
yDatum: -1
yEst: False
wUpdate: [0.02992679 0.03997088]
bUpdate: -0.01
iter:458
XY_tmp:
[[2 1 1]
[1 2 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.0199208 0.02996289]
bUpdate: -0.01
```

```
iter:459
XY_tmp:
[[1 2 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008318 -0.01004311]
bUpdate: 0.01
iter:460
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007916 -0.0300411 ]
bUpdate: 0.01
iter:461
4 -1]
      3 -1]
 [ 2
      1 1]
   1
      2
        1]
      3
   1
         11
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01007715 -0.02003509]
bUpdate: 0.01
iter:462
XY_tmp:
[ 3
     4 -1]
      3 -1]
 [ 2
      1 11
 [ 1
      2
        1]
 [ 1
      3
        1]]
yDatum: -1
yEst: True
wUpdate: [-7.51315098e-05 -3.10832223e-05]
bUpdate: 0.0
iter:463
XY_tmp:
[ 3
     4 -11
     3 -1]
  2
      1
         1]
 Ī 1
      2
        111
yDatum: 1
yEst: False
wUpdate: [-0.01007512 -0.03003108]
bUpdate: 0.01
```

```
XY_tmp:
[ [ 3
       4 -1]
 [ 2
       1 1]
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.0199269 0.02997493]
bUpdate: -0.01
iter:465
XY_tmp:
[[2 1 1]
[1 2 1]]
vDatum: -1
yEst: False
wUpdate: [0.02992291 0.03996893]
bUpdate: -0.01
iter:466
\begin{array}{c} XY \underline{\quad} tmp: \\ \left[ \begin{bmatrix} \overline{2} & 1 & 1 \end{bmatrix} \right] \end{array}
yDatum: 1
yEst: False
wUpdate: [-0.01008307 -0.02003906]
bUpdate: 0.01
iter:467
XY_tmp:
4 -1]
      3 -1]
       1
          1]
   1
       2 1]
   1
       3 1]
      4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02008105 -0.01003505]
bUpdate: 0.01
iter:468
XY_tmp:
[[ 2
       [3 - 1]
 [ 2
       1 1]
        2
   1
          11
       3
   1
          1]
 [ 4
       4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992296 0.03996696]
bUpdate: -0.01
iter:469
XY_tmp:
[ 2 3 -1]
[ 2 1 1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-8.30231896e-05 -4.10381318e-05]
bUpdate: 0.0
iter:470
XY_tmp:
[[2 3 -1]
[2 1 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008301 -0.02004103]
bUpdate: 0.01
iter:471
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008099 -0.03003702]
bUpdate: 0.01
iter:472
XY_tmp:
[[\overline{2} \ 1 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01992103 0.02996899]
bUpdate: -0.01
iter:473
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       3
   1
          1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008296 -0.01003701] bUpdate: 0.01
iter:474
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
       1 1]
 [ 1
       2 1]
      4 -111
 [ 4
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01007894 -0.030035 ]
bUpdate: 0.01
iter:475
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007693 -0.01002899]
bUpdate: 0.01
iter:476
XY_tmp:
[[3 4 -1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992709 0.02997301]
bUpdate: -0.01
iter:477
XY_tmp:
[[1 2 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.0299231 0.03996702]
bUpdate: -0.01
iter:478
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-8.28802647e-05 -4.09759163e-05]
bUpdate: 0.0
iter:479
XY_tmp:
[ [ 3
     4 -11
 [ 2
      3 -1]
   2
      1
          11
   1
      2
          11
       3
 [ 1
         11
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008286 -0.02004097]
bUpdate: 0.01
```

```
iter:480
XY_tmp:
[ 2
      3 -1]
      1 1]
     2 1]
 [ 1
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-8.08471159e-05 -3.69595276e-05]
bUpdate: 0.0
iter:481
XY_tmp:
[[2 3 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008083 -0.03003695]
bUpdate: 0.01
iter:482
XY_tmp:
[[2 1 1]
[1 2 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992119 0.02996906]
bUpdate: -0.01
iter:483
XY_tmp:
[[2 1 1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100828 -0.02003694]
bUpdate: 0.01
iter:484
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008078 -0.01003293]
bUpdate: 0.01
iter:485
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
       1
       2
         1]
       \bar{3} \bar{1}
 [ 1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-7.67663010e-05 -3.09245824e-05]
bUpdate: 0.0
iter:486
XY_tmp:
[ 3
      4 -1]
     3 -1]
 [ 2
      1 11
   1
       2 1]
      3
 [ 1
         1]]
yDatum: -1
yEst: True
wUpdate: [-7.67509478e-05 -3.09183975e-05]
bUpdate: 0.0
iter:487
XY_tmp:
[[2 3 -1]
 [ 2
       1 1]
 \begin{bmatrix} 1 & 2 & 1 \end{bmatrix}
      3 1]]
 [ 1
yDatum: -1
yEst: False
wUpdate: [0.02992326 0.03996909]
bUpdate: -0.01
iter:488
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008272 -0.02003891]
bUpdate: 0.01
iter:489
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100807 -0.0300349]
bUpdate: 0.01
iter:490
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02007869 -0.01002889]
bUpdate: 0.01
iter:491
XY_tmp:
[[ 3 4
[ 2 3
      4 -1]
      3 -1]
 [ 2
      1 11
   1
       2
         1]
       3
   1
          11
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992533 0.02997311]
bUpdate: -0.01
iter:492
XY_tmp:
[ 3
     4 -11
       1
          1]
 [ 1
      2
         1]
       3 1]
 [ 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992134 0.02996712]
bUpdate: -0.01
iter:493
XY_tmp:
[[2 1
      1
          1]
      2 1]
 [ 1
       3 1
 [ 1
 [4 4 - 1]]
yDatum: -1
yEst: True
wUpdate: [-8.26411624e-05 -3.88735391e-05]
bUpdate: 0.0
iter:494
XY_tmp:
[[\overline{2} \ 1]]
 [1 2 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-8.26246342e-05 -3.88657644e-05]
bUpdate: 0.0
iter:495
XY_tmp:
[[\overline{1} \ 2' \ 1] \ [1 \ 3 \ 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02008261 -0.01003886]
bUpdate: 0.01
iter:496
XY_tmp:
[[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007859 -0.03003685]
bUpdate: 0.01
iter:497
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1]
 [ 2
      1 1]
 [ 1
      2 1]
 [ 1
      3 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007658 -0.02003084]
bUpdate: 0.01
iter:498
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
     1 1]
      2
   1
          11
 [ 1
      3 1]]
yDatum: -1
yEst: True
wUpdate: [-7.45605541e-05 -2.68366811e-05]
bUpdate: 0.0
iter:499
XY_tmp:
[ 3 4 -1]
[ 2 3 -1]
     3 -1]
2 1]
 [ 1
 [ 1 3
          1]]
yDatum: 1
yEst: False
wUpdate: [-0.02007455 -0.01002683]
bUpdate: 0.01
iter:500
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]]
vDatum: -1
yEst: False
```

```
wUpdate: [0.02992947 0.03997517]
bUpdate: -0.01
iter:501
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: 1
vEst: False
wUpdate: [-0.01007652 -0.03003282]
bUpdate: 0.01
iter:502
XY_tmp:
[[2 \ 3 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100745 -0.02002681]
bUpdate: 0.01
iter:503
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
      2 1]
       3 1]
   1
      4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01992751 0.02997719]
bUpdate: -0.01
iter:504
XY_tmp:
[[ 2 3 -1]
 [ 2
      1 1]
2 1]
 [ 1
       3 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992353 0.0399712 ]
bUpdate: -0.01
iter:505
XY_tmp:
[[2 \ 3 \ -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
 [ 1
       2
         11
 Î 1 3
         1]]
yDatum: -1
yEst: True
wUpdate: [-8.24566315e-05 -3.67987325e-05]
bUpdate: 0.0
```

```
iter:506
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008244 -0.02003679]
bUpdate: 0.01
iter:507
XY_tmp:
[[2 1 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991958 0.02996722]
bUpdate: -0.01
iter:508
XY_tmp:
[[\bar{1} \ 3] \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008441 -0.01003878]
bUpdate: 0.01
iter:509
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
      1 11
   1
      2
        1]
      3
 [ 1
         11
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008039 -0.03003677]
bUpdate: 0.01
iter:510
XY_tmp:
[[ 2 3 -1]
[ 2 1 1]
 [ 1
      2 1]
      3
   1
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992163 0.03996924]
bUpdate: -0.01
```

```
XY_tmp:
[[_2
     3 -1]
 [ 2
      1 1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008436 -0.02003876]
bUpdate: 0.01
iter:512
XY_tmp:
[[2 3 -1]
[ 2 1 1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008234 -0.03003475]
bUpdate: 0.01
iter:513
XY_tmp:
[[2 3 -1]
[ 2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-8.03255926e-05 -2.87414948e-05]
bUpdate: 0.0
iter:514
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991969 0.02997126]
bUpdate: -0.01
iter:515
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1 1]
 [ 1
      2 1]
      3
   1
         11
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02008429 -0.01003473]
bUpdate: 0.01
iter:516
XY_tmp:
[ 2
[ 2
[ 1
     3 -1]
      1
          11
      2
          11
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02991972 0.03996728]
bUpdate: -0.01
iter:517
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
     1 1]
3 1]
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008626 -0.02004072]
bUpdate: 0.01
iter:518
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-8.42432995e-05 -3.67083655e-05]
bUpdate: 0.0
iter:519
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008423 -0.0300367 ]
bUpdate: 0.01
iter:520
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991779 0.02996931]
bUpdate: -0.01
iter:521
XY_tmp:
[[_3
      4 -1]
 [ 2
     3 -1
 [ 2
      1 1]
      2
         1]
   1
 [ 1
      3
         1]
 [ 4
      4 -1]]
vDatum: 1
yEst: False
```

```
wUpdate: [-0.02008619 -0.01003669]
bUpdate: 0.01
iter:522
XY_tmp:
[[ 3 4
[ 2 3
       4 -11
       3 -1]
 [ 2
       1
          11
 [ 1
       2
          11
 [ 1
       3
          111
yDatum: -1
yEst: True
wUpdate: [-8.21759250e-05 -3.46802073e-05]
bUpdate: 0.0
iter:523
XY_tmp:
[[3 4 -1]
 [ 2
      1 1]
 [ 1
       2
          1]
      ā 1]]
 [ 1
yDatum: -1
yEst: False
wUpdate: [0.01991784 0.02996533]
bUpdate: -0.01
iter:524
XY_tmp:
[[3 4 -1]
[2 1 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008614 -0.02004067]
bUpdate: 0.01
iter:525
\begin{array}{c} XY \underline{\hspace{0.1cm}} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,] \end{array}
 [1 \ 3 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02991587 0.03996334]
bUpdate: -0.01
iter:526
XY_tmp:
[[\overline{1} \ 3] \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009011 -0.01004465]
bUpdate: 0.01
```

```
XY_tmp:
[ 3
      4 -1]
      3 -11
   2
      1
        11
   1
      2
         1]
  1
      3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008609 -0.03004264]
bUpdate: 0.01
iter:528
XY_tmp:
[[3 4
      4 -11
 [ 2
      3 -11
 [ 1
      2
        1]
   1
      3
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008407 -0.01003663]
bUpdate: 0.01
iter:529
XY_tmp:
[[2
      3 -1]
      2
        1]
 [ 1
      3
         1]
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02991994 0.03996537]
bUpdate: -0.01
iter:530
XY_tmp:
[[ 2 3 -1]
 [ 1
     3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008604 -0.02004262]
bUpdate: 0.01
iter:531
XY_tmp:
[[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01991598 0.02996139]
bUpdate: -0.01
```

```
XY_tmp:
[[\overline{1} \ 3] 1]
yDatum: -1
yEst: True
wUpdate: [-8.80069250e-05 -4.46029153e-05]
bUpdate: 0.0
iter:533
XY_tmp:
[[3 4 -1]
[2 3 -1]
       1 1]
 [ 1
       2 1]
       3
   1
          1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008799 -0.03004459]
bUpdate: 0.01
iter:534
XY_tmp:
[[_2
      3 -1]
 [ 2
       1 11
       \overline{2} \overline{1}
 [ 1
       3 1
 [ 1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.59717258e-05 -3.85850759e-05]
bUpdate: 0.0
iter:535
XY_tmp:
[[2 3 -1]
 [1 2 1]
       3 1]
 [ 1
 \begin{bmatrix} \bar{4} & \bar{4} & -1 \end{bmatrix}
vDatum: 1
yEst: False
wUpdate: [-0.02008595 -0.01003858]
bUpdate: 0.01
iter:536
XY_tmp:
[[-2 : 3 -1]
 [1 2 1]
 [ \dot{4} \ \dot{4} \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008194 -0.03003657]
bUpdate: 0.01
iter:537
XY_tmp:
```

```
 \begin{bmatrix} [ & 1 & 2 & 1 ] \\ [ & 4 & 4 & -1 ] \end{bmatrix} 
yDatum: -1
yEst: False
wUpdate: [0.01992008 0.02996944]
bUpdate: -0.01
iter:538
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100839 -0.02003656]
bUpdate: 0.01
iter:539
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
       2
   1
           1]
 [ 1
       3
          1]
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.18881879e-05 -3.25489058e-05]
bUpdate: 0.0
iter:540
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
      2 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01008187 -0.03003254]
bUpdate: 0.01
iter:541
XY_tmp:
[[3 \ 4 \ -1]
   2 3 -1]
1 2 1]
4 4 -1]]
 [ 1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02007986 -0.01002654]
bUpdate: 0.01
iter:542
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01007584 -0.02002453]
bUpdate: 0.01
iter:543
XY_tmp:
[[3 \ 4 \ -1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992618 0.02997947]
bUpdate: -0.01
iter:544
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992219 0.03997348]
bUpdate: -0.01
iter:545
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1
         11
 [ 1
      2 11
   1
      3
         11
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.37939701e-05 -3.45162648e-05]
bUpdate: 0.0
iter:546
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
      2
         1]
 [ 1
      3
         1]]
vDatum: -1
yEst: True
wUpdate: [-8.37772113e-05 -3.45093615e-05]
bUpdate: 0.0
iter:547
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
      2
         1]
      3
 [ 1
         111
yDatum: -1
```

```
yEst: False
wUpdate: [0.01991624 0.0299655 ]
bUpdate: -0.01
iter:548
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [1 3 1]
yDatum: 1
yEst: False
wUpdate: [-0.01008774 -0.0200405 ]
bUpdate: 0.01
iter:549
XY_tmp:
[[3 4 -1]
 [ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008573 -0.01003649]
bUpdate: 0.01
iter:550
XY_tmp:
[[3 4 -1]]
yDatum: 1
vEst: False
wUpdate: [-0.01008171 -0.03003448]
bUpdate: 0.01
iter:551
XY_tmp:
[[3 4 -1]
     3 -11
 [ 2
     1 1]
   1
      2
        1]
      3 1
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02992031 0.03997153]
bUpdate: -0.01
iter:552
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
   1
      2
        11
     4 -1]]
 Γ 4
yDatum: 1
yEst: False
wUpdate: [-0.01008568 -0.03003647]
bUpdate: 0.01
```

```
iter:553
XY_tmp:
[[3 4 -1]
 [2 \ 3 \ -1]
 [1 2 1]
 [ \dot{4} \ \dot{4} \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008366 -0.01003046]
bUpdate: 0.01
iter:554
XY_tmp:
[[-3 \ 4 \ -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01992036 0.02997155]
bUpdate: -0.01
iter:555
XY_tmp:
[[-3 4 -1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-8.36269337e-05 -3.44484955e-05]
bUpdate: 0.0
iter:556
XY_tmp:
[[3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008361 -0.02003444]
bUpdate: 0.01
iter:557
XY_tmp:
[[3 \ 4 \ -1]
   2
     3 -1
 [ 2
      1 1]
      2 1]
3 1]
 [ 1
 [ 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02991841 0.03996957]
bUpdate: -0.01
iter:558
XY_tmp:
```

```
[[ 3
[ 2
[ 2
      4 -1]
      3 -1]
      1 1]
       2 1]
   1
       <u>3</u> 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-8.75771675e-05 -3.84286305e-05]
bUpdate: 0.0
iter:559
XY_tmp:
[ 2 [ 2
      4 -11
      3 -1]
      1 1]
 Ī 1
      3 111
yDatum: 1
yEst: False
wUpdate: [-0.01008756 -0.02003842]
bUpdate: 0.01
iter:560
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [1 3 1]
yDatum: 1
yEst: False
wUpdate: [-0.02008554 -0.01003441]
bUpdate: 0.01
iter:561
XY_tmp:
[[ 3 4 -1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991847 0.02996759]
bUpdate: -0.01
iter:562
XY_tmp:
[[3 \ 4 \ -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01008551 -0.0300384 ]
bUpdate: 0.01
iter:563
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
   1
          11
```

```
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02991651 0.03996761]
bUpdate: -0.01
iter:564
XY_tmp:
[[3 4 -1]
[2 3 -1]
     3 -1]
2 1]
3 1]
   1
 [ 1
 [ 4
     4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.02008947 -0.01004039]
bUpdate: 0.01
iter:565
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [1 \ 3 \ 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008546 -0.02003838]
bUpdate: 0.01
iter:566
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-8.34399403e-05 -3.43699856e-05]
bUpdate: 0.0
iter:567
XY_tmp:
[[3 \ 4 \ -1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991658 0.02996564]
bUpdate: -0.01
iter:568
XY_tmp:
[[ 3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008741 -0.03004036]
bUpdate: 0.01
```

```
iter:569
4 -11
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
       3
 [ 1
         1]
      4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02991461 0.03996565]
bUpdate: -0.01
iter:570
XY_tmp:
[[ 2 3 -1]
 [ 2
      1
         11
 [ 1
      2 1
         1]
 [ 1
       3
     4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-9.13720085e-05 -4.23412981e-05]
bUpdate: 0.0
iter:571
XY_tmp:
[[ 2
     1
          11
 [ 1
      2 1]
3 1]
 [ ]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990865 0.02995767]
bUpdate: -0.01
iter:572
XY_tmp:
[[2 1 1]
[1 2 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-9.53354634e-05 -4.83243633e-05]
bUpdate: 0.0
iter:573
XY_tmp:
[[\overline{1} \ 2' \ 1] \ [1 \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009532 -0.01004831]
bUpdate: 0.01
```

```
iter:574
XY_{tmp}: [[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100913 -0.03004631]
bUpdate: 0.01
iter:575
XY_tmp:
[ 3 [ 2
      4 -11
      3 -11
      1
        1]
 [ 1
     2 1
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01008928 -0.0200403 ]
bUpdate: 0.01
iter:576
XY_tmp:
[ [ 2
     3 -11
 [ 2
     1 1]
      2
 [ 1
        1]
      3
 [ 1
         11
     4 -111
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02991274 0.03996371]
bUpdate: -0.01
iter:577
XY_tmp:
[[2 3 -1]
[2 1 1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009324 -0.03004428]
bUpdate: 0.01
iter:578
XY_tmp:
[[2 3 -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009123 -0.01003827]
bUpdate: 0.01
```

```
iter:579
XY_tmp:
[[1 2 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01991279 0.02996374]
bUpdate: -0.01
iter:580
XY_tmp:
[[4 \ 4 \ -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01009119 -0.02004226]
bUpdate: 0.01
iter:581
4 -1]
      3 -1]
 [ 2
     1 1]
   1
      2
        1]
      3
  1
        1]
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.91711924e-05 -3.82482432e-05]
bUpdate: 0.0
iter:582
XY_tmp:
[ 3
     4 -1]
     3 -1]
 [ 2
     1 11
 [ 1
      2 1]
 [ 1
      3
        1]]
yDatum: -1
yEst: True
wUpdate: [-8.91533582e-05 -3.82405935e-05]
bUpdate: 0.0
iter:583
XY_tmp:
     4 -1]
[[_3
 [2 1 1]
 [ 1
      2
         1]
     3 111
 [ 1
yDatum: -1
yEst: False
wUpdate: [0.01991086 0.02996177]
bUpdate: -0.01
```

```
XY_tmp:
[ [ 3
     4 -1]
     2 1]
3 1]]
 [ 1
 1
yDatum: 1
yEst: False
wUpdate: [-0.02009312 -0.01004423]
bUpdate: 0.01
iter:585
XY_tmp:
[[3 4 -1]
 [1 3 1]
yDatum: 1
yEst: False
wUpdate: [-0.0100891 -0.02004222]
bUpdate: 0.01
iter:586
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02991292 0.03996179]
bUpdate: -0.01
iter:587
XY_tmp:
4 -1]
     3 -1]
      1
        1]
 [ 1
      2 1]
  1
      3 1]
     4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01009306 -0.0300462 ]
bUpdate: 0.01
iter:588
XY_tmp:
[ [ 3
     4 -1]
 [ 2
      3 -1]
   2
      1 11
   1
      2
         1]
      3
 [ 1
        1]]
yDatum: -1
yEst: True
wUpdate: [-9.10452280e-05 -4.01911288e-05]
bUpdate: 0.0
iter:589
XY_tmp:
[ 3 4 -1]
[ 2 1 1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01990897 0.02995982]
bUpdate: -0.01
iter:590
XY_tmp:
[[3 4 -1]
[1 2 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009501 -0.01004618]
bUpdate: 0.01
iter:591
XY_tmp:
yDatum: -1
yEst: True
wUpdate: [-9.09898118e-05 -4.41658190e-05]
bUpdate: 0.0
iter:592
XY_tmp:
[[\bar{1} \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009097 -0.02004416]
bUpdate: 0.01
iter:593
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2
         1]
       3
   1
          1]
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01008895 -0.03004015] bUpdate: 0.01
iter:594
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
         1]
 [ 1
       2
         1]
 [ 1
       3
         1]
      4 -1]]
 [ 4
yDatum: -1
```

```
yEst: False
wUpdate: [0.02991306 0.03996586]
bUpdate: -0.01
iter:595
XY_tmp:
[[2 1
     1
         1]
 [ 1
     2
         11
      3 1
 [ 1
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.01990708 0.02995787]
bUpdate: -0.01
iter:596
XY_tmp:
[[2 1
        11
 [1 3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100969 -0.02004812]
bUpdate: 0.01
iter:597
XY_tmp:
[[2 1 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009488 -0.03004412]
bUpdate: 0.01
iter:598
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009286 -0.01003811]
bUpdate: 0.01
iter:599
XY_tmp:
[ [ 3
     4 -11
 [ 2
     3 -1]
 [ 2
      1
         11
  1
      2
        11
      3
 [ 1
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.88427298e-05 -3.60988008e-05]
bUpdate: 0.0
```

```
iter:600
XY_tmp:
[ 3
     4 -1]
      3 -1
 [ 2
      1 1]
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01008882 -0.02003609]
bUpdate: 0.01
iter:601
XY_tmp:
[[3 \ 4 \ -1]
 [2 \ 3 \ -1]
 [ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02008681 -0.01003208]
bUpdate: 0.01
iter:602
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-8.27898349e-05 -3.00779458e-05]
bUpdate: 0.0
iter:603
XY_tmp:
[[2 3 -1]
[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02991723 0.03996993]
bUpdate: -0.01
iter:604
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01991124 0.02996193]
bUpdate: -0.01
iter:605
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
      1
      2
          1]
 [ 1
      \overline{3} \overline{1}
     4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01009274 -0.03004406]
bUpdate: 0.01
iter:606
XY_tmp:
     3 -1]
      1 1]
 Ī 1
      2
        11
      \bar{3} \bar{1}
  1
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02990928 0.03996195]
bUpdate: -0.01
iter:607
XY_tmp:
[[2 3 -1]
 [ 2
      1 1]
 [ 1
     2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0100967 -0.03004604]
bUpdate: 0.01
iter:608
XY_tmp:
        1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990532 0.02995997]
bUpdate: -0.01
iter:609
XY_tmp:
[[2 1 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009866 -0.02004602]
bUpdate: 0.01
iter:610
XY_tmp:
[[2 1 1]]
yDatum: -1
```

```
yEst: True
wUpdate: [-9.66442692e-05 -4.20154613e-05]
bUpdate: 0.0
iter:611
4 -1]
     3 -1]
 [ 2
     1 11
         1]
   1
      2
      3
   1
          11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009662 -0.01004201]
bUpdate: 0.01
iter:612
XY_tmp:
[ 3 [ 2 [ 2
     4 -11
      3 -1]
     1
        1]
 [ 1
      2 1]
 [ 1
      3
          111
yDatum: -1
yEst: True
wUpdate: [-9.26056153e-05 -3.99986568e-05]
bUpdate: 0.0
iter:613
XY_tmp:
[[_2
     3 -1]
 [ 2
     1 1]
      2 1]
 [ 1
      3
 [ 1
         1]]
yDatum: -1
yEst: False
wUpdate: [0.02990741 0.03996001]
bUpdate: -0.01
iter:614
XY_tmp:
[[2 3 -1]
 \begin{bmatrix} 2 & 1 & 1 \\ 1 & 3 & 1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01009857 -0.02004798]
bUpdate: 0.01
iter:615
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01009655 -0.03004397]
bUpdate: 0.01
iter:616
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: -1
yEst: False
wUpdate: [0.01990547 0.02996204]
bUpdate: -0.01
iter:617
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
      3 -1]
 [ 2
      1 1]
 [ 1
      2 1]
       3 1
 [ 1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009851 -0.01004396]
bUpdate: 0.01
iter:618
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
       3 1]
4 -1]]
   1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01009449 -0.02004195]
bUpdate: 0.01
iter:619
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
      1 1]
 [ 1
      3 1]
 [44-1]]
vDatum: -1
yEst: False
wUpdate: [0.02990753 0.03996206]
bUpdate: -0.01
iter:620
XY_tmp:
          1]
 [1 3 1]
 [44-1]]
vDatum: -1
yEst: False
```

```
wUpdate: [0.01990155 0.02995407]
bUpdate: -0.01
iter:621
XY_tmp:
[ 2 1 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010243 -0.03005192]
bUpdate: 0.01
iter:622
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02010041 -0.01004591]
bUpdate: 0.01
iter:623
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3 1]
   1
      4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-9.63932925e-05 -4.39031527e-05]
bUpdate: 0.0
iter:624
XY_tmp:
[[ 2 3 -1]
 [ 2
      1 1]
2 1]
 [ 1
       3 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.63740138e-05 -4.38943721e-05]
bUpdate: 0.0
iter:625
XY_tmp:
[[2 \ 3 \ -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
 [ 1
       2 1]
 \begin{bmatrix} 4 & 4 & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01009635 -0.03004389]
bUpdate: 0.01
```

```
iter:626
XY_tmp:
[[2 3 -1]
[2 1 1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-9.43354681e-05 -3.78768161e-05]
bUpdate: 0.0
iter:627
XY_tmp:
[[2 3 -1]
 [ 1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009432 -0.01003787]
bUpdate: 0.01
iter:628
XY_tmp:
[[\overline{1} \ 2] \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.0199097 0.02996414]
bUpdate: -0.01
iter:629
XY_tmp:
[ 3 [ 2 [ 2
      4 -1]
       3 -1]
       1 11
   1
       \overline{2} \overline{1}
       3
 [ 1
         11
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009428 -0.02004185]
bUpdate: 0.01
iter:630
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 1
       2 1]
   1
       3 1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009226 -0.01003785]
bUpdate: 0.01
```

```
XY_tmp:
[ [ 3
     4 -1]
 [ 1 2 1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01991176 0.02996416]
bUpdate: -0.01
iter:632
XY_tmp:
[[ 3 4 -1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009222 -0.02004183]
bUpdate: 0.01
iter:633
XY_tmp:
[[3 \ 4 \ -1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009021 -0.03003782]
bUpdate: 0.01
iter:634
XY_tmp:
[[3 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-8.81882354e-05 -3.18154558e-05]
bUpdate: 0.0
iter:635
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1 1]
 [ 1
      2 1]
      3 1
   1
     [4 - 1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02991183 0.03996819]
bUpdate: -0.01
iter:636
XY_tmp:
[ 3 [ 2 [ 2
     4 -1]
      3 -1]
1 1]
```

```
\begin{bmatrix} 1 & 2 & 1 \\ 4 & 4 & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01009415 -0.0300398 ]
bUpdate: 0.01
iter:637
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 1]
 [1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-9.21341330e-05 -3.37947704e-05]
bUpdate: 0.0
iter:638
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
[ 2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009212 -0.02003379]
bUpdate: 0.01
iter:639
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.0299099 0.03997022]
bUpdate: -0.01
iter:640
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009608 -0.01003778]
bUpdate: 0.01
iter:641
XY_tmp:
[[_3
      4 -1]
 [ 2
      3 -1
 [ 2
      1 1]
       2 1]
   1
 [ 1
      3
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: False
```

```
wUpdate: [0.01990794 0.02996423]
bUpdate: -0.01
iter:642
XY_tmp:
[[_2
      3 -1]
 [ 2
      1
         11
     2
 [ 1
        1]
 [ 1
      3 1
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02990396 0.03995824]
bUpdate: -0.01
iter:643
XY_tmp:
[[ 2 3 -1]
 [ 2
     1 1]
 [ 1
     3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010202 -0.02004975]
bUpdate: 0.01
iter:644
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101 -0.03004574]
bUpdate: 0.01
iter:645
XY_tmp:
[[ 2 3 -1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009798 -0.01003973]
bUpdate: 0.01
iter:646
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990604 0.02996227]
bUpdate: -0.01
```

```
XY_tmp:
[ 3
      4 -1]
      3 -1]
   2
      1
         11
   1
      2
          1]
   1
      3
         11
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.79436336e-05 -4.37176463e-05]
bUpdate: 0.0
iter:648
XY_tmp:
[[3 4
      4 -11
 [ 2
      3 -11
   2
      1
         1]
   1
      2
          11
      3
         1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-9.79240449e-05 -4.37089027e-05]
bUpdate: 0.0
iter:649
XY_tmp:
[[ 2
      3 -1]
 [ 2
      1
          1]
 1
      2
          11
      3
 1
         1]]
yDatum: -1
yEst: True
wUpdate: [-9.79044601e-05 -4.37001609e-05]
bUpdate: 0.0
iter:650
XY_tmp:
[[2 1 1]
[1 2 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01990212 0.02995631]
bUpdate: -0.01
iter:651
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010187 -0.02004968]
bUpdate: 0.01
```

```
XY_tmp:
[[\overline{2} \ 1 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009984 -0.03004567] bUpdate: 0.01
iter:653
XY_tmp:
[ 3
     4 -11
      3 -1]
      1 1]
 [ 1
      2 1]
      3
   1
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009782 -0.01003966] bUpdate: 0.01
iter:654
XY_tmp:
[[_3
     4 -1]
 [ 2
     3 -1
  2
      1 1]
 [ 1
      2 11
 [ 1
      3
         1]]
yDatum: -1
yEst: True
wUpdate: [-9.38053952e-05 -3.76556788e-05]
bUpdate: 0.0
iter:655
XY_tmp:
[[3 4 -1]
 [ 2
     3 -1
 [ 2
     1 1]
 [ 1
      2 1]]
vDatum: 1
yEst: False
wUpdate: [-0.01009379 -0.03003765]
bUpdate: 0.01
iter:656
XY_tmp:
[[-3 4 -1]
 [2 1 1]
 [1 2 1]
yDatum: -1
yEst: False
wUpdate: [0.01990823 0.02996836]
bUpdate: -0.01
iter:657
XY_tmp:
```

```
[[ 3 4 -1]
[ 2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009575 -0.02003763] bUpdate: 0.01
iter:658
XY_tmp:
[[\overline{2} \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02990627 0.03996637]
bUpdate: -0.01
iter:659
XY_tmp:
[ 3
      4 -11
      3 -11
 [ 2
      1 1]
      2
   1
          11
  1
       3
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009971 -0.01004162]
bUpdate: 0.01
iter:660
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
      2 1
   1
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01009569 -0.03003961]
bUpdate: 0.01
iter:661
XY_tmp:
[[2 3 -1]
     1 1]
2 1]
4 -1]]
 [ 2
 [ 1
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02990633 0.0399664 ]
bUpdate: -0.01
iter:662
XY_tmp:
[ 2 3 -1]
[ 1 2 1]
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009965 -0.0100416 ]
bUpdate: 0.01
iter:663
XY_tmp:
[[2 3 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009563 -0.02003959]
bUpdate: 0.01
iter:664
XY_tmp:
[[ 2 3 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.36147545e-05 -3.55808334e-05]
bUpdate: 0.0
iter:665
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
      1
         11
 [ 1
      2 11
   1
      3
         11
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199064 0.02996443]
bUpdate: -0.01
iter:666
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]
 [ 1
      3
         1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.02009758 -0.01004157]
bUpdate: 0.01
iter:667
XY_tmp:
[[2 3 -1]
[ 1 2 1]
[ 1 3 1]
 [ 4 4 -1]]
yDatum: -1
```

```
yEst: False
wUpdate: [0.02990644 0.03996044]
bUpdate: -0.01
iter:668
XY_tmp:
[[2 3 -1]
[1 3 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009954 -0.02004755]
bUpdate: 0.01
iter:669
XY_tmp:
[[1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990248 0.02995646]
bUpdate: -0.01
iter:670
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101015 -0.03004953]
bUpdate: 0.01
iter:671
XY_tmp:
[[3 4 -1]
     3 -1
 [ 2
     1 1]
   1
      2
        1]
      3 1
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.94793737e-05 -4.35222529e-05]
bUpdate: 0.0
iter:672
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
     2 11
   1
      3
         11
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01990054 0.02995649]
bUpdate: -0.01
```

```
iter:673
XY_tmp:
[[3 4 -1]
      1 1]
 [1 2 1]
 \begin{bmatrix} \bar{4} & \bar{4} & -\bar{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01010344 -0.0300495 ]
bUpdate: 0.01
iter:674
XY_tmp:
[[-3 \ 4 \ -1]
 [2 1 1]
 \begin{bmatrix} \bar{4} & \bar{4} & -1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01010142 -0.02004349]
bUpdate: 0.01
iter:675
XY_tmp:
[[-3 4 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0200994 -0.01003949]
bUpdate: 0.01
iter:676
XY_tmp:
[[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02990462 0.03996252]
bUpdate: -0.01
iter:677
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
 [ 2
       1 1]
       2 1]
3 1]
 [ 1
 [ 1
      \overline{4} - \overline{1}]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.01359659e-04 -4.54708528e-05]
bUpdate: 0.0
iter:678
XY_tmp:
```

```
[[ 2
[ 2
[ 1
       3 -1]
       1 1]
      2 1]
3 1]
4 -1]]
   1
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.01339387e-04 -4.54617587e-05]
bUpdate: 0.0
iter:679
XY_tmp:
      3 -1]
[[_2
 2 1]
3 1]
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02010132 -0.01004545]
bUpdate: 0.01
iter:680
XY_tmp:
[[ 1 2 1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0199027 0.02995656]
bUpdate: -0.01
iter:681
XY_tmp:
[[1 2 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010128 -0.03004943]
bUpdate: 0.01
iter:682
XY_tmp:
[[4 \ 4 \ -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01009926 -0.02004343]
bUpdate: 0.01
iter:683
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
   1
           11
```

```
[4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.72392877e-05 -3.94163151e-05]
bUpdate: 0.0
iter:684
XY_tmp:
[[<sup>-</sup>3 '4 -1]
[ 2 3 -1]
     3 -1]
2 1]
3 1]
   1
 [ 1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009722 -0.01003941]
bUpdate: 0.01
iter:685
XY_tmp:
[[ 3 4
     4 -1]
 [ 2 3 -1]
[ 1 2 1]
 [ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-9.32003959e-05 -3.74005501e-05]
bUpdate: 0.0
iter:686
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [ 1 3 1]]
yĎatum: 1
yEst: False
wUpdate: [-0.01009318 -0.02003739]
bUpdate: 0.01
iter:687
XY_tmp:
[[3 \ 4 \ -1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01990884 0.02996661]
bUpdate: -0.01
iter:688
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02990486 0.03996062]
bUpdate: -0.01
```

```
iter:689
XY_tmp:
[[ 3 4
[ 2 3
      4 -11
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
      3
 [ 1
         1]
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01010113 -0.03004737]
bUpdate: 0.01
iter:690
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-9.91056327e-05 -4.13615643e-05]
bUpdate: 0.0
iter:691
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
     1 1]
2 1]]
 [ 1
yDatum: 1
yEst: False
wUpdate: [-0.01009909 -0.03004135]
bUpdate: 0.01
iter:692
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 2 1]
yDatum: -1
yEst: False
wUpdate: [0.02990293 0.03996465]
bUpdate: -0.01
iter:693
XY_tmp:
[[2 1 1]
[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01989695 0.02995666]
bUpdate: -0.01
```

```
iter:694
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: 1
yEst: False
wUpdate: [-0.01010703 -0.02004933]
bUpdate: 0.01
iter:695
XY_tmp:
[ 3 [ 2
       4 -11
       3 -11
       1
          1]
 [ 1
       2 1
 [ 1
       3
          1]
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.020105 -0.01004532]
bUpdate: 0.01
iter:696
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
       1 1]
       2
 1
          1]
      \bar{3} \bar{1}
 Ī 1
yDatum: -1
yEst: True
wUpdate: [-1.00983566e-04 -4.33103550e-05]
bUpdate: 0.0
iter:697
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2 1 1]
 [ 1
      2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010096 -0.0300433 ]
bUpdate: 0.01
iter:698
XY_tmp:
[[-2 3 -1]
 [ 2 1 1]
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.02990106 0.03996271]
bUpdate: -0.01
```

```
iter:699
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010492 -0.02004529]
bUpdate: 0.01
iter:700
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201029 -0.01004128]
bUpdate: 0.01
iter:701
4 -1]
      3 -1]
 [ 2
     1 1]
      2 1]
3 1]
 [ 1
  1
 [ 4
     4 -111
yDatum: -1
yEst: False
wUpdate: [0.01990112 0.02996073]
bUpdate: -0.01
iter:702
XY_tmp:
[ 3
     4 -1]
     3 -1]
 [ 1
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02010286 -0.01004526]
bUpdate: 0.01
iter:703
XY_tmp:
[[-3 4 -1]
 [2 \ 3 \ -1]
     3 1]
4 -1]]
 [ 1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01009884 -0.02004325]
bUpdate: 0.01
```

```
XY_tmp:
[ [ 3
     4 -1]
 [ 2
      3 -1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01009682 -0.03003924]
bUpdate: 0.01
iter:705
XY_tmp:
[[3 4 -1]
[2 3 -1]]
yDatum: -1
yEst: True
wUpdate: [-9.48023412e-05 -3.32348570e-05]
bUpdate: 0.0
iter:706
XY_tmp:
[[3 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990522 0.02996677]
bUpdate: -0.01
iter:707
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
      2 1]
 [ 1
       3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02990124 0.03996078]
bUpdate: -0.01
iter:708
XY_tmp:
[ [ 3
     4 -1]
 [ 2 3 -1]
      1 1]
      \overline{2} \overline{1}
   1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010474 -0.03004721]
bUpdate: 0.01
iter:709
XY_tmp:
[ 3 4 -1]
[ 2 1 1]
```

```
\begin{bmatrix} 1 & 2 & 1 \\ 4 & 4 & -1 \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.01989728 0.0299588 ]
bUpdate: -0.01
iter:710
XY_tmp:
[[3 4 -1]
[1 2 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201067 -0.0100472]
bUpdate: 0.01
iter:711
XY_tmp:
[[ 3 4 -1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-1.02681837e-04 -4.51865973e-05]
bUpdate: 0.0
iter:712
XY_tmp:
[[1 \ 2 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.026613e-04 -4.517756e-05]
bUpdate: 0.0
iter:713
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       3
   1
          1]
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010264 -0.02004517] bUpdate: 0.01
iter:714
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 2 1 1]
          1]
 [ 1
       2
          1]
 [ 1
       3
          1]
      4 -1]]
 [ 4
yDatum: -1
```

```
yEst: False
wUpdate: [0.02989938 0.03995884]
bUpdate: -0.01
iter:715
XY_tmp:
[[2 3 -1]
[1 2 1]
      3 1
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201066 -0.01004915]
bUpdate: 0.01
iter:716
XY_tmp:
[[2 3 -1]
 [1 3 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010258 -0.02004714]
bUpdate: 0.01
iter:717
XY_tmp:
[[1 3 1]
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989944 0.02995687]
bUpdate: -0.01
iter:718
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010454 -0.03004912]
bUpdate: 0.01
iter:719
XY_tmp:
[ [ 3
     4 -11
 [ 2
     3 -1]
 [ 2
      1
         11
  1
      2
        11
      3
 [ 1
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.02517261e-04 -4.31135492e-05]
bUpdate: 0.0
```

```
iter:720
XY_tmp:
[ 3
     4 -11
      1
        1]
 [ 1
      2 1
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.0198975 0.0299569]
bUpdate: -0.01
iter:721
XY_tmp:
[[3 \ 4 \ -1]
 [2 1 1]
      2 1]
   1
     3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.06476258e-04 -4.90963055e-05]
bUpdate: 0.0
iter:722
XY_tmp:
[[3 4 -1]
[1 2 1]
 [ 1 3
        111
yDatum: 1
yEst: False
wUpdate: [-0.02010645 -0.01004909]
bUpdate: 0.01
iter:723
XY_tmp:
[[1 \ 2 \ 1]
 [1 \ 3 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.02433672e-04 -4.70766690e-05]
bUpdate: 0.0
iter:724
XY_tmp:
[[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010241 -0.03004707]
bUpdate: 0.01
iter:725
XY_tmp:
[ 3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
      1
      2
         1]
      \bar{3} \bar{1}
 [ 1
     4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01010039 -0.02004106]
bUpdate: 0.01
iter:726
XY_tmp:
     3 -1]
      1 1]
      2 1]
3 1]
 Ī 1
   1
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02990163 0.03996295]
bUpdate: -0.01
iter:727
XY_tmp:
[[2 3 -1]
 [ 2
      1 1]
 [1 2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010435 -0.03004504]
bUpdate: 0.01
iter:728
XY_tmp:
[[2 3 -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02010233 -0.01003903]
bUpdate: 0.01
iter:729
XY_tmp:
[[ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01990169 0.02996297]
bUpdate: -0.01
iter:730
XY_tmp:
[[4 4 -1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.01010229 -0.02004302]
bUpdate: 0.01
iter:731
XY_tmp:
[[ 3 4
[ 2 3
     4 -1]
     3 -1]
     1 11
   1
      2
         11
      \overline{3} \overline{1}
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.00271492e-04 -3.90093949e-05]
bUpdate: 0.0
iter:732
XY_tmp:
[ 3
     4 -11
      1
         1]
 [ 1
     2
         1]
      3 1]
 [ 1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989975 0.029961 ]
bUpdate: -0.01
iter:733
XY_tmp:
[ [ 3
     4 -1]
 [ 2
     1 1]
      2 1
 [ 1
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01010423 -0.03004499]
bUpdate: 0.01
iter:734
XY_tmp:
[[2 1 1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02989779 0.03996102]
bUpdate: -0.01
iter:735
XY_tmp:
[[<sup>1</sup> 2 1]
[ 4 4 -1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02010819 -0.01004698]
bUpdate: 0.01
iter:736
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010417 -0.02004497]
bUpdate: 0.01
iter:737
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1]
 [ 2
      1 1]
      2 1]
 [ 1
 [ 1
       3 1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.02147627e-04 -4.09586081e-05]
bUpdate: 0.0
iter:738
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
      2 1]
3 1]
 [ 1
   1
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02010213 -0.01004095]
bUpdate: 0.01
iter:739
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]
 [44-1]]
vDatum: -1
yEst: False
wUpdate: [0.02990189 0.03996106]
bUpdate: -0.01
iter:740
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]]
vDatum: -1
yEst: True
```

```
wUpdate: [-1.04087151e-04 -4.69344379e-05]
bUpdate: 0.0
iter:741
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010407 -0.03004693]
bUpdate: 0.01
iter:742
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.01989795 0.02995908]
bUpdate: -0.01
iter:743
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3 1]
   1
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01010603 -0.02004691]
bUpdate: 0.01
iter:744
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
     3 -1]
 [ 2
      1 1]
 [ 1
      2 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.010104 -0.0300429]
bUpdate: 0.01
iter:745
XY_tmp:
[[3 \ 4 \ -1]
 \begin{bmatrix} \tilde{2} & \tilde{3} & 1 \end{bmatrix}
      1 1]
     2 1]]
 Ī 1
yDatum: -1
yEst: True
wUpdate: [-1.01983105e-04 -3.68895217e-05]
bUpdate: 0.0
```

```
iter:746
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010196 -0.02003688]
bUpdate: 0.01
iter:747
XY_tmp:
[[3 4 -1]
 [ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02009994 -0.01003287]
bUpdate: 0.01
iter:748
XY_tmp:
[[ 2 3 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02990408 0.03996913]
bUpdate: -0.01
iter:749
XY_tmp:
[ 2 [ 2
      4 -1]
      3 -1]
      1 11
  1
      2 1]
      3 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0198981 0.02996114]
bUpdate: -0.01
iter:750
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 1
      2 1]
      3 1]
   1
      4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02010588 -0.01004485] bUpdate: 0.01
```

```
XY_tmp:
[ [ 3
      4 -1]
 [ 1 2 1]
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989814 0.02995715]
bUpdate: -0.01
iter:752
XY_tmp:
\begin{bmatrix} -1 & 2 \end{bmatrix}
          1]
 [ 1
       3 1
 [4 \ 4 \ -1]]
yDatum: -1
yEst: True
wUpdate: [-1.05841214e-04 -4.88367065e-05]
bUpdate: 0.0
iter:753
XY_tmp:
 [ 1 2 1]
[ 4 4 -1]]
[[1 \ 2]
yDatum: 1
yEst: False
wUpdate: [-0.01010582 -0.03004883]
bUpdate: 0.01
iter:754
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101038 -0.02004282]
bUpdate: 0.01
iter:755
XY_tmp:
[ 3 [ 2
      4 -11
       3 -1]
      1 1]
 [ 1
      2 1]
       3
   1
         1]
      [4 - 1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.01778121e-04 -3.88086103e-05]
bUpdate: 0.0
iter:756
XY_tmp:
[ 3 [ 2 [ 1
     4 -1]
       1
          11
       2
          11
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989824 0.0299612 ]
bUpdate: -0.01
iter:757
XY_tmp:
[[3 4 -1]
[2 1 1]
 [ 1
     2 1]
     3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.05737414e-04 -4.47930884e-05]
bUpdate: 0.0
iter:758
XY_tmp:
[[2 1 1]
[1 2 1]
 [1 \ 3 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02989428 0.03995522]
bUpdate: -0.01
iter:759
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101117 -0.02005278]
bUpdate: 0.01
iter:760
XY_tmp:
[[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010967 -0.03004876]
bUpdate: 0.01
iter:761
XY_tmp:
[ 3
      4 -1]
     3 -1
  2
      1 1]
      2
         1]
   1
  1
      3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
```

```
wUpdate: [-0.02010765 -0.01004275]
bUpdate: 0.01
iter:762
XY_tmp:
[ 3
      4 -11
       3 -1]
 [ 2
      1
         11
 [ 1
       2 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010363 -0.03004075]
bUpdate: 0.01
iter:763
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
      1 1]
 [ 1
       2 1]
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989839 0.02996526]
bUpdate: -0.01
iter:764
XY_tmp:
         11
[[ 2 1
 [ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02989441 0.03995927]
bUpdate: -0.01
iter:765
\begin{array}{c} XY \underline{\hspace{0.1cm}} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,] \end{array}
 [1 \ 2 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.11567155e-04 -4.87230709e-05]
bUpdate: 0.0
iter:766
XY_tmp:
[[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011154 -0.01004871]
bUpdate: 0.01
```

```
XY_tmp:
[ 3
      4 -1]
      3 -1]
   2
      1
        11
   1
      2
         1]
  1
      3
        1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010752 -0.0200467 ]
bUpdate: 0.01
iter:768
XY_tmp:
[[3 4
      4 -11
 [ 2
      3 -11
 [ 2
      1 1]
   1
      3
        1]
 [ 4
     4 -111
yDatum: 1
yEst: False
wUpdate: [-0.0101055 -0.02004269]
bUpdate: 0.01
iter:769
XY_tmp:
[ 3
     4 -1]
      1
         1]
 Ī 1
      3
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989652 0.02996131]
bUpdate: -0.01
iter:770
XY_tmp:
[[2 1
         1]
 [ 1
     3 1]
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02989254 0.03995532]
bUpdate: -0.01
iter:771
XY_tmp:
[[2 1 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011344 -0.03005267]
bUpdate: 0.01
```

```
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011142 -0.01004666] bUpdate: 0.01
iter:773
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 1]
 [ 1
       2 1]
       3 1
   1
      [4 - 1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.07392769e-04 -4.46491658e-05]
bUpdate: 0.0
iter:774
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
      3 -1
 [ 2
       1 1]
 [ 1
      3 11
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01010737 -0.02004464]
bUpdate: 0.01
iter:775
XY_tmp:
[[2 3 -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
 [ 1
       3 1]
 [4 4 -1]]
vDatum: -1
yEst: False
wUpdate: [0.02989465 0.03995937]
bUpdate: -0.01
iter:776
XY_tmp:
[[2 1 1]
 [1 3 1]
 \begin{bmatrix} \dot{4} & \dot{4} & -1 \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.01988867 0.02995138]
bUpdate: -0.01
iter:777
XY_tmp:
```

```
[[ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011531 -0.01005461] bUpdate: 0.01
iter:778
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011128 -0.0300526 ]
bUpdate: 0.01
iter:779
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
      2
   1
          1]
  1
       3
         1]
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.09261163e-04 -4.65920138e-05]
bUpdate: 0.0
iter:780
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
      2 1
   1
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01010924 -0.03004658]
bUpdate: 0.01
iter:781
XY_tmp:
[[3 \ 4 \ -1]
  2 3 -1]
1 2 1]
4 4 -1]]
 [ 1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02010722 -0.01004057]
bUpdate: 0.01
iter:782
XY_tmp:
[[3 4 -1]
[2 3 -1]
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101032 -0.02003857]
bUpdate: 0.01
iter:783
XY_tmp:
[[2 3 -1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02989882 0.03996544]
bUpdate: -0.01
iter:784
XY_tmp:
[[ 2 3 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.07155145e-04 -4.25506397e-05]
bUpdate: 0.0
iter:785
XY_tmp:
[ 3
     4 -11
      3 -1]
 [ 2
     1
        11
 [ 1
      2 11
   1
      3
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989287 0.02995746]
bUpdate: -0.01
iter:786
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
      2
         1]
      3
 [ 1
        1]]
vDatum: -1
yEst: True
wUpdate: [-1.11112287e-04 -4.85336211e-05]
bUpdate: 0.0
iter:787
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1
      2
        1]
      3
 [ 1
         111
yDatum: -1
```

```
yEst: False
wUpdate: [0.01988891 0.02995148]
bUpdate: -0.01
iter:788
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [1 2 1]
yDatum: 1
yEst: False
wUpdate: [-0.01011507 -0.03005451]
bUpdate: 0.01
iter:789
XY_tmp:
[[3 4 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011304 -0.0100485 ]
bUpdate: 0.01
iter:790
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: -1
yEst: False
wUpdate: [0.02989098 0.03995351]
bUpdate: -0.01
iter:791
XY_tmp:
[[3 4 -1]
 [ 2
     3 -1
 [ 2
     1 1]
   1
      2
        1]
      3 1
   1
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.010115 -0.02005448]
bUpdate: 0.01
iter:792
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
     1 1]
 [ 1
      2
         11
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01011298 -0.03005047]
bUpdate: 0.01
```

```
iter:793
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [1 2 1]
 \begin{bmatrix} \overline{4} & \overline{4} & -\overline{1} \end{bmatrix}
yDatum: -1
yEst: False
wUpdate: [0.01988905 0.02995554]
bUpdate: -0.01
iter:794
XY_tmp:
[[-3 \ 4 \ -1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011493 -0.01005045]
bUpdate: 0.01
iter:795
XY_tmp:
[[-3 4 -1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011091 -0.02004844]
bUpdate: 0.01
iter:796
XY_tmp:
[[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02989111 0.03995557]
bUpdate: -0.01
iter:797
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
 [ 2
       1 1]
      2 1]
3 1]
 [ 1
 [ 1
      \overline{4} - \overline{1}]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.14865687e-04 -5.24257565e-05]
bUpdate: 0.0
iter:798
XY_tmp:
```

```
[[ 3
[ 2
[ 2
      4 -1]
       3 -1]
      1 1]
       2 1]
   1
       3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.14842714e-04 -5.24152713e-05]
bUpdate: 0.0
iter:799
XY_tmp:
[ 3
      4 -11
      3 -1]
 [ 2
      1
         1]
      3 111
 [ 1
yDatum: 1
yEst: False
wUpdate: [-0.01011482 -0.0200524 ]
bUpdate: 0.01
iter:800
XY_tmp:
[[3 4 -1]
[2 1 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.0198872 0.02995161]
bUpdate: -0.01
iter:801
XY_tmp:
[[3 4 -1]
[2 1 1]]
vDatum: 1
yEst: False
wUpdate: [-0.01011677 -0.03005438]
bUpdate: 0.01
iter:802
XY_tmp:
[[\overline{2} \ 1 \ 1]]
vDatum: -1
yEst: True
wUpdate: [-1.14750867e-04 -4.83737515e-05]
bUpdate: 0.0
iter:803
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
   1
           11
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011473 -0.01004836]
bUpdate: 0.01
iter:804
XY_tmp:
[[3 4 -1]
[2 3 -1]
   2
       1 1]
 [ 1
       2 1]
 [ 1
       3 1]]
vDatum: -1
yEst: True
wUpdate: [-1.10704971e-04 -4.63544040e-05]
bUpdate: 0.0
iter:805
XY_tmp:
[[3 4
      4 -1]
 [ 2
      1 1]
       2 1]
 [ 1
 [ 1
      3
         111
yDatum: -1
yEst: False
wUpdate: [0.01988932 0.02995365]
bUpdate: -0.01
iter:806
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 1 1]
 [ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011466 -0.02005234]
bUpdate: 0.01
iter:807
XY_tmp:
[[2 1 1]
 [1 3 1]]
vDatum: -1
yEst: True
wUpdate: [-1.12637762e-04 -4.83253969e-05]
bUpdate: 0.0
iter:808
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: 1
yEst: False
wUpdate: [-0.01011262 -0.03004832]
bUpdate: 0.01
```

```
iter:809
XY_tmp:
[[ 3 4
[ 2 3
      · 4 -11
       3 -11
 [ 2
      1 1]
 [ 1
       2
         1]
      3
 [ 1
         1]
 [ 4
     4 -111
yDatum: 1
yEst: False
wUpdate: [-0.02011059 -0.01004231]
bUpdate: 0.01
iter:810
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.06570593e-04 -4.02976075e-05]
bUpdate: 0.0
iter:811
XY_tmp:
[[ 2 3 -1]
 [ 2 1 1]
[ 1 2 11
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02989345 0.03995971]
bUpdate: -0.01
iter:812
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011253 -0.01004828]
bUpdate: 0.01
iter:813
XY_tmp:
[[<sup>2</sup> 3 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010851 -0.02004627]
bUpdate: 0.01
```

```
iter:814
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010648 -0.03004226]
bUpdate: 0.01
iter:815
XY_tmp:
[ 3 [ 2
      4 -11
      3 -11
      1
        1]
 [ 1
     2 1
 [ 1
      3 1]
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989554 0.02996375]
bUpdate: -0.01
iter:816
XY_tmp:
[ 3
     4 -11
     1 1]
 [ 1
      2 1]
     3
 [ 1
        1]
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989156 0.02995775]
bUpdate: -0.01
iter:817
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [ 1 2 1]
 [1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.12419884e-04 -4.82384266e-05]
bUpdate: 0.0
iter:818
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 1 1]
 [1 2 1]
yDatum: 1
yEst: False
wUpdate: [-0.0101124 -0.03004823]
bUpdate: 0.01
```

```
iter:819
XY_tmp:
[[3 4 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011037 -0.02004222]
bUpdate: 0.01
iter:820
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.02989165 0.03996179]
bUpdate: -0.01
iter:821
4 -1]
      3 -1]
 [ 2
     1 1]
      2 1]
   1
      3
  1
        11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011433 -0.0100462 ]
bUpdate: 0.01
iter:822
XY_tmp:
[ 3
     4 -1]
     3 -1]
     1 11
 [ 1
      3 1]
 [ 4
     4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01011031 -0.02004419]
bUpdate: 0.01
iter:823
XY_tmp:
[ [ 2
     3 -11
 [ 2
     1 1]
 [ 1
      3 1]
 [ 4
     4 -111
yDatum: -1
yEst: False
wUpdate: [0.02989171 0.03995982]
bUpdate: -0.01
```

```
XY_tmp:
     3 -1]
[[ 2
      1 1]
 Ī 1
     3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.14264590e-04 -4.81769309e-05]
bUpdate: 0.0
iter:825
XY_tmp:
[[2 3 -1]
[2 1 1]]
vDatum: 1
yEst: False
wUpdate: [-0.01011424 -0.03004817]
bUpdate: 0.01
iter:826
XY_tmp:
[[2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011222 -0.01004216]
bUpdate: 0.01
iter:827
XY_tmp:
4 -1]
     3 -1]
      1 1]
 [ 1
      2 1]
 [ 1
      3 1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.0198918 0.02995985]
bUpdate: -0.01
iter:828
XY_tmp:
[ [ 3
     4 -1]
 [ 2
      3 -1]
   2
      1 11
   1
      2
         1]
      3
 [ 1
        1]]
yDatum: -1
yEst: True
wUpdate: [-1.12174806e-04 -4.61412007e-05]
bUpdate: 0.0
iter:829
XY_tmp:
[ 2 3 -1]
[ 2 1 1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02988785 0.03995387]
bUpdate: -0.01
iter:830
XY_tmp:
[[2 3 -1]
[1 2 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011813 -0.01005412]
bUpdate: 0.01
iter:831
XY_tmp:
yDatum: -1
yEst: False
wUpdate: [0.01988589 0.02994789]
bUpdate: -0.01
iter:832
XY_tmp:
[[\bar{1} \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011808 -0.0200581 ]
bUpdate: 0.01
iter:833
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
       3
   1
          1]
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011606 -0.03005409] bUpdate: 0.01
iter:834
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [ 2
       1 1]
 [ 1
       2
          1]
 Ī 1
       3
          111
yDatum: -1
```

```
yEst: True
wUpdate: [-1.14036665e-04 -4.80790608e-05]
bUpdate: 0.0
iter:835
XY_tmp:
[[ 2 3
[ 2 1
       3 -1]
      1
          1]
 [ 1
       2
          11
       3
 [ 1
          1]]
yDatum: -1
yEst: True
wUpdate: [-1.14013857e-04 -4.80694450e-05]
bUpdate: 0.0
iter:836
\begin{array}{c} XY \underline{\hspace{0.1cm}} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,] \end{array}
 [1 2 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01988601 0.02995194]
bUpdate: -0.01
iter:837
XY_tmp:
[[1 2 1]
 [1 \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011797 -0.01005405]
bUpdate: 0.01
iter:838
XY_tmp:
[[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011394 -0.02005204]
bUpdate: 0.01
iter:839
XY_tmp:
[ [ 3
      4 -1]
 [ 2
      3 -1]
 [ 2
       1
           11
   1
       2
           11
       3
 [ 1
          11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011192 -0.03004803]
bUpdate: 0.01
```

```
iter:840
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
 [ 1
      2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.09899489e-04 -4.20193954e-05]
bUpdate: 0.0
iter:841
XY_tmp:
[[3 \ 4 \ -1]
 [23-1]
 [ 2 1 1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010988 -0.02004201]
bUpdate: 0.01
iter:842
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02010786 -0.010038 ]
bUpdate: 0.01
iter:843
XY_tmp:
[[2 3 -1]
[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.02989617 0.03996401]
bUpdate: -0.01
iter:844
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01010981 -0.03004399]
bUpdate: 0.01
iter:845
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
2
1
          1]
      1
      2
          1]
 [ 1
      \bar{3} \bar{1}
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01989221 0.02996202]
bUpdate: -0.01
iter:846
XY_tmp:
[ 3
      4 -1]
      3 -1]
 Ī 2
      1 11
  1
      2 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01011177 -0.03004397]
bUpdate: 0.01
iter:847
XY_tmp:
[[2 3 -1]
 [ 2
      1 1]
 \begin{bmatrix} 1 & 2 & 1 \end{bmatrix}
 [44-1]
yDatum: -1
yEst: False
wUpdate: [0.02989025 0.03996204]
bUpdate: -0.01
iter:848
XY_tmp:
        1]
 [1 2 1]
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988427 0.02995404]
bUpdate: -0.01
iter:849
XY_tmp:
[[2 1 1]
 [1 \ 2 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.19702227e-04 -5.19458187e-05]
bUpdate: 0.0
iter:850
XY_tmp:
[[\overline{1} \ 2' \ 1]]
yDatum: 1
```

```
yEst: False
wUpdate: [-0.02011968 -0.01005194]
bUpdate: 0.01
iter:851
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 11
   1
       2 1]
       3
   1
           11
 [ 4
       4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011565 -0.02004993]
bUpdate: 0.01
iter:852
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
[ 2 1 1]
 [ 1
       3 1]
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01011363 -0.02004592]
bUpdate: 0.01
iter:853
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
      1 1]
3 1]]
 Ī 1
yDatum: -1
yEst: True
wUpdate: [-1.11608493e-04 -4.19058744e-05]
bUpdate: 0.0
iter:854
XY_tmp:
[[3 \ 4 \ -1]
 \begin{bmatrix} \bar{2} & \bar{3} & -1 \end{bmatrix}
 \begin{bmatrix} \overline{2} & \overline{1} & \overline{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01011159 -0.0300419 ]
bUpdate: 0.01
iter:855
XY_tmp:
[[3 4 -1]
[2 1 1]]
yDatum: -1
```

```
yEst: False
wUpdate: [0.01989044 0.02996411]
bUpdate: -0.01
iter:856
XY_tmp:
[[3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011354 -0.01004188]
bUpdate: 0.01
iter:857
XY_tmp:
[[3 \ 4 \ -1]
 [2 \ 3 \ -1]
     1 1]
2 1]
3 1]
 [ 2
 [ 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02989048 0.03996013]
bUpdate: -0.01
iter:858
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]
[1 3 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201155 -0.01004787]
bUpdate: 0.01
iter:859
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
 [1 3 1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.01011147 -0.02004586]
bUpdate: 0.01
iter:860
XY_tmp:
[[2 3 -1]
 [1 3 1]
 [44-1]]
vDatum: -1
yEst: False
```

```
wUpdate: [0.02989055 0.03995815]
bUpdate: -0.01
iter:861
XY_tmp:
[[1 3 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988457 0.02995016]
bUpdate: -0.01
iter:862
XY_tmp:
[[1 \ 3 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.19406959e-04 -5.58285034e-05]
bUpdate: 0.0
iter:863
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3 1]
   1
 [ 4
      4 -111
vDatum: 1
yEst: False
wUpdate: [-0.01011938 -0.03005582]
bUpdate: 0.01
iter:864
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1
 [ 1
      2 1
 [ 1
      3
         1]]
yDatum: -1
yEst: True
wUpdate: [-1.17359201e-04 -4.98061742e-05]
bUpdate: 0.0
iter:865
XY_tmp:
[ [ 2
     3 -1]
 \begin{bmatrix} 2 & \overline{1} & \overline{1} \end{bmatrix}
 [ 1
       2
         11
 Î 1 3
         1]]
yDatum: -1
yEst: True
wUpdate: [-1.17335729e-04 -4.97962130e-05]
bUpdate: 0.0
```

```
iter:866
XY_tmp:
[[2 3 -1]
[2 1 1]
 [1 2 1]
yDatum: 1
yEst: False
wUpdate: [-0.01011731 -0.03004979]
bUpdate: 0.01
iter:867
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011529 -0.02004378]
bUpdate: 0.01
iter:868
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: False
wUpdate: [0.01988673 0.02996023]
bUpdate: -0.01
iter:869
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
      1 11
   1
      \overline{2} \overline{1}
       3
 [ 1
         11
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02011724 -0.01004576]
bUpdate: 0.01
iter:870
XY_tmp:
[[ 2 3 -1]
[ 2 1 1]
 [ 1
      2 1]
       3
   1
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988678 0.03995625]
bUpdate: -0.01
```

```
XY_tmp:
[[_2
     3 -1]
 [ 2
      1 1]
 [ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101192 -0.03005174]
bUpdate: 0.01
iter:872
XY_tmp:
[[2 3 -1]
[ 2 1 1]
 [4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011717 -0.02004573]
bUpdate: 0.01
iter:873
XY_tmp:
[[2 1 1]
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988485 0.02995828]
bUpdate: -0.01
iter:874
XY_tmp:
[[2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-1.19126692e-04 -4.77138467e-05]
bUpdate: 0.0
iter:875
XY_tmp:
4 -11
      3 -1]
     1 1]
 [ 1
      2 1]
      3
   1
        1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0201191 -0.0100477]
bUpdate: 0.01
iter:876
XY_tmp:
4 -1]
      3 -1]
1 1]
```

```
[ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011508 -0.02004569]
bUpdate: 0.01
iter:877
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 1 1]
 [ 2 1 1]
[ 1 3 1]
 [44-1]]
vDatum: -1
yEst: False
wUpdate: [0.01988694 0.02995831]
bUpdate: -0.01
iter:878
XY_tmp:
[[3 4 -1]
 [1 3 1]
 [4 4 -1]]
vDatum: 1
yEst: False
wUpdate: [-0.02011703 -0.01004768]
bUpdate: 0.01
iter:879
XY_tmp:
[[3 4 -1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011301 -0.03004567]
bUpdate: 0.01
iter:880
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988901 0.03996034]
bUpdate: -0.01
iter:881
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
       \begin{bmatrix} \bar{2} & \bar{1} \end{bmatrix}
   1
 [ 1
      3 1]
 [ 4
      4 -1]]
vDatum: -1
yEst: True
```

```
wUpdate: [-1.16965213e-04 -4.76506863e-05]
bUpdate: 0.0
iter:882
XY_tmp:
       3 -1]
[[ 2
 [ 2
       1
           11
 [ 1
       2
          11
 [ 1
       3
          11
      4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.02988306 0.03995236]
bUpdate: -0.01
iter:883
XY_tmp:
[[ 2 3 -1]
      1 1]
 [ 1
       2 1]
       \bar{3} \bar{1}
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.22918431e-04 -5.56316279e-05]
bUpdate: 0.0
iter:884
XY_tmp:
[[2 3 -1]
 \begin{bmatrix} \bar{1} & \bar{2} & 1 \end{bmatrix} \begin{bmatrix} 1 & 3 & 1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.02012289 -0.01005562]
bUpdate: 0.01
iter:885
XY_tmp:
yDatum: -1
yEst: False
wUpdate: [0.01988113 0.02994639]
bUpdate: -0.01
iter:886
XY_tmp:
[[\overline{1} \ 2^{\dot{}} \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012285 -0.0300596 ]
bUpdate: 0.01
```

```
XY_tmp:
[ 3
      4 -1]
      3 -11
   2
      1
         11
   1
      2
          1]
   1
      3
         1]
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012082 -0.02005359]
bUpdate: 0.01
iter:888
XY_tmp:
[[3 4
      4 -11
 [ 2
      1
         1]
 [ 1
      2
         1]
   1
      3
          11
  4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.0198812 0.02995042]
bUpdate: -0.01
iter:889
XY_tmp:
[[ 2
      1
          1]
 [ 1
      2
          1]
  1
      3
         1]
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.22773002e-04 -5.55661033e-05]
bUpdate: 0.0
iter:890
XY_tmp:
[[2 1
          1]
 [ 1
      3
         11
 [ 4
     4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01012275 -0.02005555]
bUpdate: 0.01
iter:891
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.20723898e-04 -5.15438791e-05]
bUpdate: 0.0
```

```
XY_tmp:
[[\overline{1} \ 3 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201207 -0.01005153] bUpdate: 0.01
iter:893
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 1]
 [ 1
      2 1]
       3
   1
         1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01011668 -0.03004952]
bUpdate: 0.01
iter:894
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1
 [ 2
      1 1]
 [ 1
      2 1]
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01011465 -0.03004351]
bUpdate: 0.01
iter:895
XY_tmp:
[[3 4 -1]
 [ 2
     3 -1
 [ 2
     1 1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-1.12629348e-04 -3.75046563e-05]
bUpdate: 0.0
iter:896
XY_tmp:
[[2 \ 3 \ -1]
 [2 1 1]
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.02988739 0.0399625 ]
bUpdate: -0.01
iter:897
XY_tmp:
```

```
[[2 1 1]
[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01988142 0.02995451]
bUpdate: -0.01
iter:898
XY_tmp:
[[\overline{1} \ 2 \ 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012256 -0.01005148]
bUpdate: 0.01
iter:899
XY_tmp:
[ 3
      4 -11
      3 -11
 [ 2
      1 1]
      2
   1
          11
  1
       3
         1]
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011854 -0.02004947]
bUpdate: 0.01
iter:900
XY_tmp:
[[2 3 -1]
[2 1 1]
      2 1]
3 1]
 [ 1
   1
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988349 0.03995454]
bUpdate: -0.01
iter:901
XY_tmp:
[[2 3 -1]
     1 1]
2 1]
4 -1]]
 [ 2
 [ 1
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01012249 -0.03005345]
bUpdate: 0.01
iter:902
XY_tmp:
[[2 3 -1]
[ 1 2 1]
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012046 -0.01004744]
bUpdate: 0.01
iter:903
XY_tmp:
[[ 2 3 -1]
[ 1 2 1]]
yDatum: -1
yEst: True
wUpdate: [-1.16440471e-04 -4.54310974e-05]
bUpdate: 0.0
iter:904
XY_tmp:
[[1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.01988358 0.02995458]
bUpdate: -0.01
iter:905
XY_tmp:
[[ 3 4
[ 2 3
     4 -11
      3 -1]
 [ 2
      1
         11
 [ 1
      2 11
         1]
   1
      3
     4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01012039 -0.02005141]
bUpdate: 0.01
iter:906
XY_tmp:
[[2 \ 3 \ -1]
 [ 2
     1 1]
   1
      2
         1]
 [ 1
      3
         1]
 [4 4 - 1]]
vDatum: -1
yEst: False
wUpdate: [0.02988163 0.0399526 ]
bUpdate: -0.01
iter:907
XY_{tmp}: [ 2 1
          11
      1
 [ 1
      2
         1]
      3
 [ 1
         1]
     4 -1]]
 [ 4
yDatum: -1
```

```
yEst: False
wUpdate: [0.01987565 0.02994461]
bUpdate: -0.01
iter:908
XY_tmp:
[[2 1
[1 2
           1]
         1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012832 -0.03006138]
bUpdate: 0.01
iter:909
XY_tmp:
[[2 1 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0101263 -0.02005537]
bUpdate: 0.01
iter:910
\begin{array}{c} XY \underline{\quad} tmp: \\ [\,[\,\overline{2}\ 1\ 1\,]\,] \end{array}
yDatum: -1
yEst: True
wUpdate: [-1.24270354e-04 -5.13587346e-05]
bUpdate: 0.0
iter:911
XY_tmp:
[[3 4 -1]
 [ 2
      3 -1
 [ 2
      1 1]
   1
       2
          11
       3
   1
          11
 [ 4
       4 -111
yDatum: 1
yEst: False
wUpdate: [-0.02012425 -0.01005135]
bUpdate: 0.01
iter:912
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
   1
       2
          1]
       3
 [ 1
          1]]
yDatum: -1
yEst: True
wUpdate: [-1.20220651e-04 -4.93381932e-05]
bUpdate: 0.0
```

```
iter:913
XY_tmp:
[[ 2 3 -1]
[ 2 1 1]
 [ 1
       2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.0298798 0.03995067]
bUpdate: -0.01
iter:914
XY_tmp:
[[2 \ 3 \ -1]
 \begin{bmatrix} \bar{2} & \bar{1} & 1 \end{bmatrix}
 \begin{bmatrix} \bar{1} & \bar{3} & \bar{1} \end{bmatrix}
vDatum: 1
yEst: False
wUpdate: [-0.01012617 -0.02005732]
bUpdate: 0.01
iter:915
XY_tmp:
[[2 3 -1]
[2 1 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012415 -0.03005331]
bUpdate: 0.01
iter:916
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012212 -0.0100473 ]
bUpdate: 0.01
iter:917
XY_tmp:
[[3 \ 4 \ -1]
   2
      3 -1
 [ 2
       1 1]
       2 1]
3 1]
 [ 1
 [ 1
      \overline{4} - \overline{1}]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.0198819 0.02995471]
bUpdate: -0.01
iter:918
XY_tmp:
```

```
[[ 3
[ 2
[ 2
       4 -1]
       3 -1]
      1 1]
   1
       3 1
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.01012207 -0.02005128]
bUpdate: 0.01
iter:919
XY_tmp:
[ [ 3
      4 -11
 [ 2
      3 -1]
 [ 2
       1 1]
 Ī 1
      3 111
yDatum: -1
yEst: True
wUpdate: [-1.20050045e-04 -4.72675626e-05]
bUpdate: 0.0
iter:920
XY_tmp:
[[3 4 -1]
[2 1 1]
 [1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01987997 0.02995274]
bUpdate: -0.01
iter:921
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.24002029e-04 -5.32486575e-05]
bUpdate: 0.0
iter:922
XY_tmp:
[[\overline{2} \ 1 \ 1]]
vDatum: 1
yEst: False
wUpdate: [-0.01012398 -0.03005324]
bUpdate: 0.01
iter:923
XY_tmp:

[[ 3  4 -1]

[ 2  3 -1]

[ 2  1  1]

[ 1  2  1]
       23
   1
           11
```

```
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012195 -0.01004723]
bUpdate: 0.01
iter:924
XY_tmp:
[[3 4 -1]
[2 3 -1]
  2
      1 1]
 [ 1
      2 1]
 [ 1
      3 1]]
vDatum: -1
yEst: True
wUpdate: [-1.17928043e-04 -4.52179147e-05]
bUpdate: 0.0
iter:925
XY_tmp:
[[3 4
     4 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
      2 1]
 [ 1
 1 3
         111
yDatum: -1
yEst: False
wUpdate: [0.0198821 0.02995479]
bUpdate: -0.01
iter:926
XY_tmp:
[[-3 4 -1]
 [ 1 2 1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012188 -0.0100512 ]
bUpdate: 0.01
iter:927
XY_tmp:
[[3 \ 4 \ -1]
 [1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011786 -0.02004919]
bUpdate: 0.01
iter:928
XY_tmp:
[[ 3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011583 -0.03004518]
bUpdate: 0.01
```

```
iter:929
XY_tmp:
[[ 3 4
[ 2 3
      4 -11
       3 -11
 [ 2
      1 1]
       2 1]
 [ 1
      3 1]
 [ 1
 [44-1]]
yDatum: -1
yEst: False
wUpdate: [0.02988619 0.03996083]
bUpdate: -0.01
iter:930
XY_tmp:
[[2 3 -1]
 [ 2
       1 1]
 \begin{bmatrix} 1 & 2 & 1 \\ 1 & 3 & 1 \end{bmatrix}
 [ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988021 0.03995284] bUpdate: -0.01
iter:931
XY_tmp:
[[2 3 -1]
 [ 2 1 1]
[ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012576 -0.03005515]
bUpdate: 0.01
iter:932
XY_tmp:
[[2 3 -1]
[1 2 1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012374 -0.01004914] bUpdate: 0.01
iter:933
XY_tmp:
[[1 2 1]
[4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988029 0.02995287]
bUpdate: -0.01
```

```
iter:934
XY_tmp:
[[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012369 -0.02005312]
bUpdate: 0.01
iter:935
XY_tmp:
[ 3 [ 2
      4 -11
       3 -11
       1
         1]
 [ 1
      2 1
 [ 1
       3 1]
      4 -1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.21664463e-04 -4.91125384e-05]
bUpdate: 0.0
iter:936
XY_tmp:
[ 3
      4 -1]
      3 -1]
 [ 2
       1 11
       2
 [ 1
         1]
      \bar{3} \bar{1}
 Ī 1
yDatum: -1
yEst: True
wUpdate: [-1.21640130e-04 -4.91027159e-05]
bUpdate: 0.0
iter:937
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
 [ 1
      2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012162 -0.03004909]
bUpdate: 0.01
iter:938
XY_tmp:
[[-2 3 -1]
 \begin{bmatrix} 2 & 1 & 1 \end{bmatrix}
[ 1 2 1]]
yDatum: -1
yEst: False
wUpdate: [0.02988041 0.03995692]
bUpdate: -0.01
```

```
iter:939
XY_tmp:
[[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012557 -0.01005107]
bUpdate: 0.01
iter:940
XY_tmp:
[[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012154 -0.02004906]
bUpdate: 0.01
iter:941
4 -1]
     3 -1]
 [ 2
     1 1]
     2 1]
3 1]
 [ 1
  1
 [ 4
     4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988048 0.02995495]
bUpdate: -0.01
iter:942
XY_tmp:
[[ 2 3
      3 -11
 [ 2
      1
        1]
 [ 1
      2
        11
 [ 1
      3 1]
 [ 4
     4 -1]]
vDatum: -1
yEst: False
wUpdate: [0.02987651 0.03994895]
bUpdate: -0.01
iter:943
XY_tmp:
[[2 1]
         11
 [ 1
      2 1]
 [ 1
      3
        1]
     4 -1]]
 [ 4
yDatum: -1
yEst: False
wUpdate: [0.01987053 0.02994096]
bUpdate: -0.01
```

iter:944

```
XY_tmp:
[[\overline{2} \ 1] \ 1]
 [1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.33443642e-04 -6.50234054e-05]
bUpdate: 0.0
iter:945
XY_tmp:
[[2 1 1]
[1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01013342 -0.02006501]
bUpdate: 0.01
iter:946
\begin{array}{c} XY \underline{\quad} tmp: \\ \left[ \begin{bmatrix} \overline{2} & 1 & 1 \end{bmatrix} \right] \end{array}
yDatum: 1
yEst: False
wUpdate: [-0.01013139 -0.030061 ]
bUpdate: 0.01
iter:947
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
 [ 1
        2
           1]
 [ 1
        3 1]
       4 -111
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.02012936 -0.01005499]
bUpdate: 0.01
iter:948
XY_tmp:
[[3 4 -1]
[2 3 -1]
   2
        1 1]
       \overline{2} \overline{1}
   1
 [ 4
        4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01012534 -0.03005297]
bUpdate: 0.01
iter:949
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
```

```
[ 1 2 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012331 -0.01004696] bUpdate: 0.01
iter:950
XY_tmp:
[[3 4 -1]
[2 3 -1]
[4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011929 -0.02004495]
bUpdate: 0.01
iter:951
XY_tmp:
[[ 3 '4 -1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988274 0.02995905]
bUpdate: -0.01
iter:952
XY_tmp:
[[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.02987876 0.03995306]
bUpdate: -0.01
iter:953
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
       2 1]
3 1]
 [ 1
   1
 [ 4
      4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.27216830e-04 -5.49276473e-05]
bUpdate: 0.0
iter:954
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 1 1]
         1]
 [ 1
      2
         1]
 [ 1
       3 1]
      4 -1]]
 [ 4
yDatum: -1
```

```
yEst: False
wUpdate: [0.01987281 0.02994508]
bUpdate: -0.01
iter:955
XY_tmp:
[[ 3 4 -1]
[ 1 2 1]
     3 1
 [ 1
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.02013117 -0.01006091]
bUpdate: 0.01
iter:956
XY_tmp:
[[1 2
         11
 [1 3 1]
 [4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.27139715e-04 -5.88934973e-05]
bUpdate: 0.0
iter:957
XY_tmp:
[[ 1 3 1]
 [44-1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012711 -0.02005888]
bUpdate: 0.01
iter:958
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012509 -0.03005487]
bUpdate: 0.01
iter:959
XY_tmp:
[ [ 3
     4 -11
 [ 2
     3 -1]
 [ 2
      1
         11
  1
      2
        11
      3
 [ 1
        11
 [ 4
     4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.23063846e-04 -4.88589683e-05]
bUpdate: 0.0
```

```
iter:960
XY_tmp:
[[3 4 -1]
[2 3 -1]
 [ 2
      1 1]
 [ 1
       2 1]
      3 1]]
 [ 1
yDatum: -1
yEst: True
wUpdate: [-1.23039234e-04 -4.88491965e-05]
bUpdate: 0.0
iter:961
XY_tmp:
[[3 \ 4 \ -1]
 [2 3 - 1]
 \begin{bmatrix} 1 & 2 & 1 \\ 1 & 3 & 1 \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.02012301 -0.01004884]
bUpdate: 0.01
iter:962
XY_tmp:
[[3 4 -1]
[2 3 -1]
[1 2 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011899 -0.03004683]
bUpdate: 0.01
iter:963
XY_tmp:
[[3 4 -1]
[ 2 3 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01011697 -0.02004082]
bUpdate: 0.01
iter:964
XY_tmp:
[[ 3 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01988506 0.02996319]
bUpdate: -0.01
iter:965
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
```

```
2
1
           1]
       1
       2
          1]
 [ 1
       \bar{3} \bar{1}
 [ 4
      4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988108 0.0399572 ]
bUpdate: -0.01
iter:966
XY_tmp:
[ 3 [ 2 [ 1
      4 -1]
      3 -1]
       2 1]
3 1]
   1
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0201249 -0.0100508]
bUpdate: 0.01
iter:967
XY_tmp:
[[3 4 -1]
[2 3 -1]
       3 -1]
 [ 1 2 1]
 [4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012087 -0.03004879]
bUpdate: 0.01
iter:968
XY_tmp:
[[ 2 3 -1]
[ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02988115 0.03995722]
bUpdate: -0.01
iter:969
XY_tmp:
[[ 1 2 1]
[ 4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.01987518 0.02994923]
bUpdate: -0.01
iter:970
XY_tmp:
[[\overline{1} \ 2' \ 1]]
yDatum: -1
```

```
yEst: True
wUpdate: [-1.28798172e-04 -5.67575801e-05]
bUpdate: 0.0
iter:971
XY_tmp:
[[ 3 4
[ 2 3
     4 -1]
     3 -1]
 [ 2
     1 11
        1]
   1
      2
      3
   1
         11
 [ 4
      4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012877 -0.02005675]
bUpdate: 0.01
iter:972
XY_tmp:
[ 3 [ 2
     4 -11
      3 -1]
     1
        1]
 [ 1
      2 1]
 [ 1
      3
         111
yDatum: -1
yEst: True
wUpdate: [-1.26746658e-04 -5.27348793e-05]
bUpdate: 0.0
iter:973
XY_tmp:
[ 3
     4 -1]
      3 -1]
 [ 2
      1 1]
 [ 1
     3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012672 -0.02005272]
bUpdate: 0.01
iter:974
XY_tmp:
[[3 \ 4 \ -1]
 [ 2 3 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201247 -0.01004871]
bUpdate: 0.01
iter:975
XY_tmp:
[ 2 3 -1]
[ 1 3 1]]
yDatum: -1
```

```
yEst: False
wUpdate: [0.02987933 0.0399533 ]
bUpdate: -0.01
iter:976
XY_tmp:
[[1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01987335 0.02994531]
bUpdate: -0.01
iter:977
XY_tmp:
[[3 \ 4 \ -1]
 [ 2
     3 -1]
 [ 2
      1 1]
 [ 1
      2 1]
      3 1
 [ 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01013062 -0.03006068]
bUpdate: 0.01
iter:978
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 2 3 -1]
      2 1]
3 1]
 [ 1
  1
      4 -1]]
 [ 4
yDatum: 1
yEst: False
wUpdate: [-0.0201286 -0.01005467]
bUpdate: 0.01
iter:979
XY_tmp:
[[<sup>3</sup> 4 -1]
[ 1 2 1]
 [ 1
      3 1]
 [44-1]]
vDatum: -1
yEst: False
wUpdate: [0.01987543 0.02994734]
bUpdate: -0.01
iter:980
XY_tmp:
[[3 4 -1]
 [1 3 1]
 [4 4 -1]]
vDatum: 1
yEst: False
```

```
wUpdate: [-0.01012854 -0.02005865]
bUpdate: 0.01
iter:981
XY_tmp:
[[1 3 1]
[4 4 -1]]
yDatum: -1
yEst: True
wUpdate: [-1.26519095e-04 -5.46384317e-05]
bUpdate: 0.0
iter:982
XY_tmp:
[[1 \ 3 \ 1]]
yDatum: -1
yEst: True
wUpdate: [-1.26493791e-04 -5.46275041e-05]
bUpdate: 0.0
iter:983
XY_tmp:
[[3 4 -1]
[2 3 -1]
      1 11
 [ 1
       2 1]
       3 1]
   1
 [ 4
      4 -111
yDatum: 1
yEst: False
wUpdate: [-0.01012647 -0.03005462]
bUpdate: 0.01
iter:984
XY_tmp:
[[3 4 -1]
[ 2 3 -1]
 [ 2
      1 1]
      3 1
 [ 1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012444 -0.02004861]
bUpdate: 0.01
iter:985
XY_tmp:
[[3 \ 4 \ -1]
 [2 \ 3 \ -1]
 [ 2
     1 1]
 \begin{bmatrix} 4 & \overline{4} & -\overline{1} \end{bmatrix}
yDatum: 1
yEst: False
wUpdate: [-0.01012242 -0.0300446 ]
bUpdate: 0.01
```

```
iter:986
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
 [44-1]
yDatum: -1
yEst: False
wUpdate: [0.01987961 0.02996141]
bUpdate: -0.01
iter:987
XY_tmp:
[[3 4 -1]
 [2 1 1]]
yDatum: -1
yEst: True
wUpdate: [-1.24369747e-04 -4.45792975e-05]
bUpdate: 0.0
iter:988
XY_tmp:
[[ 3 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.02012434 -0.01004457]
bUpdate: 0.01
iter:989
XY_tmp:
[ 2 [ 2
     4 -1]
      3 -1]
      1 11
  1
      2 1]
      3 1
 [ 1
 [4 4 -1]]
yDatum: -1
yEst: False
wUpdate: [0.02987968 0.03995744]
bUpdate: -0.01
iter:990
XY_tmp:
[[ 3 4 -1]
[ 2 3 -1]
 [ 1
      2 1]
      3 1]
   1
 [ 4
     4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201263 -0.01005055] bUpdate: 0.01
```

iter:991

```
XY_tmp:
[ [ 3
       4 -1]
 \begin{bmatrix} \overline{2} & \overline{3} & \overline{1} \end{bmatrix}
 [ 1 3 1]
[ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012227 -0.02004854]
bUpdate: 0.01
iter:992
XY_tmp:
[[3 4 -1] [ 1 3 1]
 [4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.01987975 0.02995547]
bUpdate: -0.01
iter:993
XY_tmp:
[[-3 \ 4 \ -1]
 [ 4 4 -1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012422 -0.03005052]
bUpdate: 0.01
iter:994
XY_{tmp}: [[4 \ 4 \ -1]]
yDatum: -1
yEst: False
wUpdate: [0.0298778 0.03995549]
bUpdate: -0.01
iter:995
XY_tmp:
4 -11
       3 -1]
      1 1]
 [ 1
      2 1]
       3 1
   1
      [4 - 1]]
 [ 4
yDatum: -1
yEst: True
wUpdate: [-1.28172894e-04 -5.25052218e-05]
bUpdate: 0.0
iter:996
XY_tmp:
[[3 4 -1]
[2 3 -1]
[2 1 1]
```

```
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: True
wUpdate: [-1.28147260e-04 -5.24947208e-05]
bUpdate: 0.0
iter:997
XY_tmp:
[[ 3 4 -1]
[ 2 1 1]
[ 1 2 1]
[ 1 3 1]]
yDatum: -1
yEst: False
wUpdate: [0.01987188 0.02994752]
bUpdate: -0.01
iter:998
XY_tmp:
[[ 3 4 -1]
[ 1 2 1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.0201321 -0.01005847]
bUpdate: 0.01
iter:999
XY_tmp:
[[ 3 4 -1]
[ 1 3 1]]
yDatum: 1
yEst: False
wUpdate: [-0.01012807 -0.02005646]
bUpdate: 0.01
```