

list3

hw7\_gen3

np =  
20

n =  
60

n0 =  
6

r =  
54

u =  
7

s =  
1

c =  
60

xyzt =

|        |        |        |
|--------|--------|--------|
| 1921.8 | 726.42 | 591.72 |
| 1900.9 | 710.91 | 513.92 |
| 1981.7 | 722.3  | 594.19 |
| 1916.8 | 713.28 | 534.13 |
| 1937.1 | 748.77 | 548.13 |
| 1894.5 | 727.97 | 562.49 |
| 1884.1 | 737.68 | 587.2  |
| 1974.5 | 743.46 | 573.27 |
| 1953.7 | 758.52 | 583.77 |
| 1934.4 | 737.78 | 514.21 |
| 1909.8 | 740.96 | 579.2  |
| 1921.2 | 723.9  | 603.46 |
| 1900.8 | 699.6  | 576.08 |
| 1965.6 | 748.58 | 517.63 |
| 1971.5 | 740.57 | 539.16 |
| 1893.2 | 693.93 | 597.76 |
| 1946.1 | 733.84 | 564.51 |
| 1879.5 | 733.88 | 526.25 |
| 1906.1 | 721.64 | 570.36 |
| 1937.6 | 722.85 | 572.78 |

ans =

|        |        |        |
|--------|--------|--------|
| 588.23 | 2041.7 | 126.29 |
| 510.43 | 2017.2 | 117.65 |
| 590.7  | 2097.7 | 104.65 |
| 530.64 | 2033   | 115.23 |
| 544.64 | 2062.9 | 143.12 |
| 559    | 2016.1 | 135.85 |
| 583.71 | 2009   | 148.2  |
| 569.78 | 2097.1 | 126.99 |
| 580.28 | 2081.7 | 147.53 |
| 510.72 | 2057.1 | 133.4  |
| 575.71 | 2034.6 | 143.71 |
| 599.97 | 2040.4 | 124.06 |
| 572.59 | 2013.7 | 106.87 |
| 514.14 | 2090.1 | 134.51 |
| 535.67 | 2093.4 | 125.11 |
| 594.27 | 2004.7 | 103.73 |
| 561.02 | 2067.2 | 126.18 |
| 522.76 | 2003.5 | 145.93 |
| 566.87 | 2025.3 | 126.37 |
| 569.29 | 2055.7 | 118.21 |

B =

|         |        |         |         |    |    |    |
|---------|--------|---------|---------|----|----|----|
| 2930.3  | 902.94 | 1887.6  | -2270.9 | -1 | 0  | 0  |
| -902.94 | 2930.3 | -2270.9 | -1887.6 | 0  | -1 | 0  |
| -1887.6 | 2270.9 | 2930.3  | 902.94  | 0  | 0  | -1 |
| 2829.5  | 980.73 | 1919.8  | -2172.5 | -1 | 0  | 0  |
| -980.73 | 2829.5 | -2172.5 | -1919.8 | 0  | -1 | 0  |
| -1919.8 | 2172.5 | 2829.5  | 980.73  | 0  | 0  | -1 |
| 2977.6  | 971.42 | 1930.1  | -2346.5 | -1 | 0  | 0  |
| -971.42 | 2977.6 | -2346.5 | -1930.1 | 0  | -1 | 0  |
| -1930.1 | 2346.5 | 2977.6  | 971.42  | 0  | 0  | -1 |
| 2862.5  | 973.72 | 1918.2  | -2211.5 | -1 | 0  | 0  |
| -973.72 | 2862.5 | -2211.5 | -1918.2 | 0  | -1 | 0  |
| -1918.2 | 2211.5 | 2862.5  | 973.72  | 0  | 0  | -1 |
| 2932.3  | 951.6  | 1963    | -2221.1 | -1 | 0  | 0  |
| -951.6  | 2932.3 | -2221.1 | -1963   | 0  | -1 | 0  |
| -1963   | 2221.1 | 2932.3  | 951.6   | 0  | 0  | -1 |
| 2884.7  | 904.04 | 1892.1  | -2205.2 | -1 | 0  | 0  |
| -904.04 | 2884.7 | -2205.2 | -1892.1 | 0  | -1 | 0  |
| -1892.1 | 2205.2 | 2884.7  | 904.04  | 0  | 0  | -1 |
| 2908    | 856.08 | 1873.3  | -2212.7 | -1 | 0  | 0  |
| -856.08 | 2908   | -2212.7 | -1873.3 | 0  | -1 | 0  |
| -1873.3 | 2212.7 | 2908    | 856.08  | 0  | 0  | -1 |

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list3
2978.5      969.73      1966.1      -2297.1      -1      0      0
-969.73     2978.5      -2297.1     -1966.1      0      -1      0
-1966.1     2297.1      2978.5      969.73      0      0      -1
2987.4      921.79      1957.1      -2272.2     -1      0      0
-921.79     2987.4      -2272.2     -1957.1      0      -1      0
-1957.1     2272.2      2987.4      921.79      0      0      -1
2888.9      996.32      1977.6      -2189.3     -1      0      0
-996.32     2888.9      -2189.3     -1977.6      0      -1      0
-1977.6     2189.3      2888.9      996.32      0      0      -1
2926.6      891.73      1905.1      -2230.9     -1      0      0
-891.73     2926.6      -2230.9     -1905.1      0      -1      0
-1905.1     2230.9      2926.6      891.73      0      0      -1
2936.7      890.96      1874.2      -2285.5     -1      0      0
-890.96     2936.7      -2285.5     -1874.2      0      -1      0
-1874.2     2285.5      2936.7      890.96      0      0      -1
2868.5      919.05      1853.4      -2251.5     -1      0      0
-919.05     2868.5      -2251.5     -1853.4      0      -1      0
-1853.4     2251.5      2868.5      919.05      0      0      -1
2930.3      1018.9      2012.5      -2220.2     -1      0      0
-1018.9     2930.3      -2220.2     -2012.5      0      -1      0
-2012.5     2220.2      2930.3      1018.9      0      0      -1
2944         1007.6      1989.8      -2257.8     -1      0      0
-1007.6     2944        -2257.8     -1989.8      0      -1      0
-1989.8     2257.8      2944        1007.6      0      0      -1
2873.8      890.3       1822.1      -2271.6     -1      0      0
-890.3      2873.8     -2271.6     -1822.1      0      -1      0
-1822.1     2271.6     2873.8      890.3       0      0      -1
2936.3      955.49     1939.5      -2262.4     -1      0      0
-955.49     2936.3     -2262.4     -1939.5      0      -1      0
-1939.5     2262.4     2936.3      955.49     0      0      -1
2848.6      923.49     1917.6      -2142.3     -1      0      0
-923.49     2848.6     -2142.3     -1917.6      0      -1      0
-1917.6     2142.3     2848.6      923.49     0      0      -1
2893.7      913.41     1887.7      -2232.8     -1      0      0
-913.41     2893.7     -2232.8     -1887.7      0      -1      0
-1887.7     2232.8     2893.7      913.41     0      0      -1
2923.4      945.37     1912.8      -2271       -1      0      0
-945.37     2923.4     -2271       -1912.8      0      -1      0
-1912.8     2271       2923.4     945.37      0      0      -1

```

```

ft =
Columns 1 through 7
-0.18745 -39.456 39.185 1.05 -38.824 38.741 -0.33649
Columns 8 through 14
-40.607 40.342 0.69318 -39.187 39.055 1.087 -39.623
Columns 15 through 21
39.567 0.42533 -38.848 38.663 0.12988 -38.724 38.487
Columns 22 through 28
0.47921 -40.412 40.276 0.56807 -40.048 39.917 1.5434
Columns 29 through 35
-39.471 39.486 0.33395 -39.193 39.003 -0.46514 -39.478
Columns 36 through 42
39.163 -0.3838 -39.004 38.69 1.6705 -40.078 40.13
Columns 43 through 49
1.0939 -40.254 40.215 -0.91368 -38.921 38.517 0.47827
Columns 50 through 56
-39.842 39.691 1.2539 -38.455 38.396 0.14613 -39.092
Columns 57 through 60
38.867 0.11 -39.701 39.486

```

```

parameter corrections
ans =
0.00033001 0.00076358 0.010377 0.0089901 1.0144 0.85646 0.45752
condMx =
5.786e+13

```

```

parameter corrections
ans =
5.9514e-05 9.0545e-05 1.2241e-05 -2.2754e-05 0.72573 0.1734 0.032427
condMx =
5.7882e+13

```

```

parameter corrections
ans =
2.5529e-09 4.4915e-09 -1.8577e-09 1.965e-09 -1.6837e-05 -5.7272e-06 6.3962e-07
condMx =
5.786e+13

```

```

parameter corrections
ans =
2.9026e-17 -1.2113e-16 -3.0282e-16 -3.2299e-16 -1.8302e-13 7.0236e-13 -1.4248e-12
condMx =
5.786e+13

```

```

we have converged

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list3

7 parameters

ans =  
-0.41961      -0.56915      -0.41961      0.56915

ans =  
8.7401          2.0298          3.4899

residuals

v =

-1.6829e-05  
-2.8713e-06  
1.3655e-05  
5.2908e-07  
1.0425e-05  
5.6731e-06  
-3.1128e-06  
4.1591e-06  
4.1534e-06  
8.9912e-06  
1.5419e-05  
-2.0299e-06  
-1.524e-05  
8.7974e-08  
-1.61e-05  
-1.2006e-06  
7.6453e-06  
-1.1587e-05  
-4.7021e-06  
-3.6086e-06  
6.7557e-06  
-7.9879e-07  
-7.6277e-06  
-8.9198e-06  
1.6056e-05  
5.0238e-06  
-3.442e-06  
3.8875e-06  
-1.1523e-05  
-7.6558e-06  
9.8988e-06  
7.5374e-06  
6.211e-06  
-1.2387e-06  
1.0367e-05  
1.528e-06  
-1.3134e-05  
-1.1988e-05  
4.1317e-06  
-6.677e-06  
2.3022e-06  
3.2216e-06  
-8.362e-06  
-4.0573e-07  
1.5908e-05  
1.0671e-05  
-1.7136e-05  
8.7723e-06  
1.4961e-06  
-4.2863e-06  
-4.7081e-06  
1.1214e-05  
1.2204e-06  
-8.4792e-06  
3.3072e-06  
2.3549e-07  
2.2448e-06  
5.2438e-06  
-4.9754e-06  
-9.3322e-06

diary off