Norm of First-order

Iteration Func-count f(x) step optimality

0 117 36262.9 2.41e+09

1 234 12077.6 5.35207 2.68e+08

2 351 4023.59 3.7019 2.98e+07

3 468 1346.62 2.29474 3.34e+06

4 585 448.758 0.000465875 3.71e+05

5 702 149.537 0.00139685 4.12e+04

6 819 49.7264 1.15272 4.57e+03

7 936 16.569 0.543326 511

8 1053 5.52598 0.332158 57.2

9 1170 1.85043 0.231016 6.46

10 1287 0.628354 0.335311 0.741

11 1404 0.222825 0.907894 0.0873

12 1521 0.0889796 2.26256 0.0108

13 1638 0.0459999 4.288 0.00142

14 1755 0.0341636 4.81265 0.00017

15 1872 0.0323884 2.53818 9.12e-06

16 1989 0.0323295 0.505047 4.04e-08

Local minimum found.

Optimization completed because the size of the gradient is less than

the default value of the function tolerance.

<stopping criteria details>

Optimization completed: The first-order optimality measure, 4.035114e-08,

is less than options.TolFun = 1.000000e-06.

Optimization Metric Options

relative first-order optimality = 4.04e-08 TolFun = 1e-06 (default)

load('k\_2\_5percNoisedata.mat','k\_noisy'); % load k\_noisy data

[h\_hat,resnorm2] = lsqnonlin(@objective, h\_guess+1e-5, zeros(N,1),repmat(12,[N,1]),options);