```
Error=(X_analytical_heat-X_heat)
```

```
Error = 5000×70
         0         0         0         0         0         0         0         0 ···
         0   -0.0032   -0.0062   -0.0087   -0.0107   -0.0119   -0.0124   -0.0120
         0   -0.0062   -0.0120   -0.0170   -0.0209   -0.0233   -0.0242   -0.0235
         0   -0.0091   -0.0176   -0.0249   -0.0306   -0.0342   -0.0355   -0.0345
         0   -0.0119   -0.0229   -0.0325   -0.0398   -0.0445   -0.0462   -0.0450
         0   -0.0145   -0.0280   -0.0396   -0.0486   -0.0543   -0.0565   -0.0550
         0   -0.0170   -0.0328   -0.0464   -0.0570   -0.0637   -0.0663   -0.0645
         0   -0.0193   -0.0374   -0.0529   -0.0649   -0.0726   -0.0756   -0.0736
         0   -0.0216   -0.0417   -0.0591   -0.0725   -0.0811   -0.0844   -0.0823
         0   -0.0237   -0.0459   -0.0649   -0.0797   -0.0892   -0.0928   -0.0905
    ⋮
```

```
surf(x_vals_heat,t_vals_heat(1:800),Error(1:800,:),"LineStyle","none","FaceColor","flat")
```