
```

numDataPoints = 10 ;
[t, data] = serial_reader(numDataPoints) ;
disp('Time')
disp(t)
disp( 'Data' )
disp(data)

T0 = 298.15 ;
T_room = 23.6+273.15 ;
B = 3950 ;
R0 = 10000 ;
%T = 1/( (1/T0) + (1/B)*ln(R/R0) )
resistance = data(:,1) ;
R = mean(resistance) ; %resistance average
som = -(B*T0^2)/(R*(B+T0)*log(R/R0)^2) ; %sensitivity of measurement
temp = data(:,2) ; %temp in celcius
T_meas = mean(temp) ; %average measured temp in C
offset = T_meas - T_room ; %Temperature offset
inaccuracy = offset/T_room ;
T_max = 125 ;
T_min = -55 ;
intervals = 1024 ;
resolution = (T_max-T_min)/intervals ;

```

```

Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Reading Serial Data
Time

```

```

    0.9916
    1.9968
    3.0083
    4.0009
    5.0104
    6.0005
    7.0045
    8.0129
    9.0095
   10.0154

```

```
Data
```

```

    1.0e+04 *

    1.0542    0.0297
    1.0542    0.0297
    1.0583    0.0297

```

1.0625	0.0297
1.0583	0.0297
1.0625	0.0297
1.0625	0.0297
1.0625	0.0297
1.0667	0.0297
1.0625	0.0297

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