

```
clear;
close all;
clc;

ChinID=277;
```

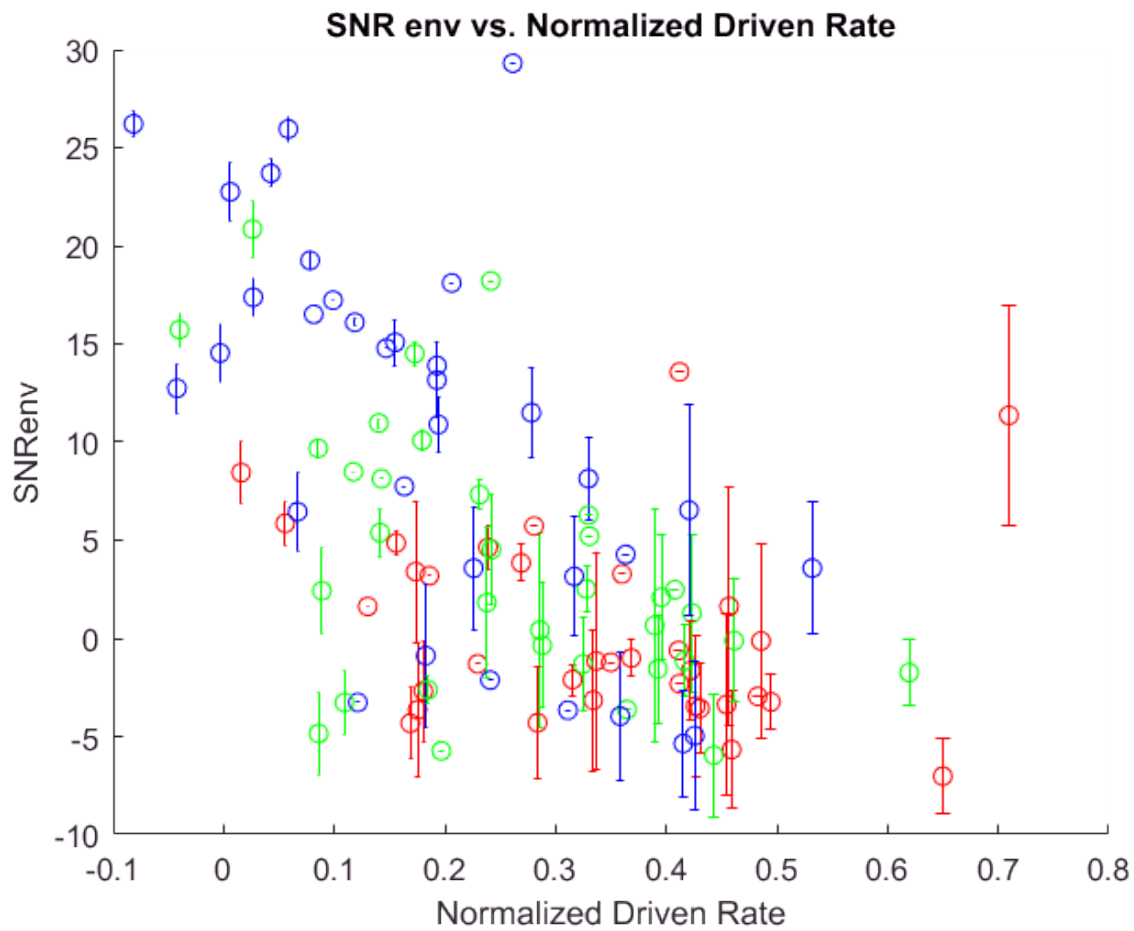
#### Load Data

```
DataRepo='R:\Users\Satya\SP\Codes\SNRenv-OUTPUT\DataAnal\';
dirName=dir([DataRepo '*' num2str(ChinID) '*']);

load([DataRepo dirName(end).name '\SummaryVar.mat']);
SNRcolor='rgb';
SNRs=[-6 0 6];
```

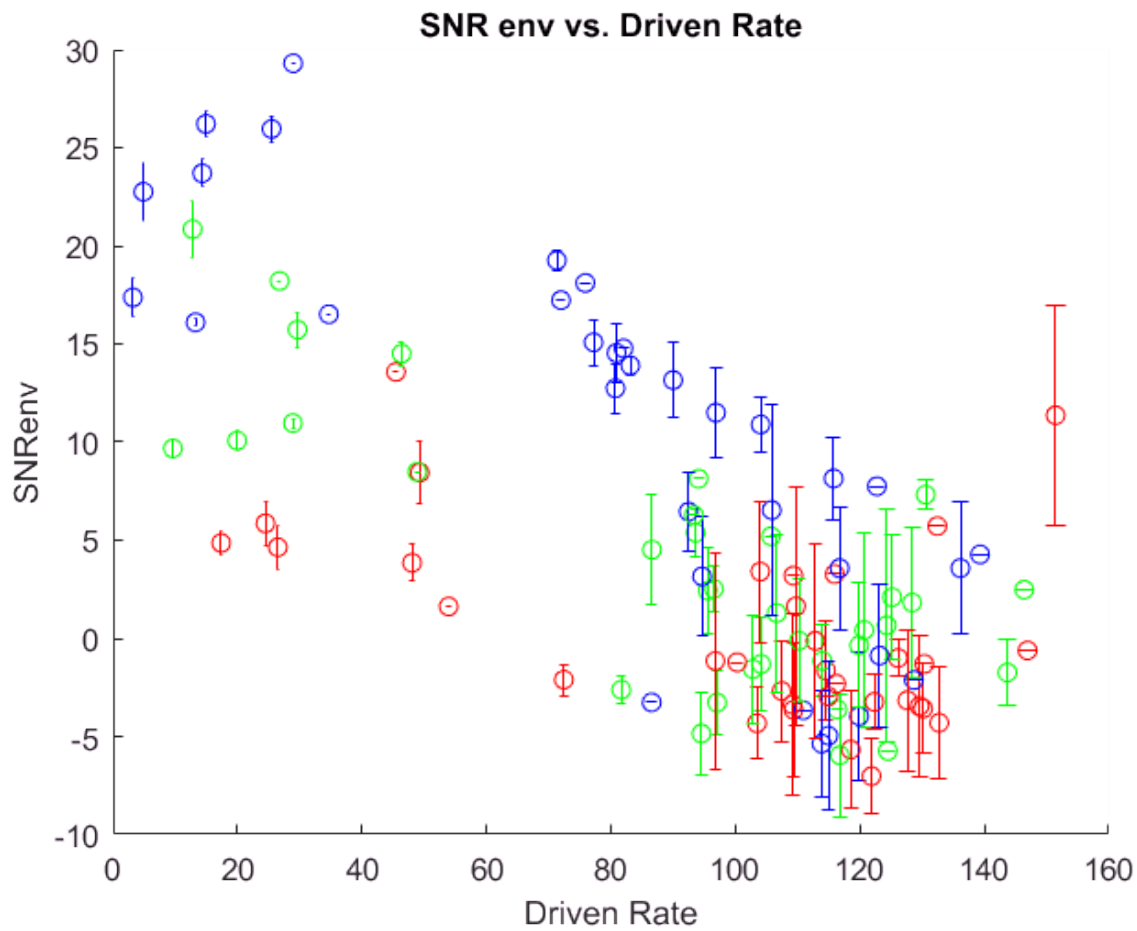
#### SNR env vs. Normalized Driven Rate

```
hold on;
for i=1:length(SummaryVar)
    x=(SummaryVar(i).spkRateSN-SummaryVar(i).SR)/(SummaryVar(i).SatR-SummaryVar(i).SR);
    y=SummaryVar(i).SNRenvAll;
    errorbar(x, mean(y), std(y), [SNRcolor(SummaryVar(i).SNR==SNRs) 'o']);
end
hold off;
xlabel('Normalized Driven Rate');
ylabel('SNRenv');
title('SNR env vs. Normalized Driven Rate');
```



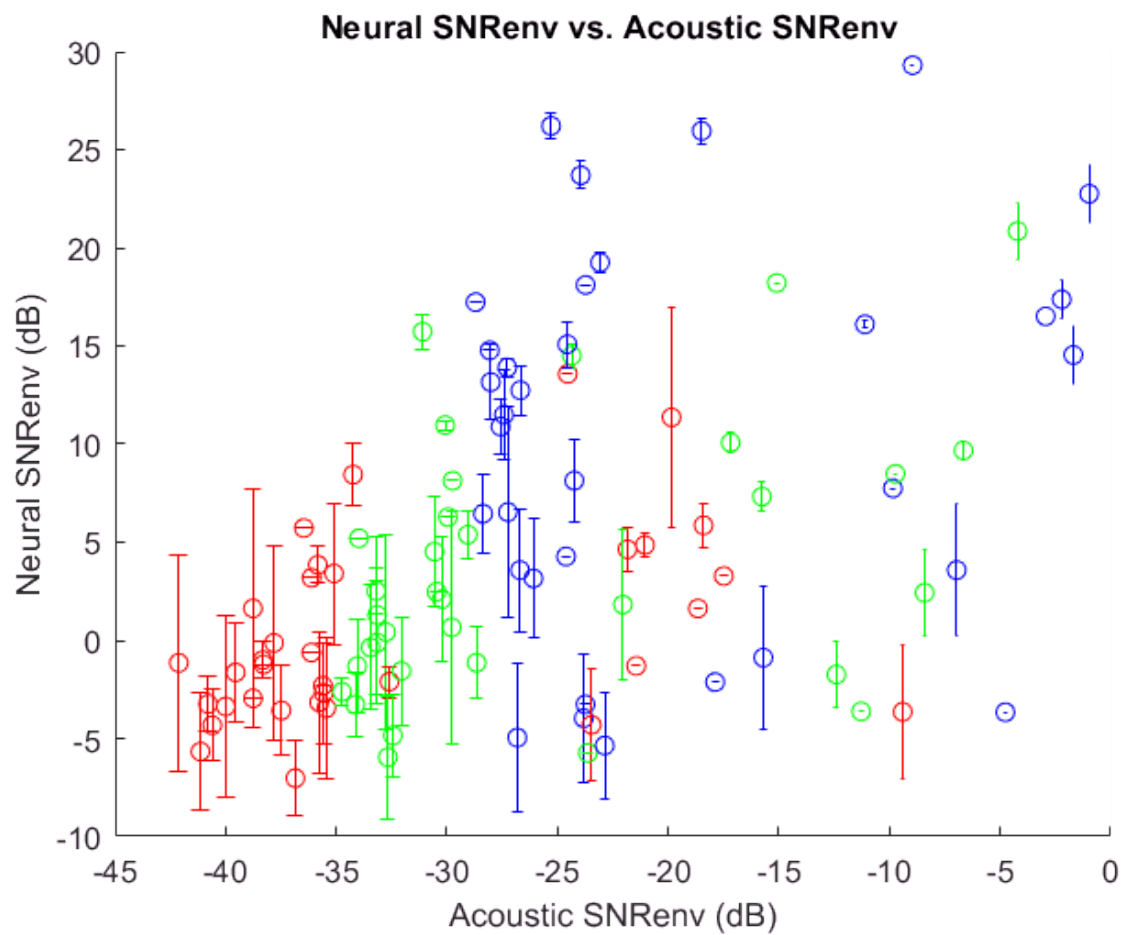
SNR env vs. Driven Rate

```
figure;
hold on;
for i=1:length(SummaryVar)
    y=SummaryVar(i).SNRenvAll;
    errorbar(SummaryVar(i).spkRateSN, mean(y), std(y), [SNRcolor(SummaryVar(i).SNR==SNRs) 'o'])
end
hold off;
xlabel('Driven Rate');
ylabel('SNRenv');
title('SNR env vs. Driven Rate');
```



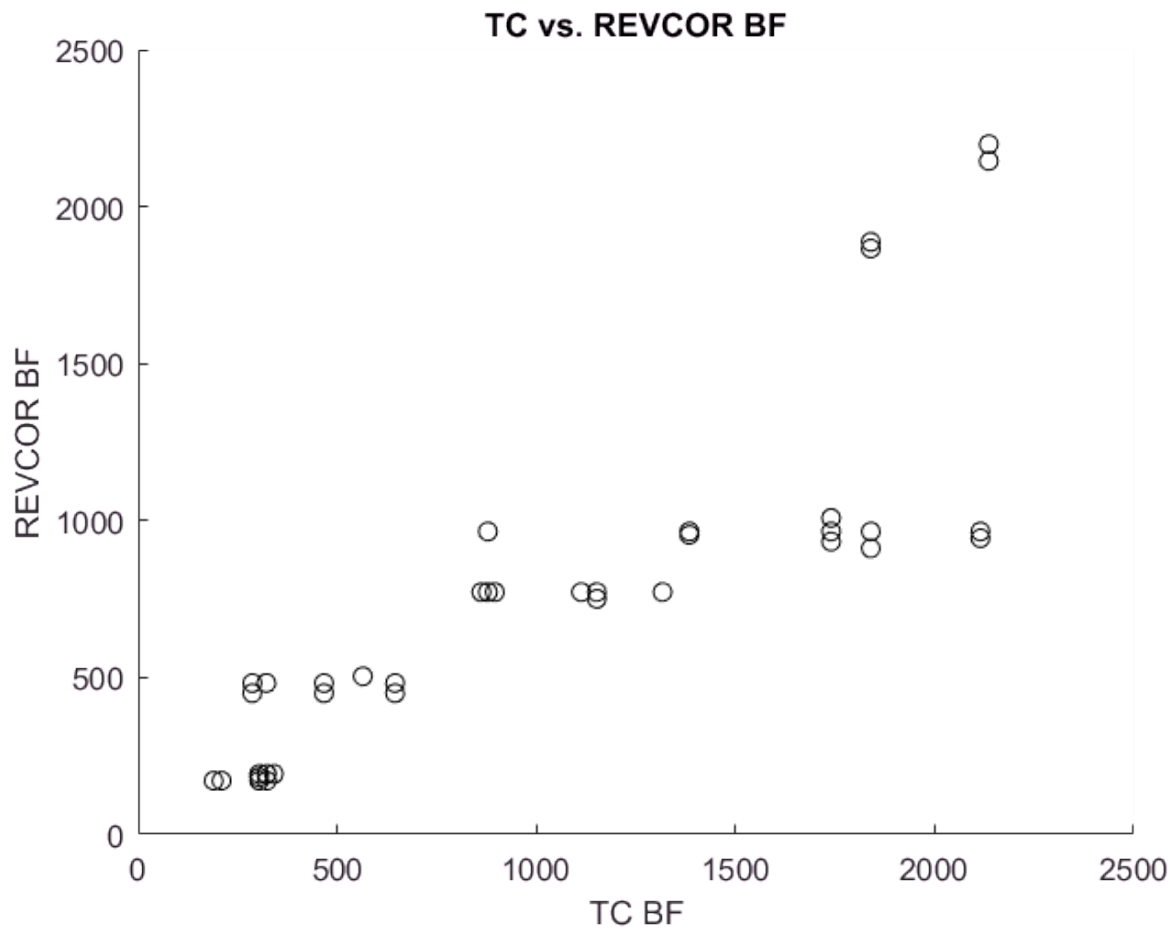
Acoustic SNRenv vs. Neural SNRenv

```
figure;
hold on;
for i=1:length(SummaryVar)
    y=SummaryVar(i).SNRenvAll;
    errorbar(SummaryVar(i).SNRenvACST, mean(y), std(y), [SNRcolor(SummaryVar(i).SNR==SNRs) 'o']);
end
hold off;
xlabel('Acoustic SNRenv (dB)');
ylabel('Neural SNRenv (dB)');
title('Neural SNRenv vs. Acoustic SNRenv ');
```



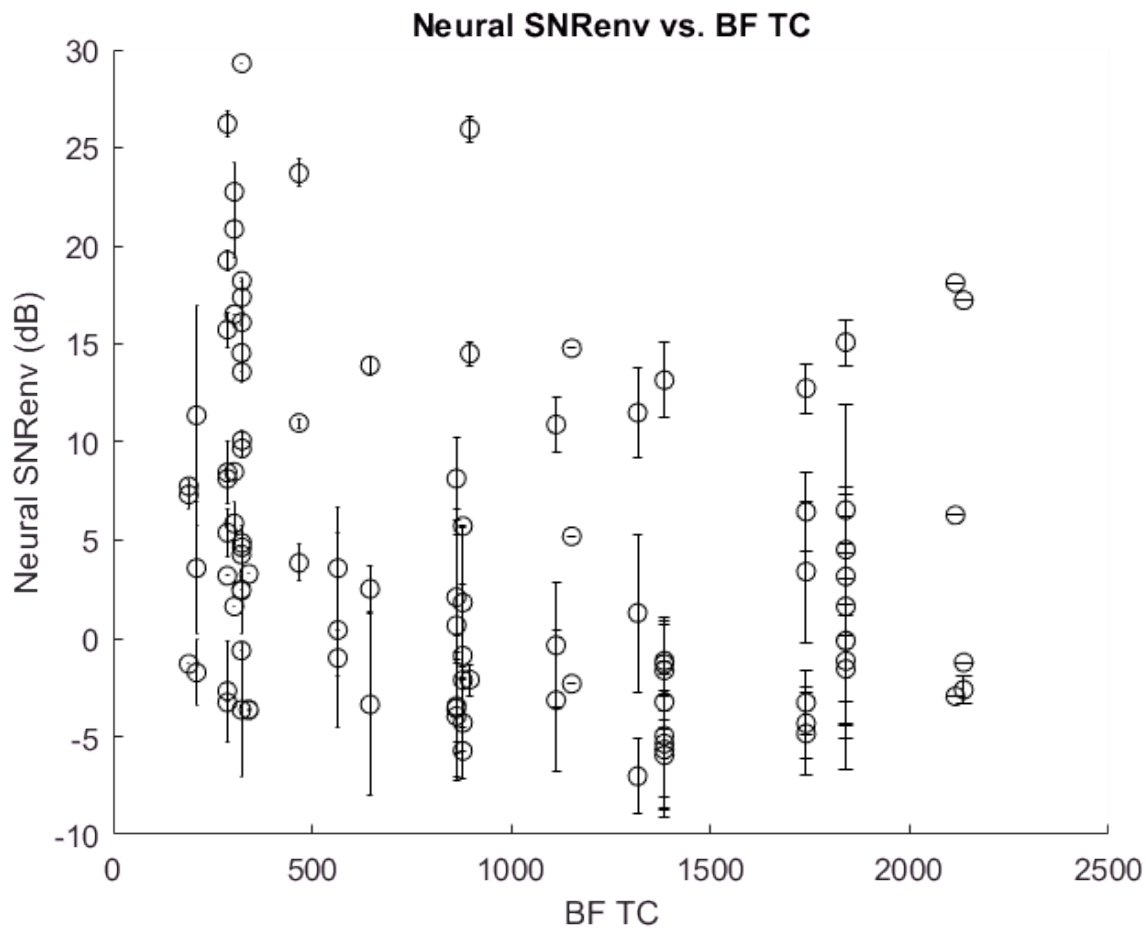
Tuning Curve BF vs REVCOR BF

```
scatter([SummaryVar.BF_TC],[SummaryVar.BF_revcor], 'k');  
xlabel('TC BF');  
ylabel('REVCOR BF');  
title('TC vs. REVCOR BF');
```



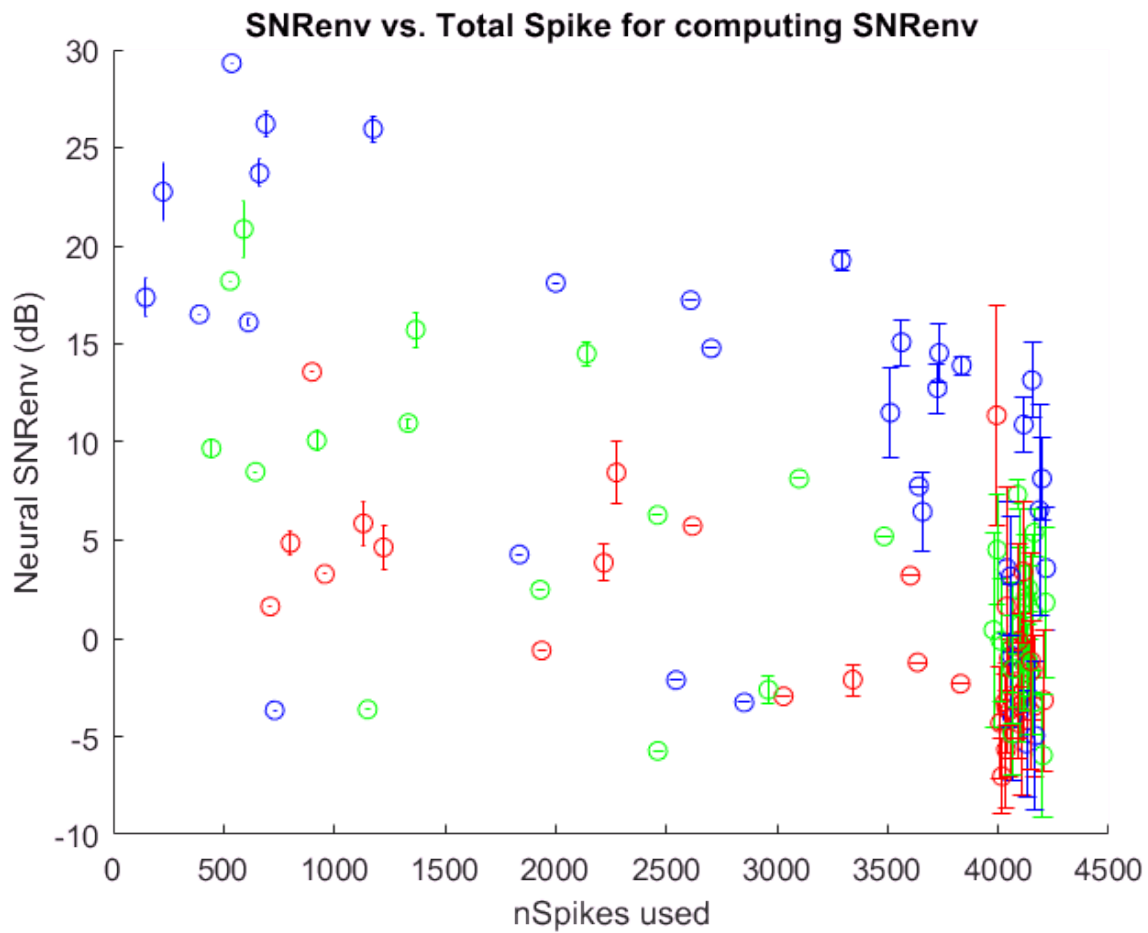
SNRenv vs CF

```
figure;
hold on;
for i=1:length(SummaryVar)
    y=SummaryVar(i).SNRenvAll;
    errorbar(SummaryVar(i).BF_TC, mean(y), std(y), 'ko');
end
hold off;
xlabel('BF TC');
ylabel('Neural SNRenv (dB)');
title('Neural SNRenv vs. BF TC');
```



SNRenv vs. Total Spike for computing SNRenv

```
figure;
hold on;
for i=1:length(SummaryVar)
    y=SummaryVar(i).SNRenvAll;
    errorbar(SummaryVar(i).nSpikesSN, mean(y), std(y), [SNRcolor(SummaryVar(i).SNR==SNRs) 'o'])
end
hold off;
xlabel('nSpikes used');
ylabel('Neural SNRenv (dB)');
title('SNRenv vs. Total Spike for computing SNRenv');
```



SNRenv vs. Q10 from TC

```
figure;
hold on;
for i=1:length(SummaryVar)
    y=SummaryVar(i).SNRenvAll;
    errorbar(SummaryVar(i).Q10_TC, mean(y), std(y), 'ko');
end
hold off;
xlabel('TC Q10');
ylabel('Neural SNRenv (dB)');
title('SNRenv vs. Q10 from TC');
```

SNRenv vs. Q10 from TC

