
```
clear close all; clc;

%Data is loaded into the Workspace.
load EEG1.txt
load EEG2.txt

%Mean is subtracted from its corresponding dataset to eliminate baseline drift.
EEG1=EEG1-mean(EEG1);
EEG2=EEG2-mean(EEG2);

%The total power of the two sets are calculated here where Total Power =P,
% $P=1/N \sum_{n=1}^N EEG(n)^2$  .

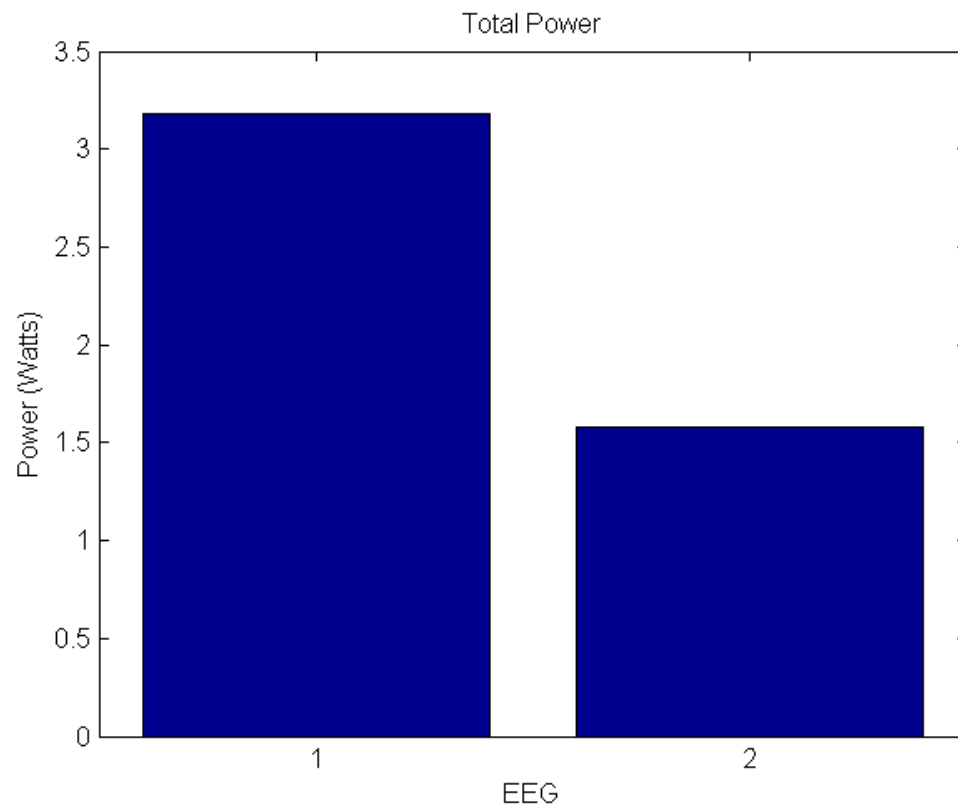
%Here all the individual elements are squared in each data sets.
EEG1=EEG1.^2;
EEG2=EEG2.^2;

%The elements are then summed, then divided by the number of elements in
%the set.
P1=sum(EEG1)/(length(EEG1));
P2=sum(EEG2)/(length(EEG2));

%The total power of the data sets are displayed here.
disp(['Total power in EEG1 (conscious) signal is ',num2str(P1),' Watts']);
disp(['Total power in EEG2 (unconscious) signal is ',num2str(P2),' Watts']);

%The results computed are then put into an array, then displayed as a bar
%graph, with appropriate title and labels.
InputData=[P1, P2];
bar(InputData);
title('Total Power');
xlabel('EEG');
ylabel('Power (Watts)');

    Total power in EEG1 (conscious) signal is 3.1838 Watts
    Total power in EEG2 (unconscious) signal is 1.5778 Watts
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