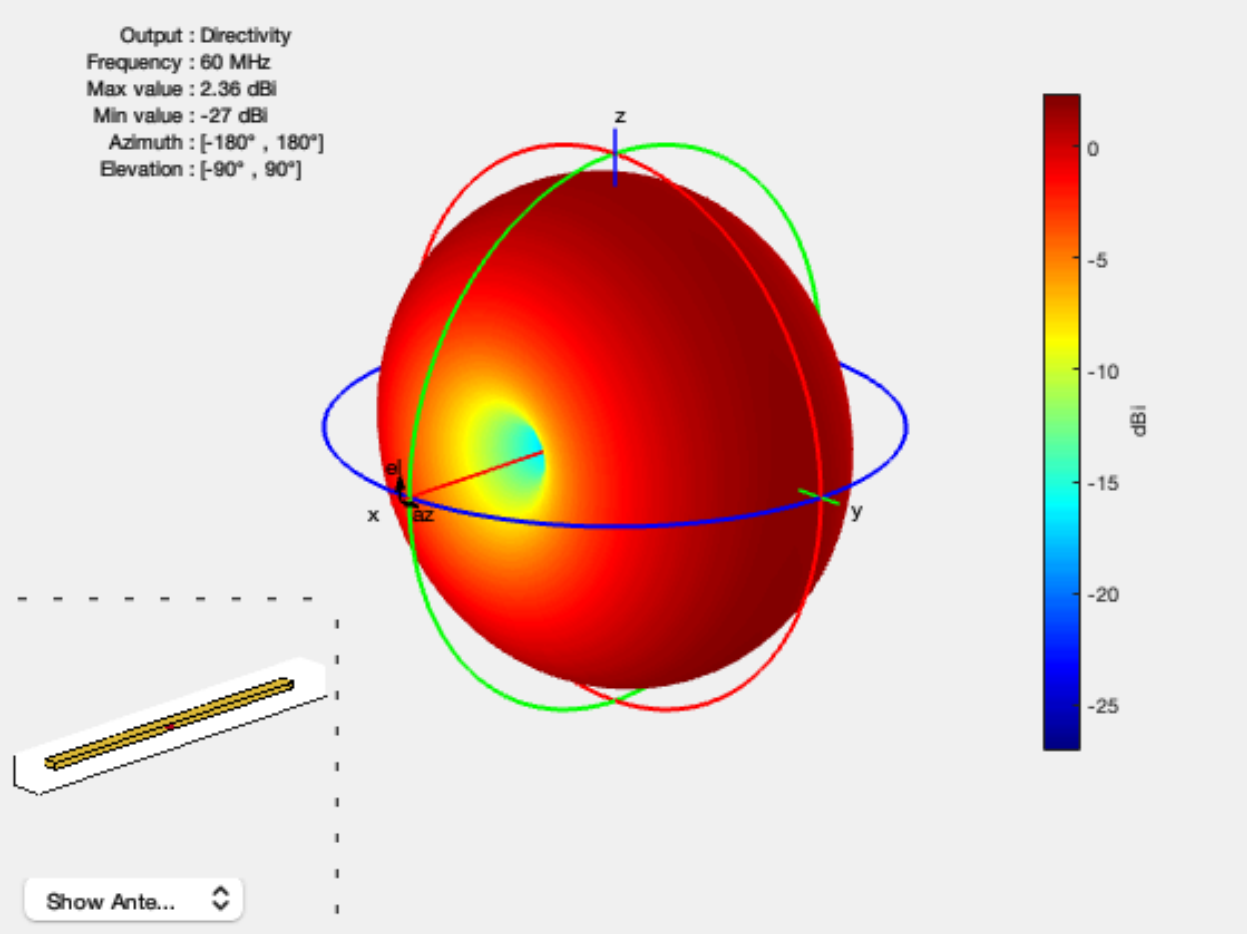
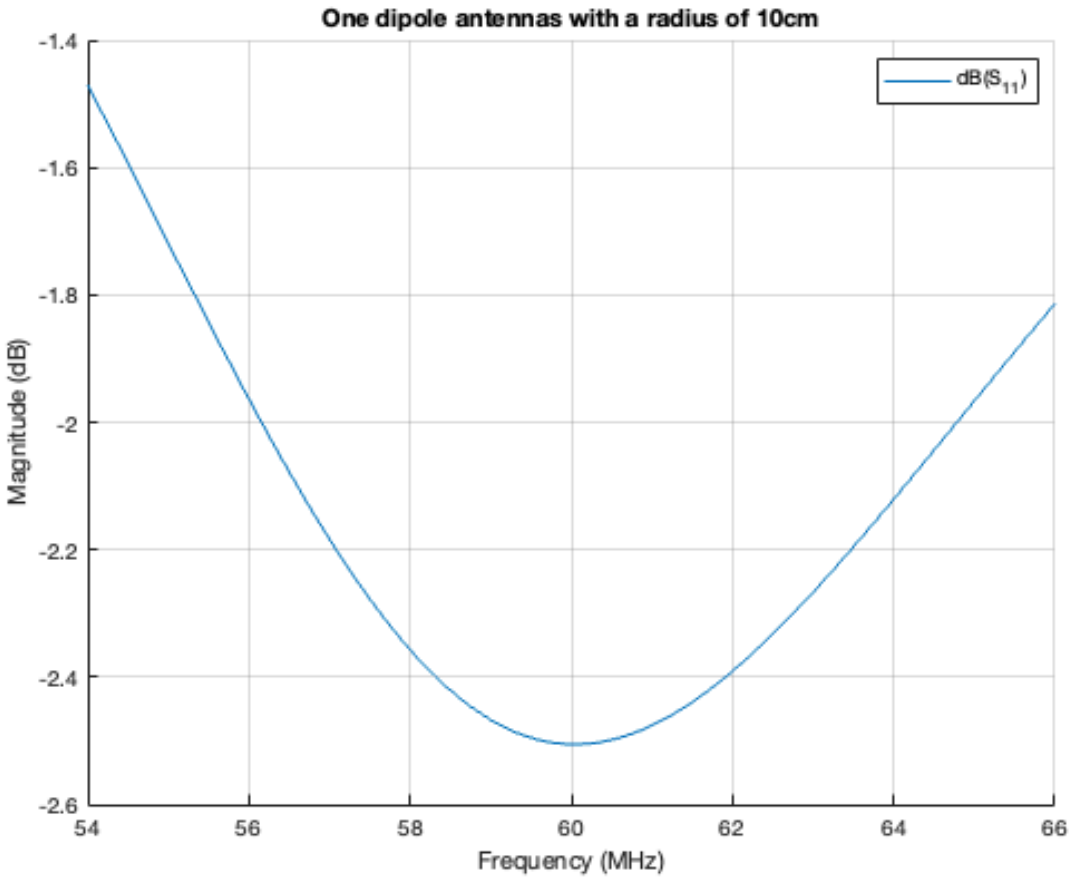
```
clc; clear all; close all;
%%Folded Dipole Radiation pattern and S11

f = 60*10^6;
c= 3e8;
c1 = .5;
c_offsetLegnth = -.255;
lambda =c/f;

L1 =.5*lambda+c_offsetLegnth



df =
 dipoleFolded('Length',2.2,'Width',0.1,'Load',lumpedElement('Impedance',75),'Spacing',2.23


figure(1)
pattern(df,f), title('radiation a=pattern of dipole')
%
%
% impedance(d1,50e6:1e6:70e6)
% figure(2)
%range Mhz
f1 = 54e6;
f2 = 66e6;
f_interval = .1e6;
S = sparameters(df,f1:f_interval:f2);
% S1 = sparameters(d2,f1:1e6:f2);
% S2 = sparameters(d3,f1:1e6:f2);
figure(2)
title(sprintf('One dipole antennas with a radius of 10cm'))
hold on
rfplot(S)
% rfplot(S1)
% rfplot(S2)
hold off


L1 =

    2.2450


df =

  dipoleFolded with properties:

       Length: 2.2000
        Width: 0.1000
      Spacing: 0.0437
    Conductor: [1×1 metal]
```

```
    Tilt: 0
TiltAxis: [1 0 0]
    Load: [1×1 lumpedElement]
```





Published with MATLAB® R2022a