

$$\begin{cases} \frac{\partial^2 u}{\partial t^2} - c^2 \left( \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} \right) = 0 \text{ in } \Omega \\ u = 0 \text{ on } \partial\Omega \end{cases}$$

For eigenfrequency:  $e_a = 1$ ,  $c = 1$ ,  $f = 0$ . Then result are

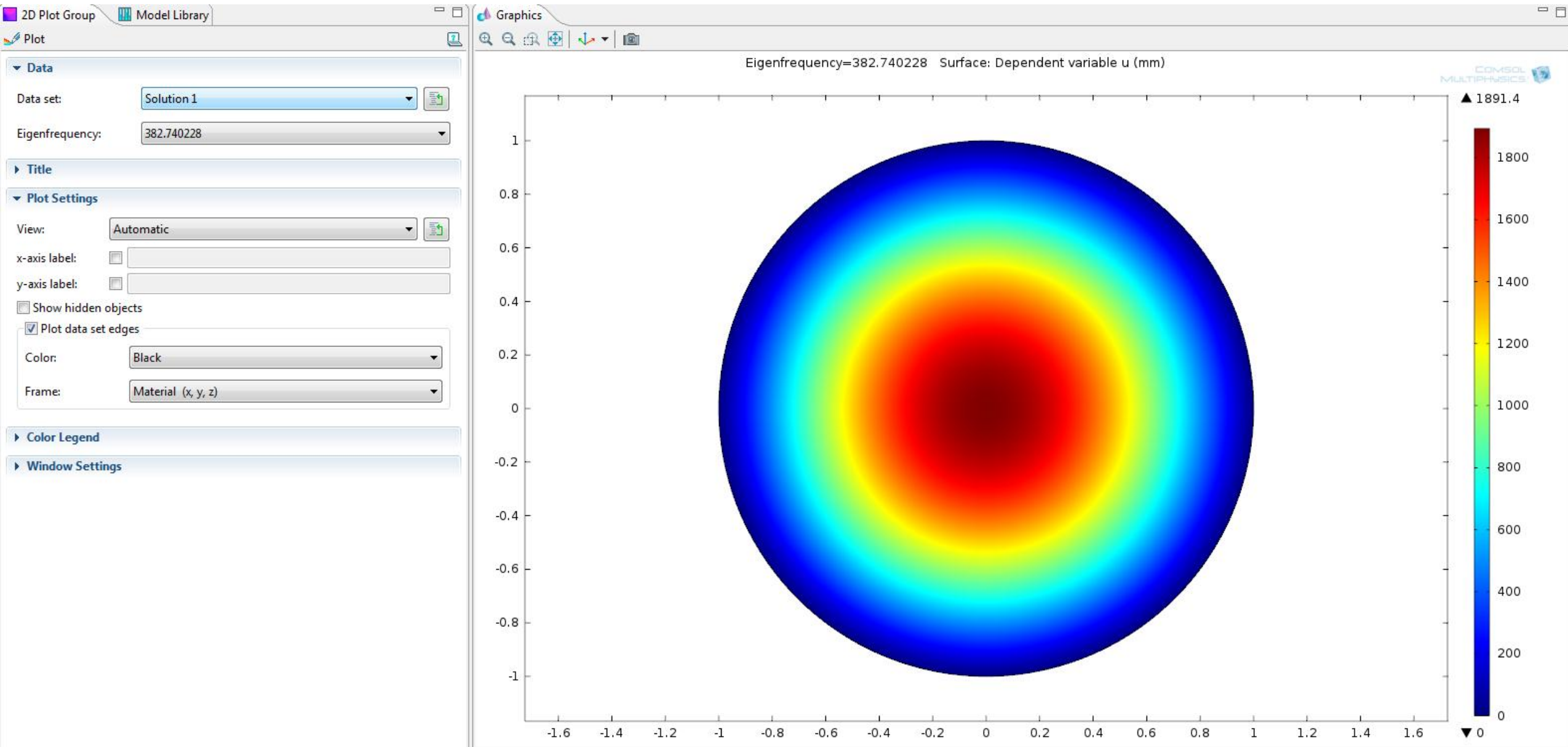
1<sup>st</sup> mode: 382 Hz

2<sup>nd</sup> mode: 609 Hz

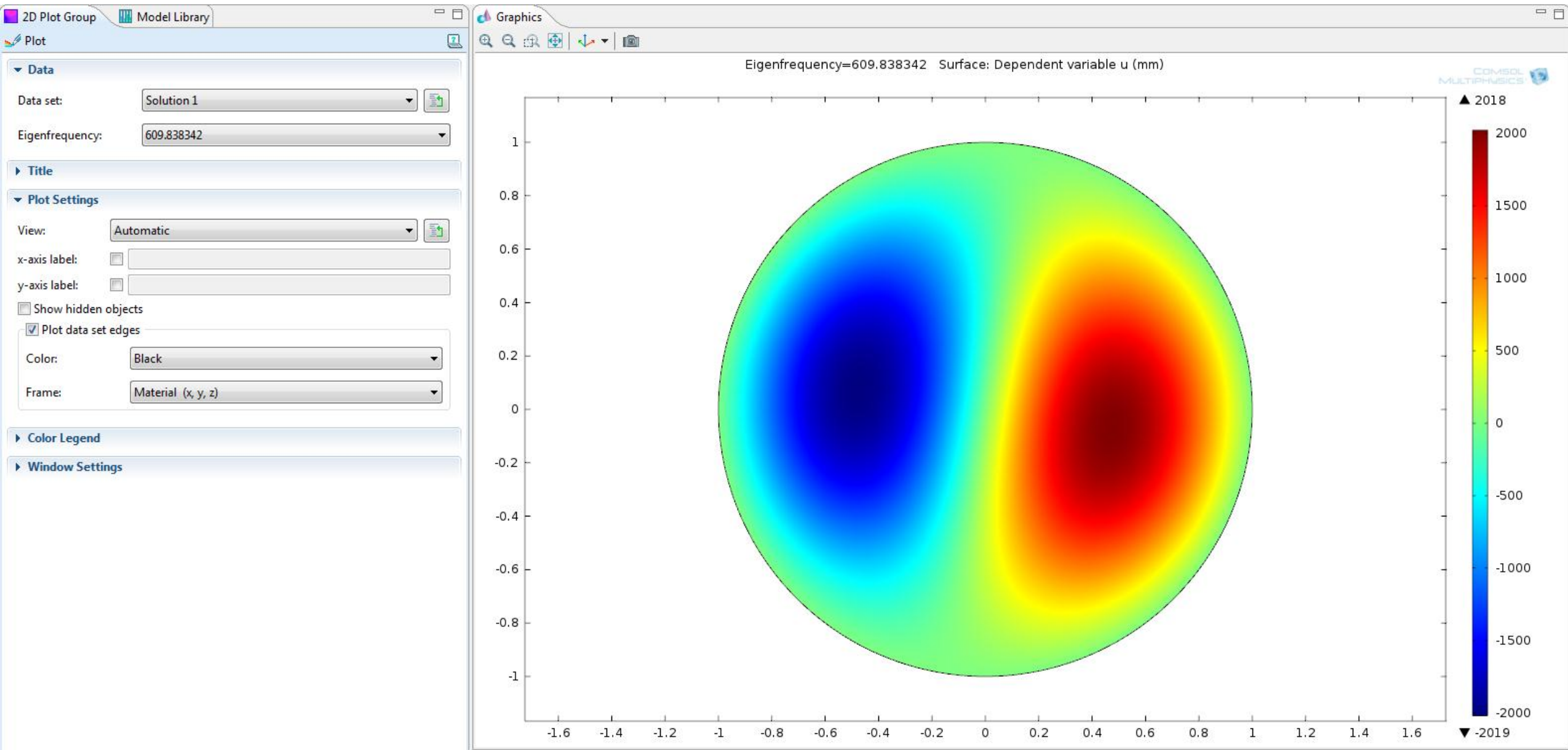
For frequency domain:  $e_a = 1$ ,  $c = 1$ ,  $f = 1$ . and I set

frequency = 609 Hz

# Eigenfrequency. 1<sup>st</sup> mode ( 382Hz)



# Eigenfrequency. 2<sup>nd</sup> mode ( 609Hz)



# Frequency Domain, (set f = 609Hz)

