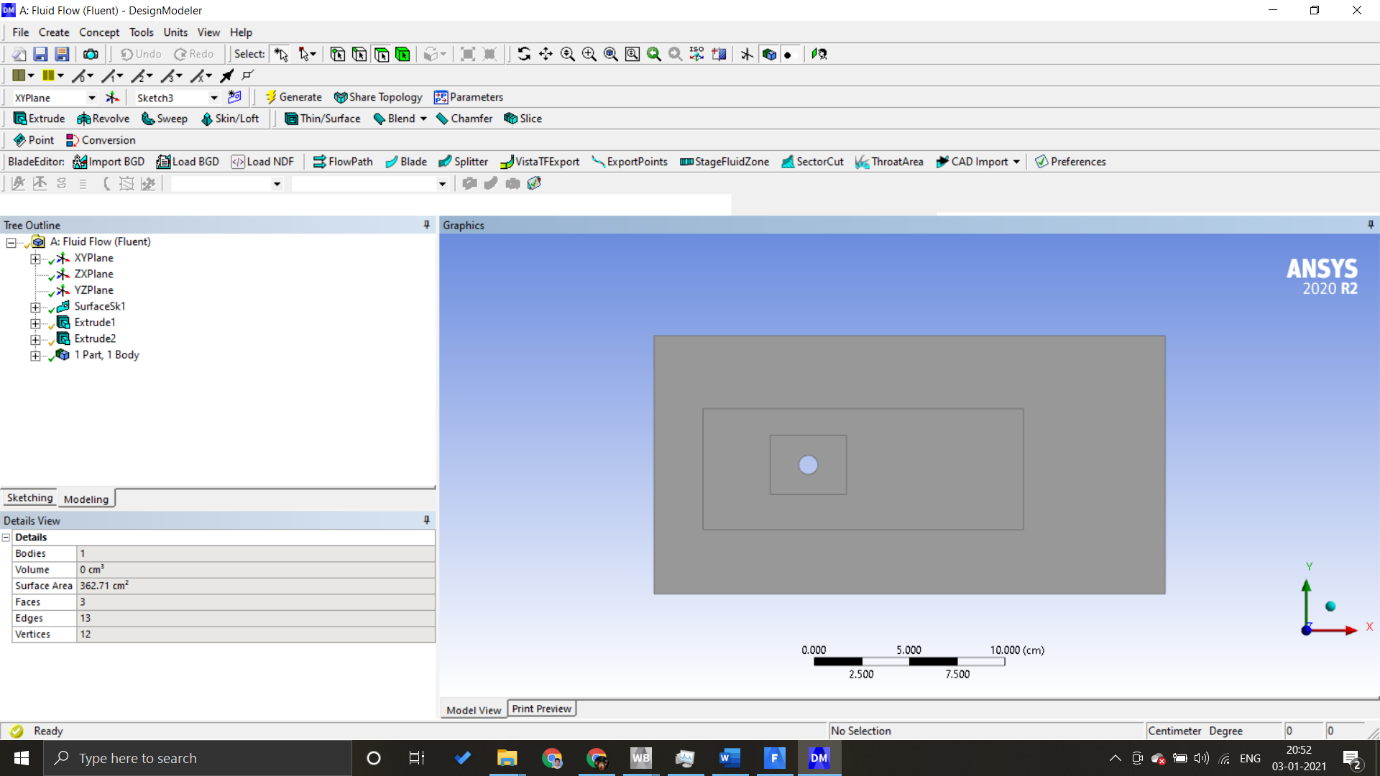
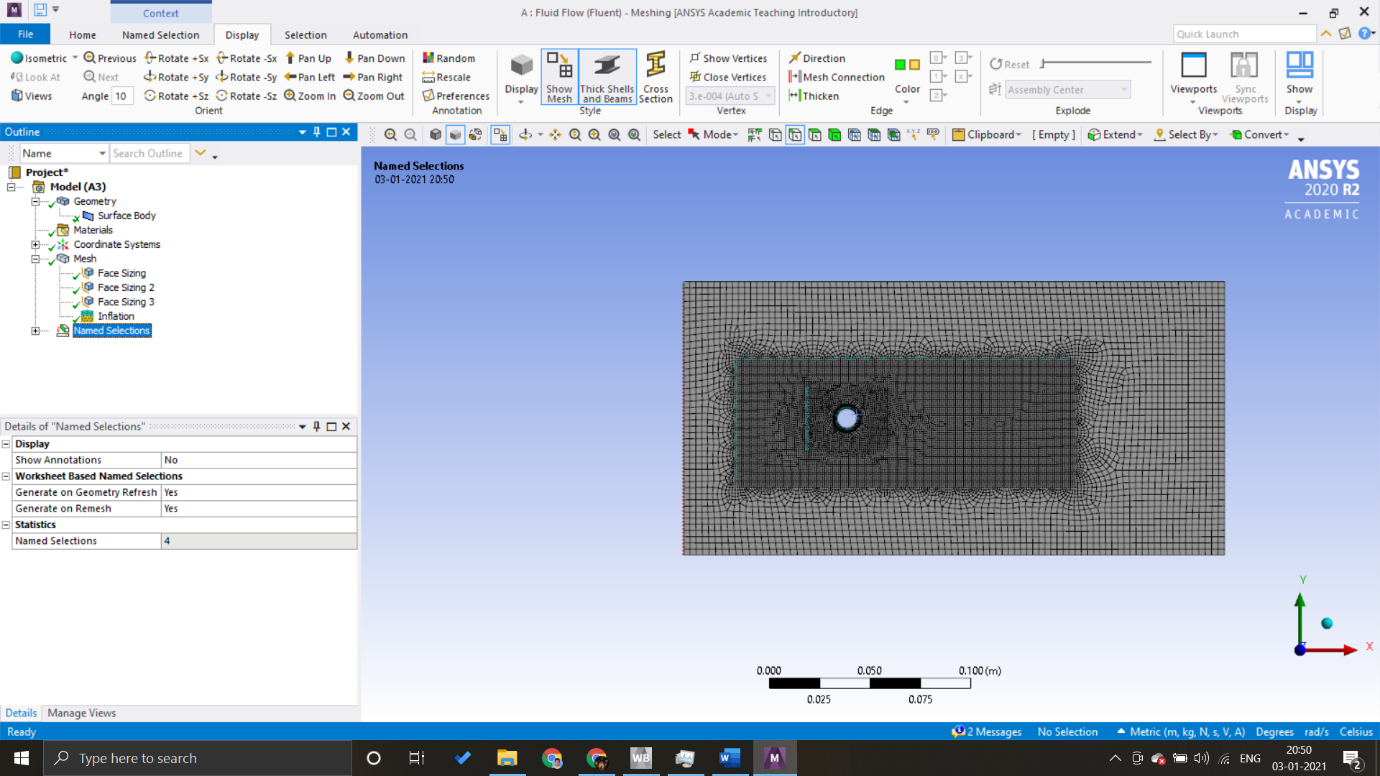
**K OMEGA**

**Y+ =1**

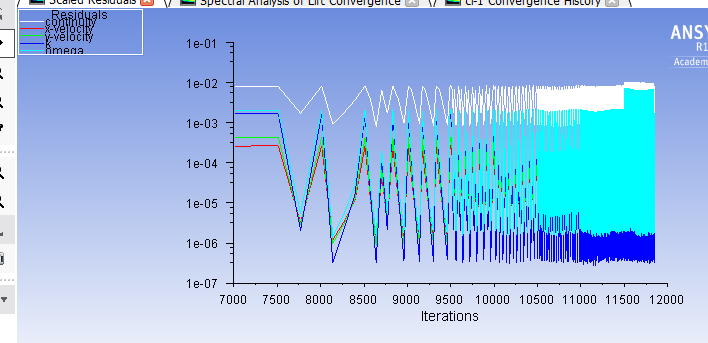
**y=0.123mm(Inflation First Layer Thickness)**

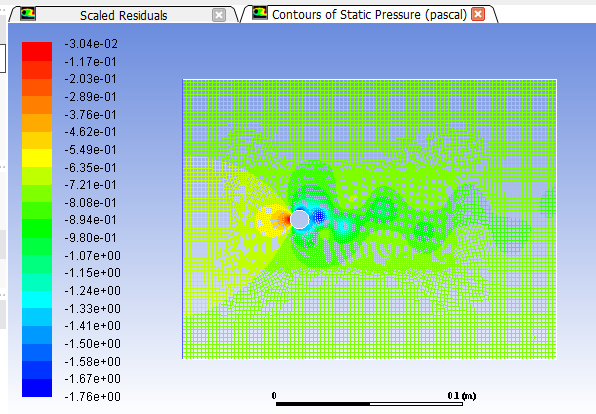
**Design Modular (3 Faces)**

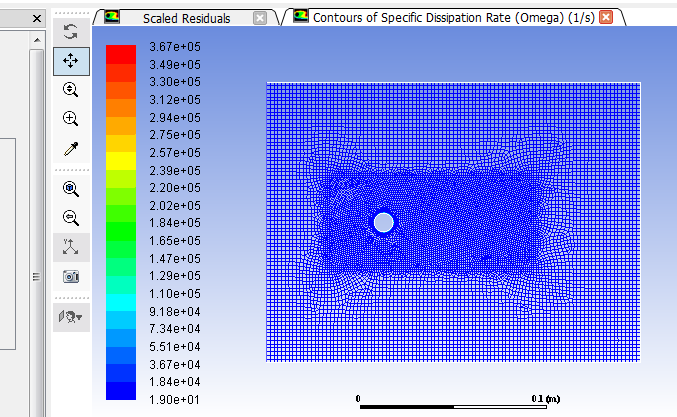
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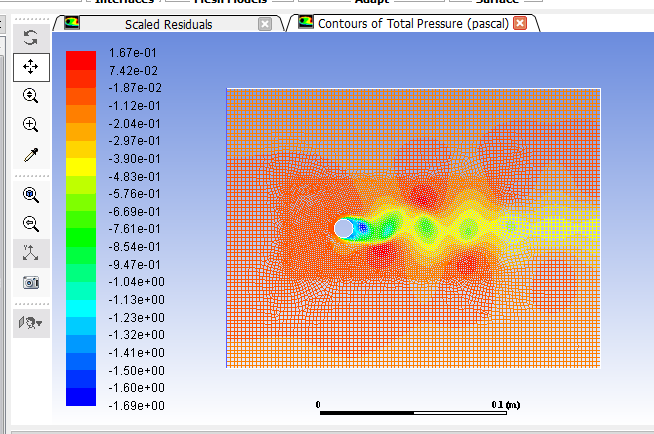
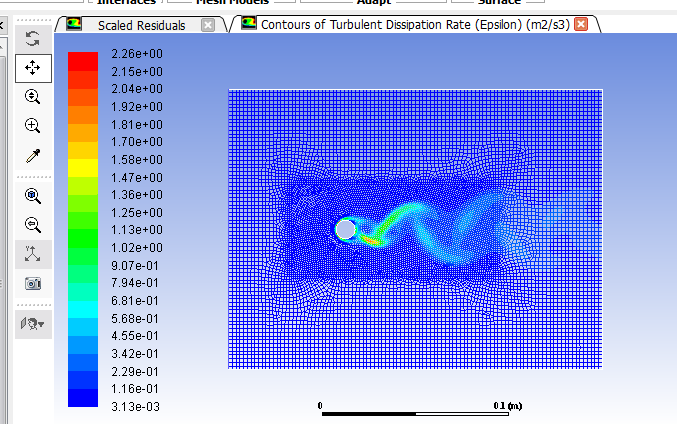
**MESHING**

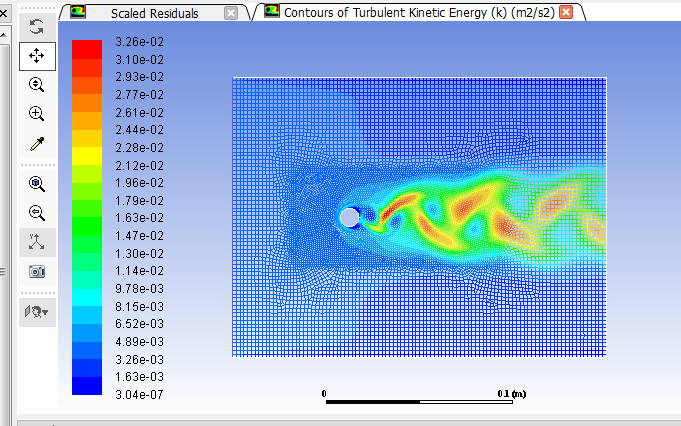
**Scaled Residuals**

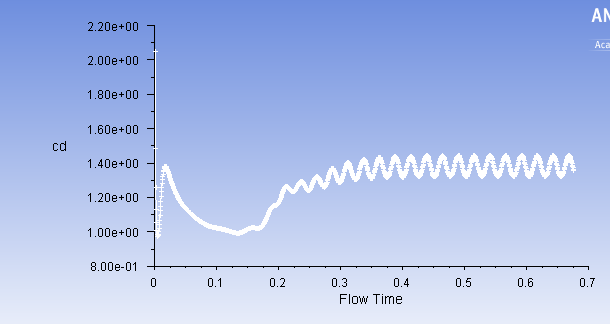
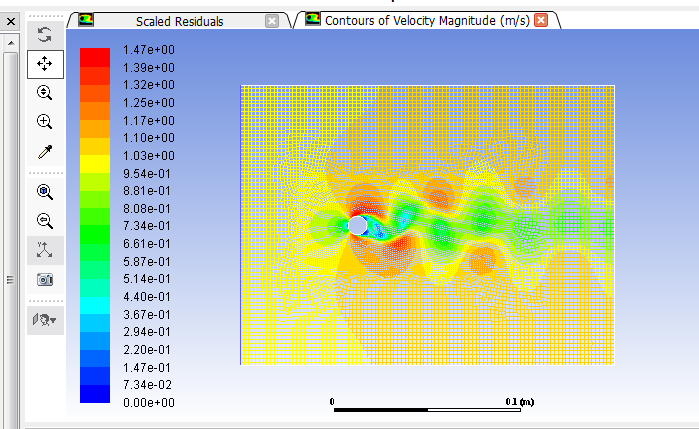
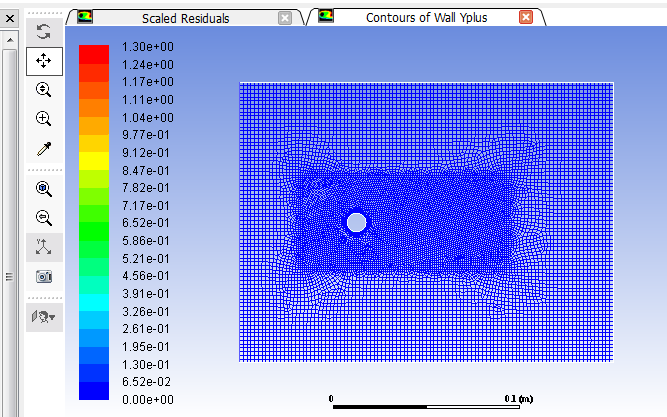
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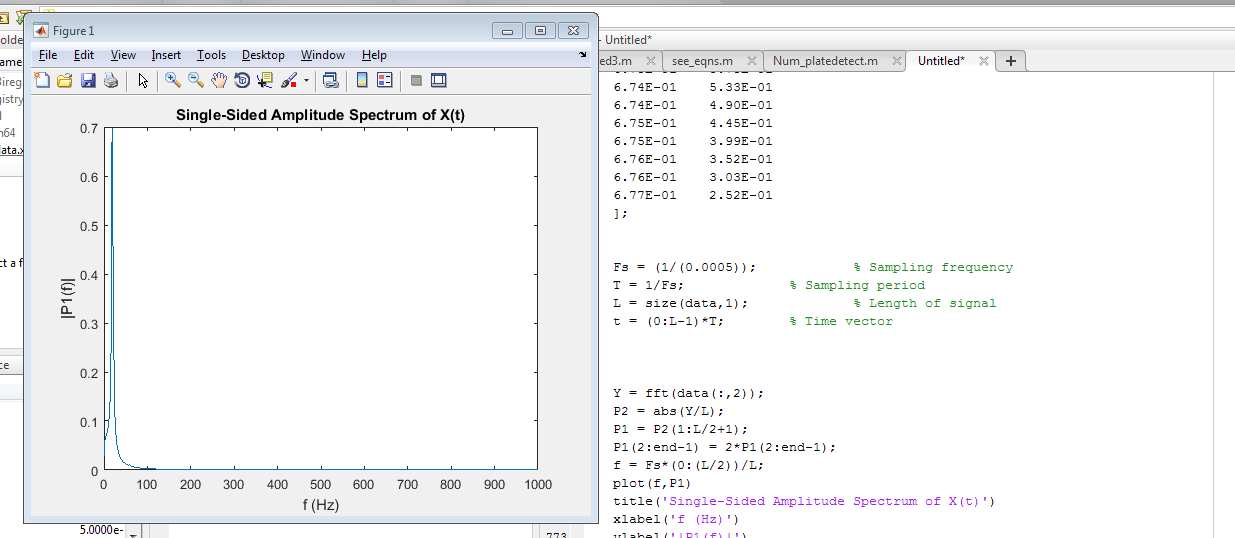
**Static Pressure**

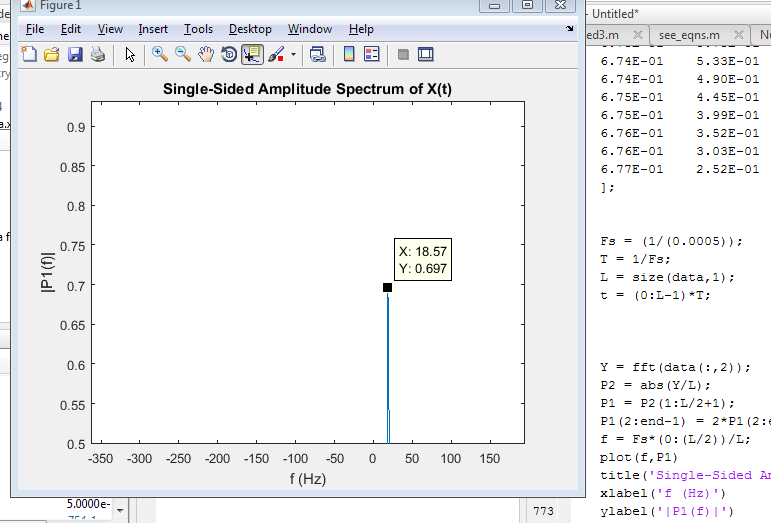
**Dissipation Rate(Omega)**

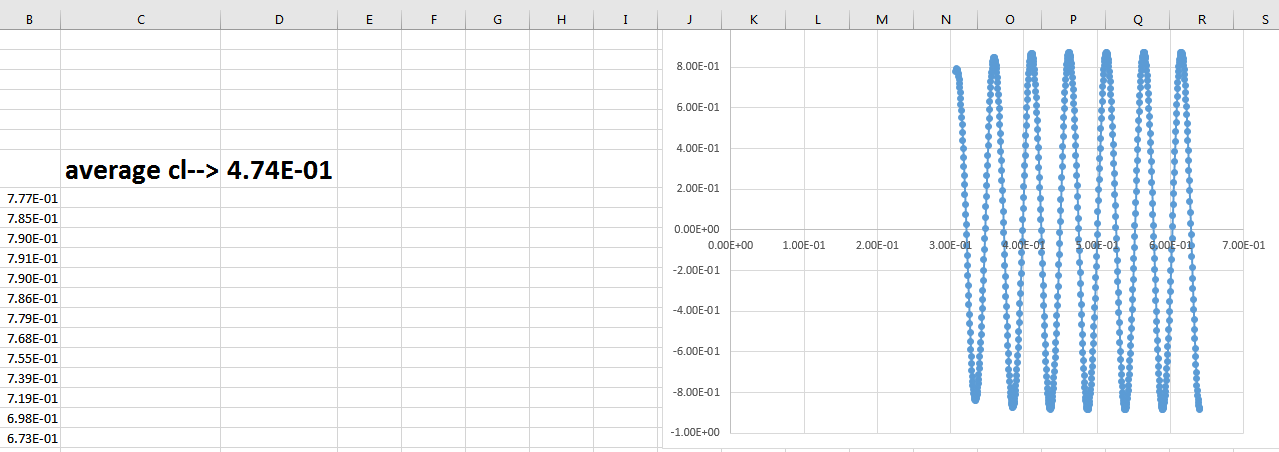
**Contour Of Total PressureContour Of turbulent Dissipation Rate (Epsilon)**

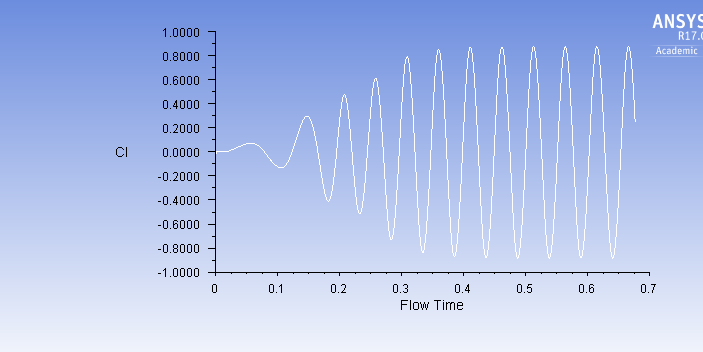
**Contours of Turbulent Kinetic Energy\**

**Cd Drag PlotContour Of VelocityContour Of Y plus**

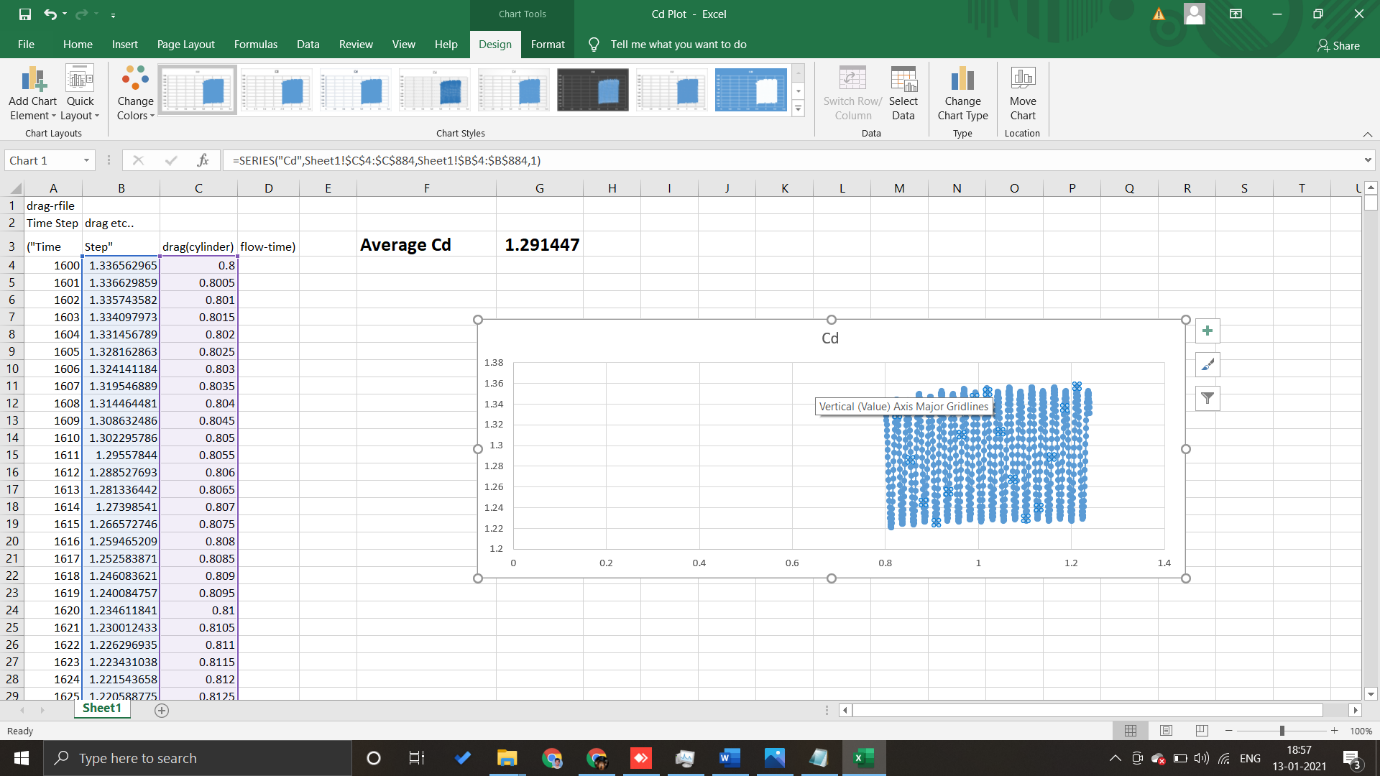
**I performed a fft of the sorted Cl values in matlab and found out Frequency n=18.57**

**N=18.57**

**Sorted Out CL values (Plot of Cl)**

**Cl vs time Plot**

**CD AVERAGE SORTED OUT DATA:**

****

**CONCLUSIONS:**

🡪St(strouhal number) =Frequency \* Diameter/ Velocity

= 18.57\*0.01/1

=0.1857

🡪Average Cl Value(Of sorted data)=0.474(UPWARD)

🡪Average Cd Value(Of sorted data)=1.291447