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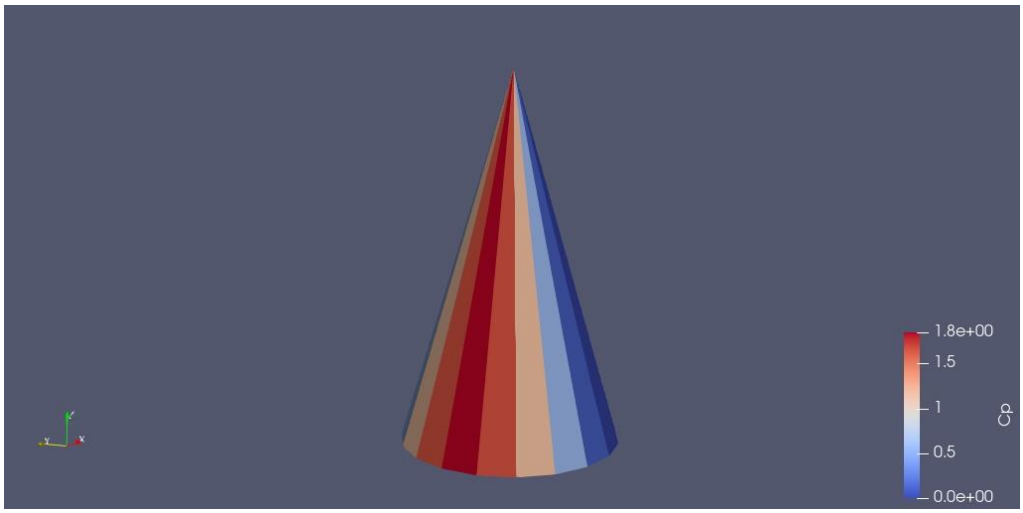
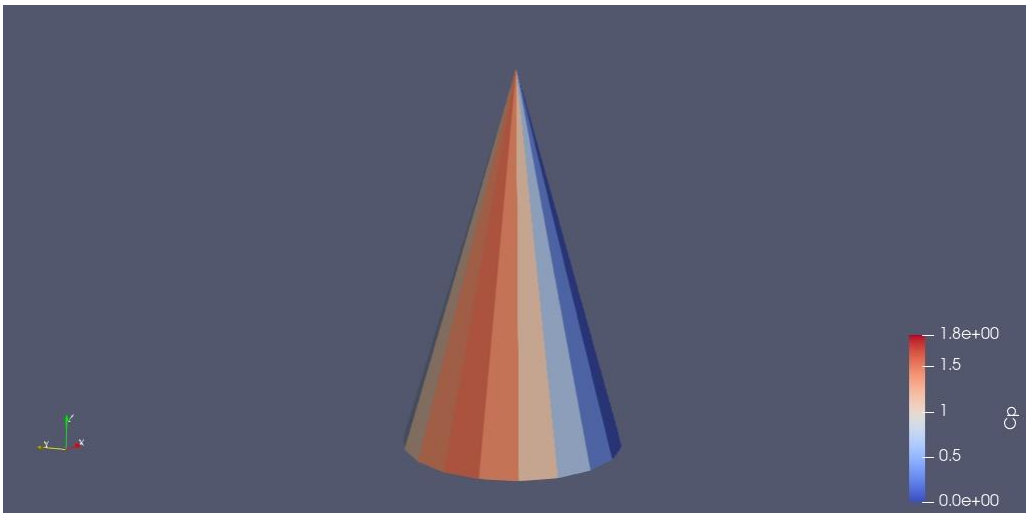
Newtonian flow analysis

1. **Flow $\vec{f} = (1, 0, 0)$**



In this situation, the flow direction is along the x-axis. Consequently, the pressure coefficient in the surface directly perpendicular to the x-axis is the highest. Then, it continues to dissipate as the angle with the x-axis increases as indicated by lighter red colors. We can also observe that the opposite side of the cone experiences almost no pressure because of a lack of turbulence.

2. **Flow $\vec{f} = (1, 0, -1)$**



In this situation, we can observe less difference among pressure coefficient distributions at each location as indicated by colors in the cone. In other words, there is a slightly larger coverage range of the pressure distribution around the cone, but a lower peak value at the perpendicular area. Note that the former is not observable in the figure; however, observable in the vtk files. Also, similar to the previous case, almost no pressure is observed at the opposite of the impact area of the cone.