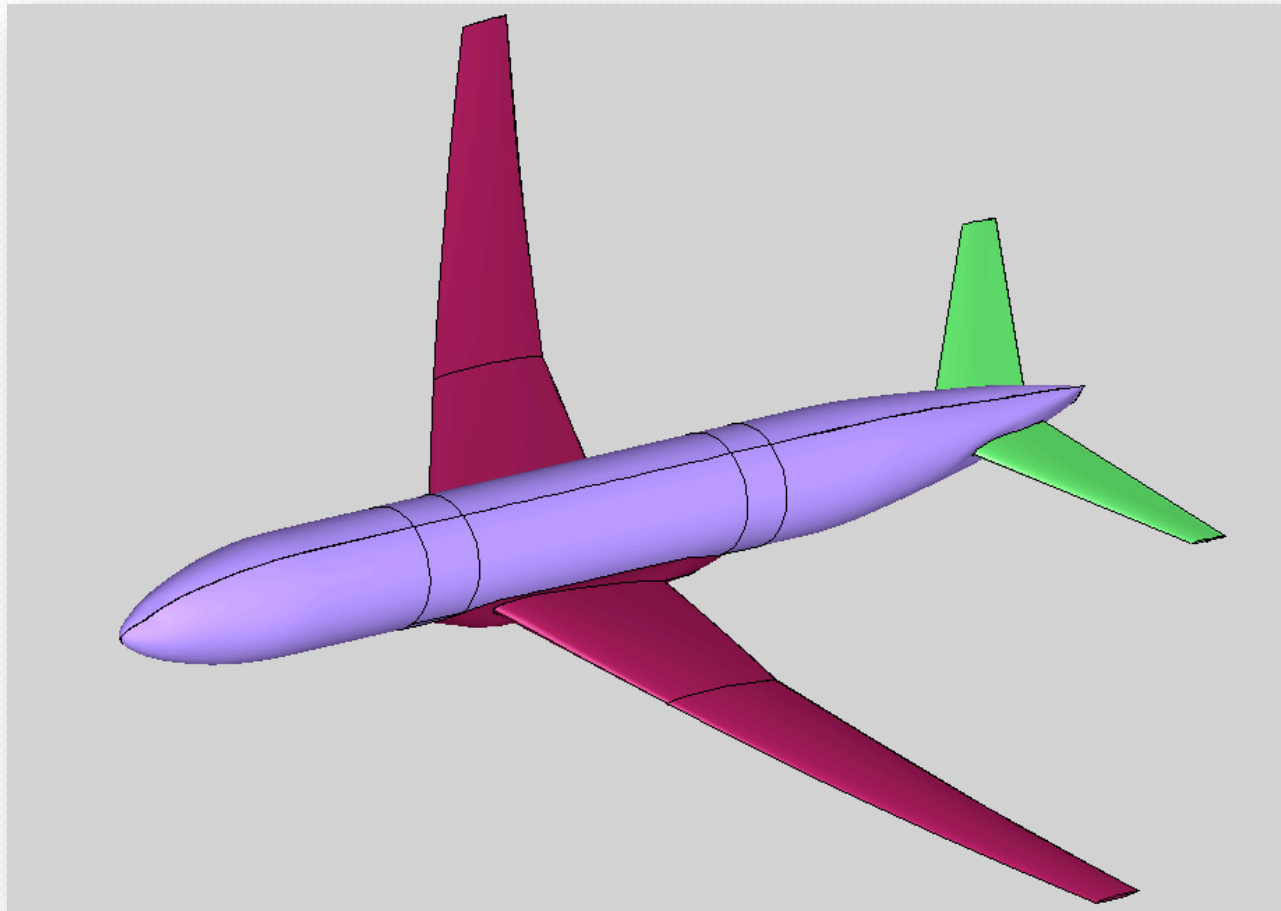


## DPW4 Gridding Details



## Gridding Detail

### Coarse Grid:

Surface grid : 75,000 elements

Volume grid : 3.5 M elements

$Y^+ = 1$

### Medium Grid 10M cells:

Surface grid : 250,000 elements

Volume grid : 10 M elements

$Y^+ = 2/3$

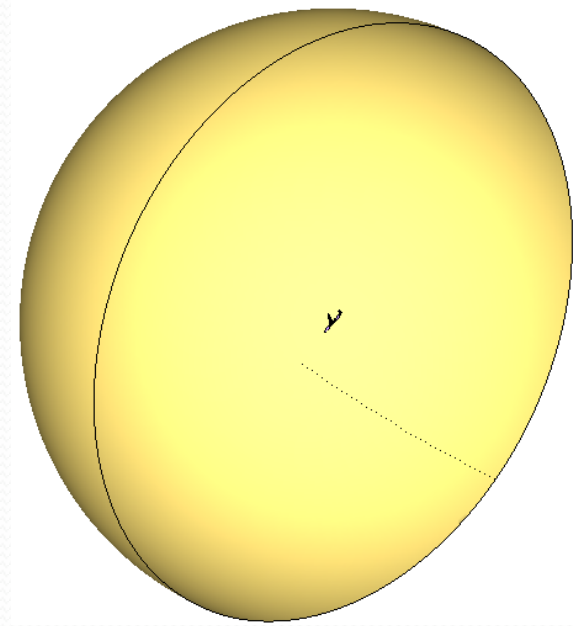
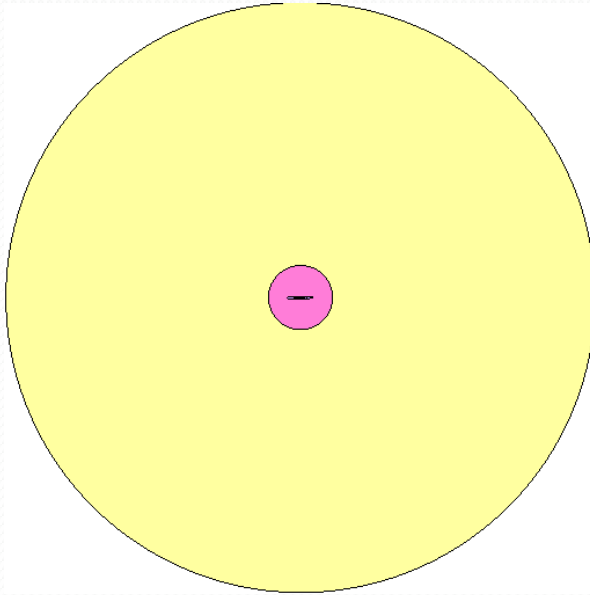
### Fine Grid 25M cells:

Surface grid : 1,600,000 elements

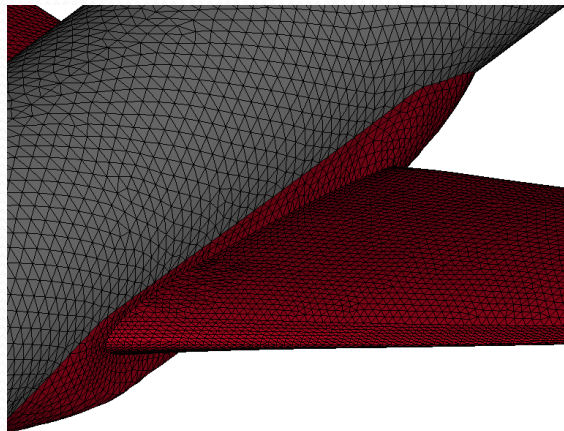
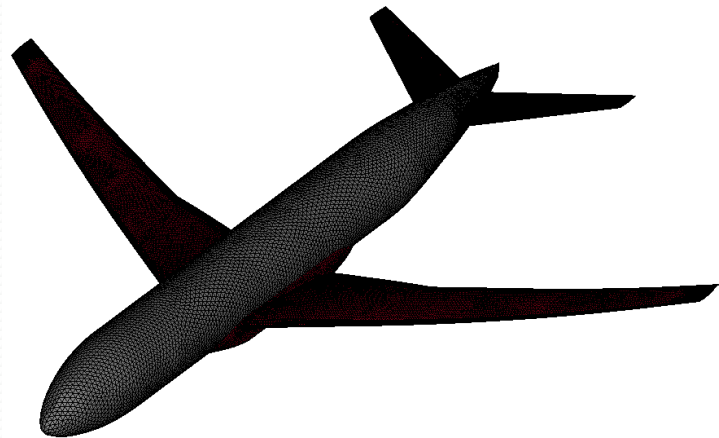
Volume grid : 25 M elements

$Y^+ = 4/9$

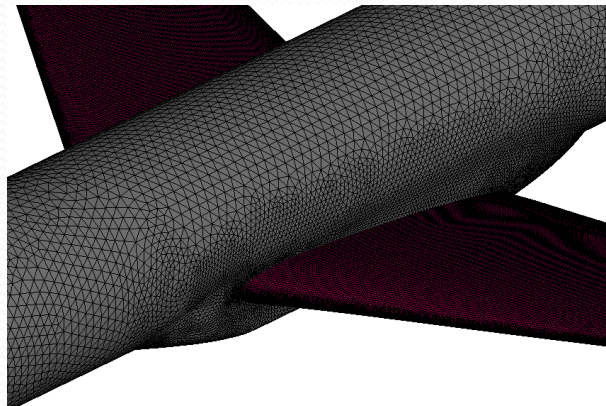
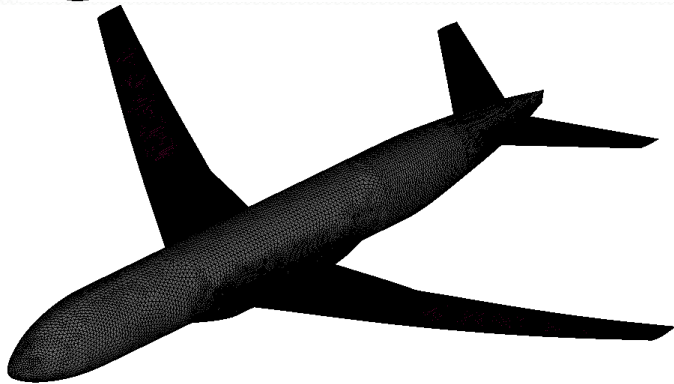
## Computational Domain



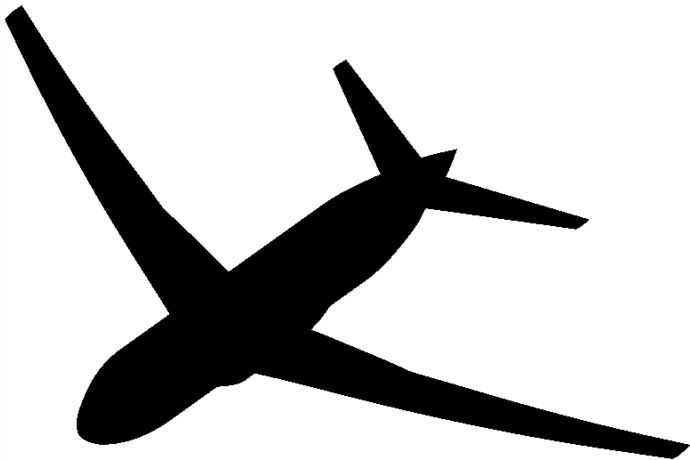
Outer hemispherical boundary is 100 times chord away from body



Coarse surface mesh  
75,000 triangles



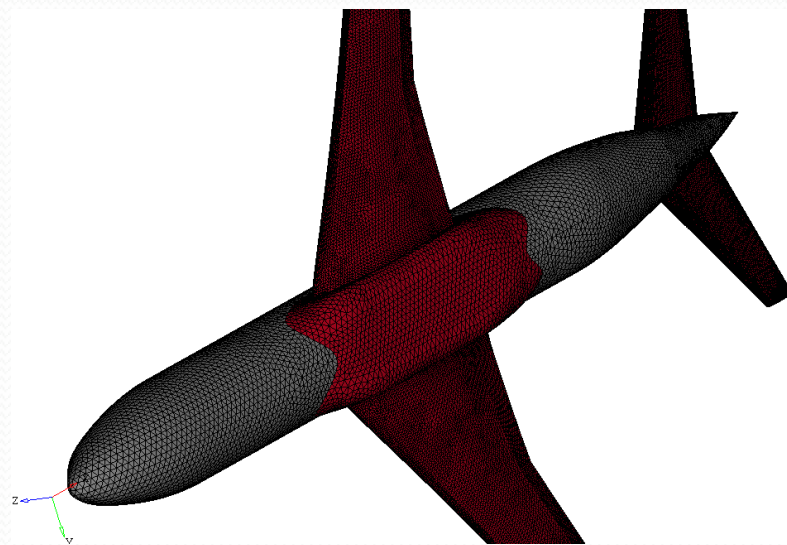
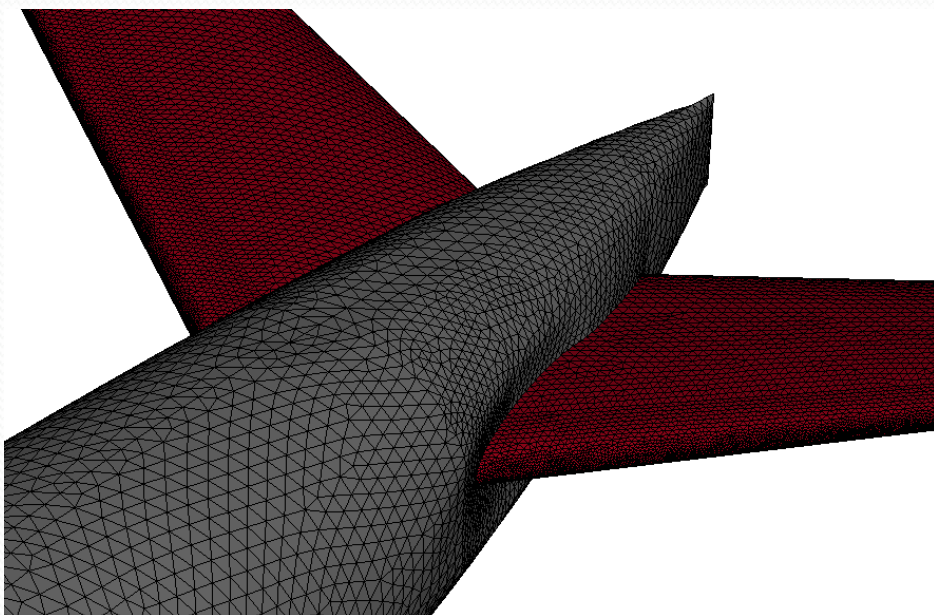
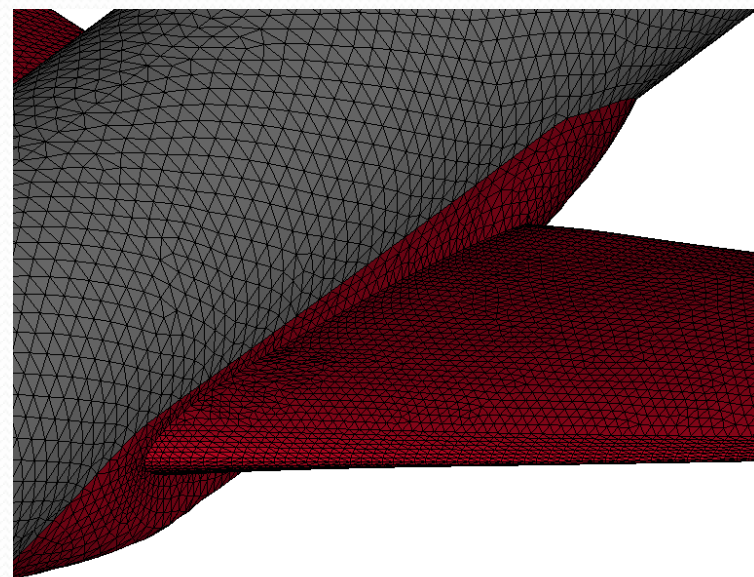
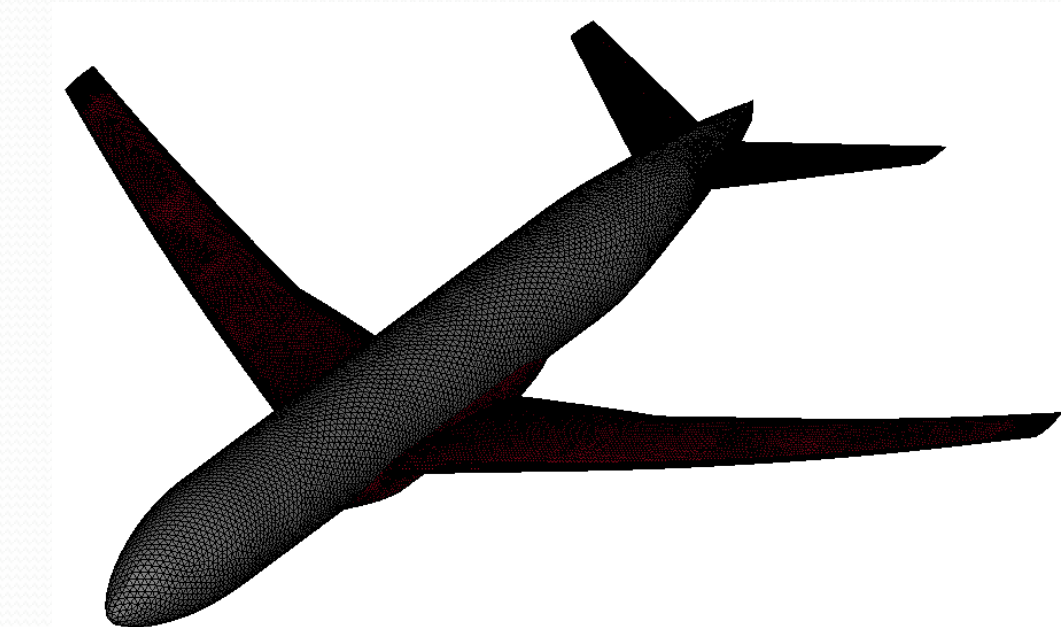
Medium surface mesh  
250,000 triangles



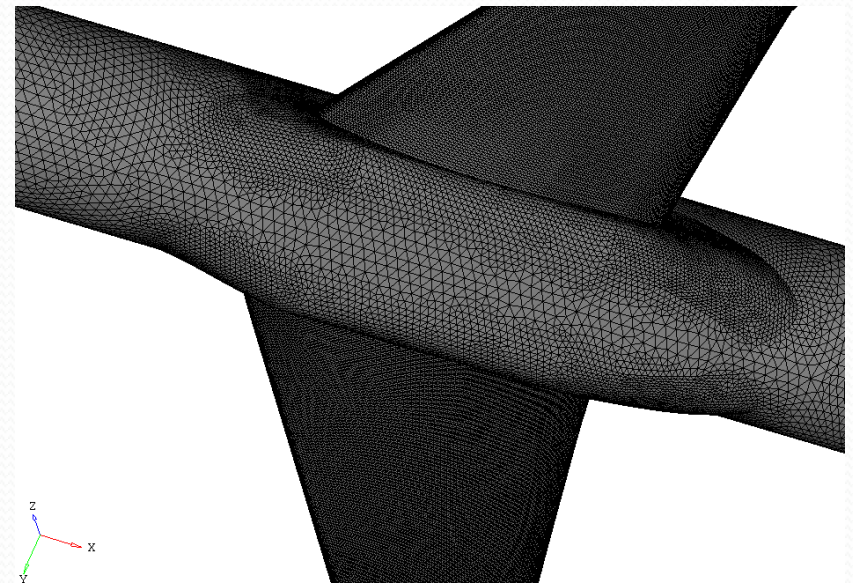
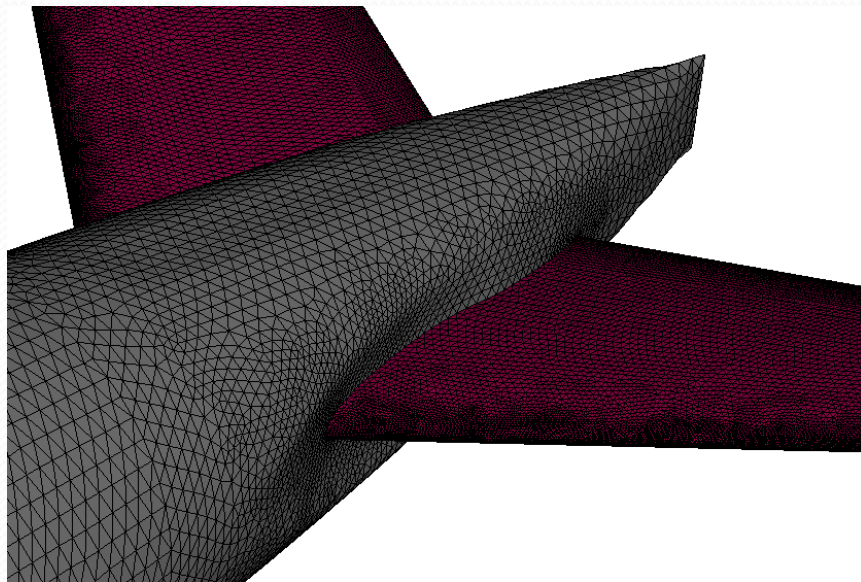
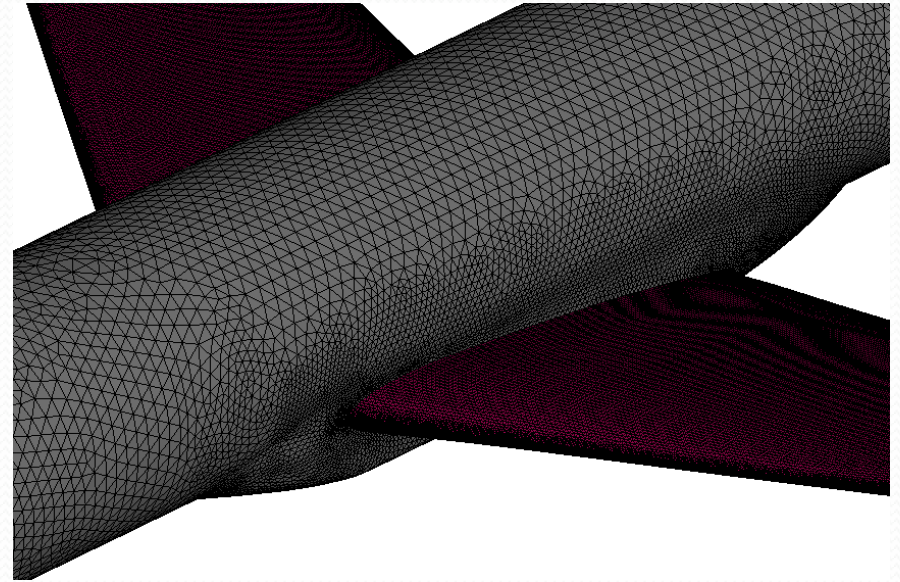
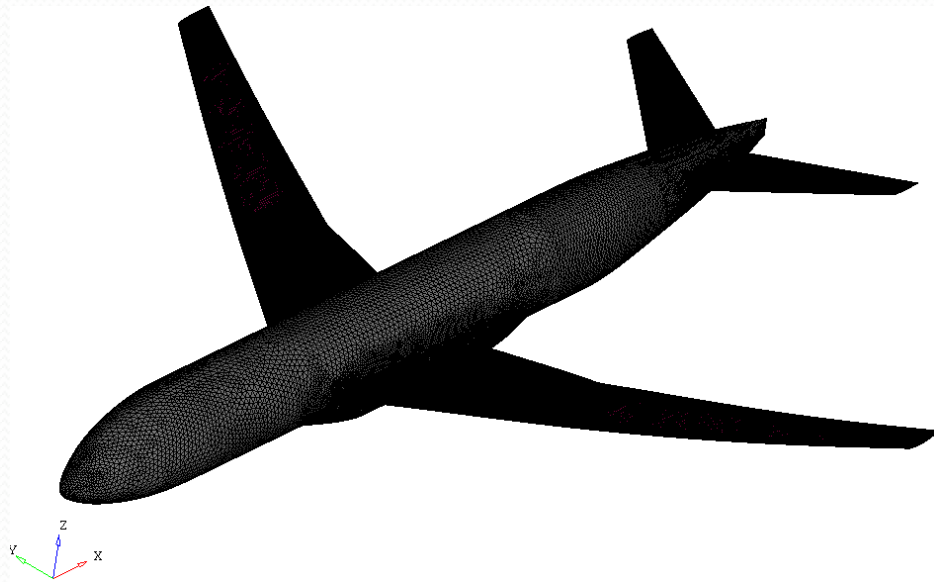
Fine surface mesh  
1,600,000 triangles



# Coarse surface grid

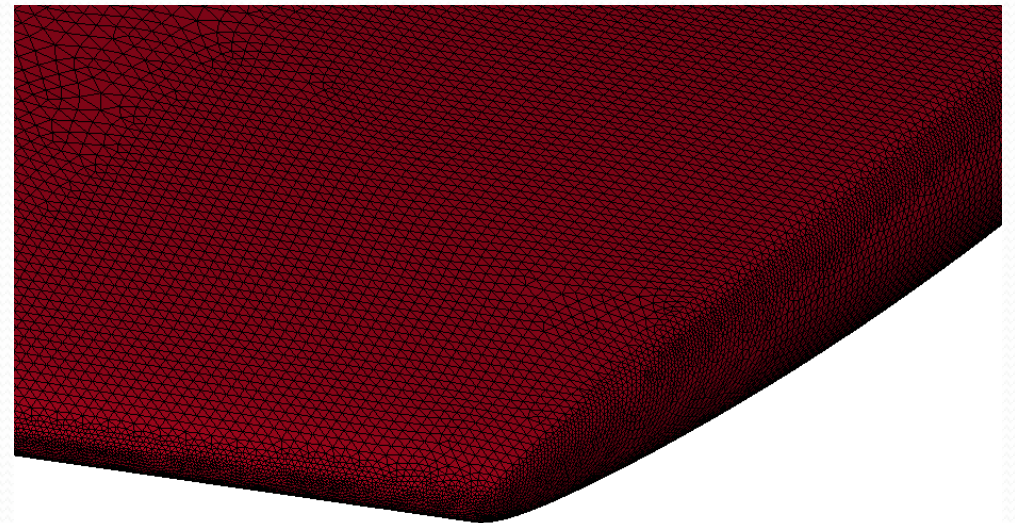
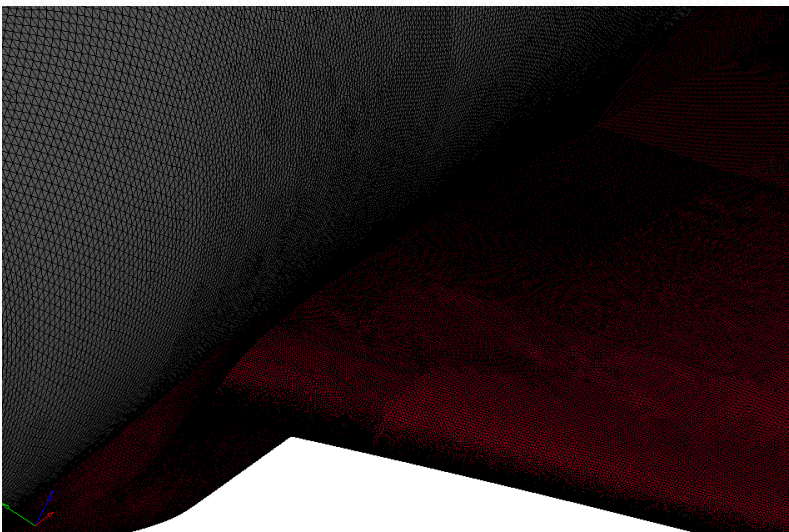
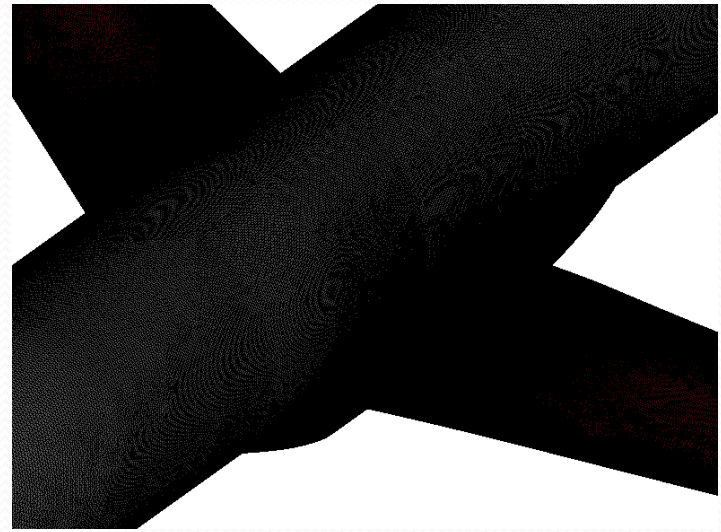
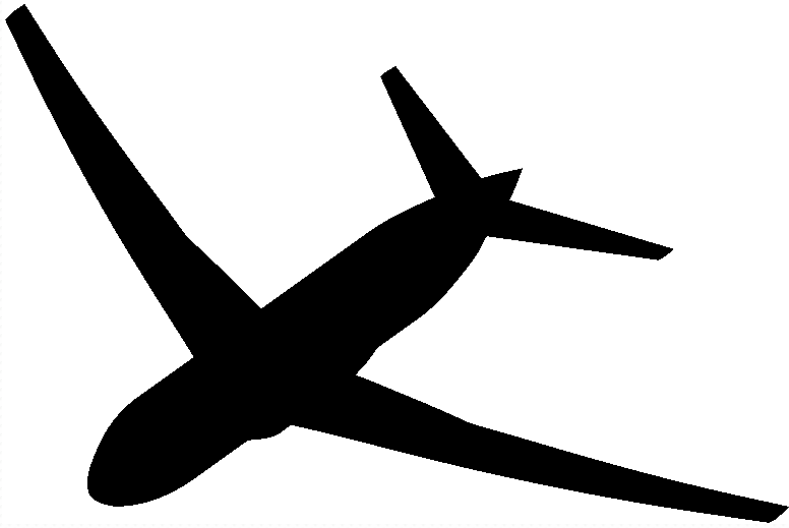


# Medium surface grid



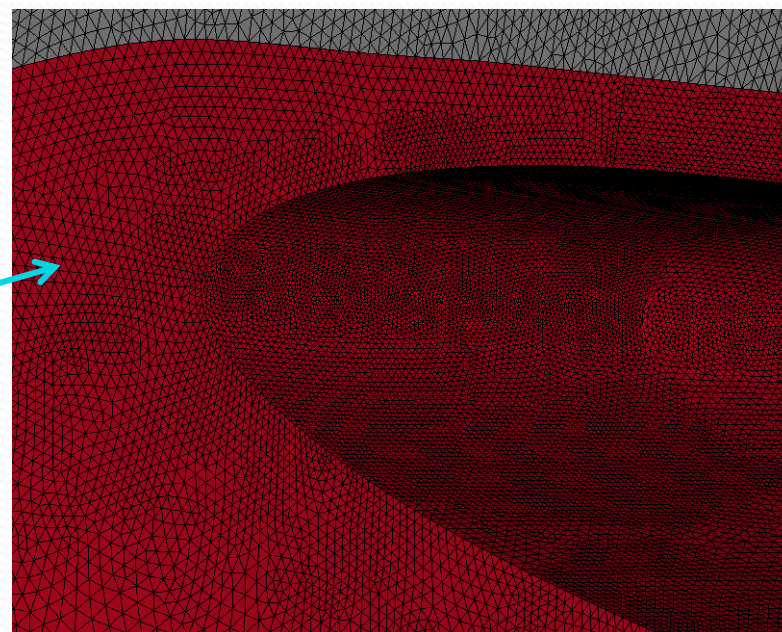
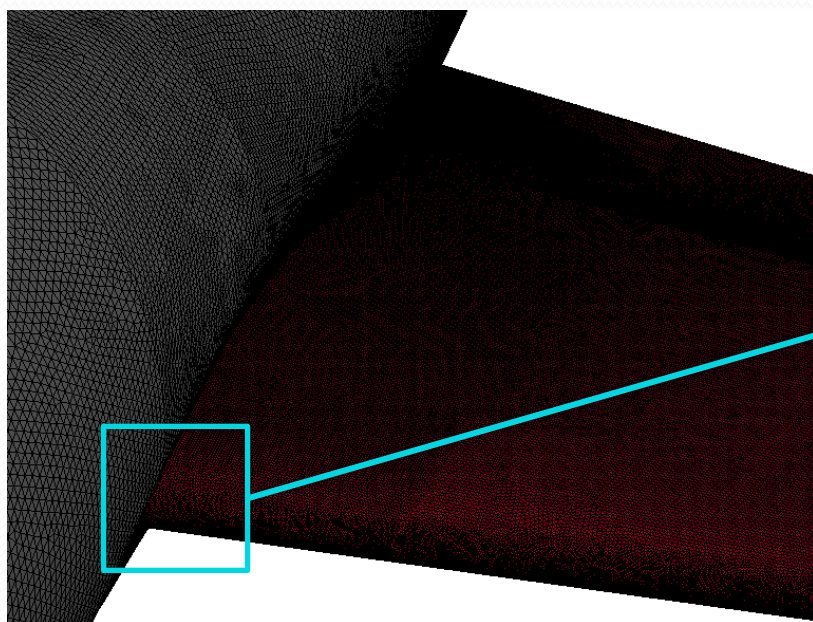
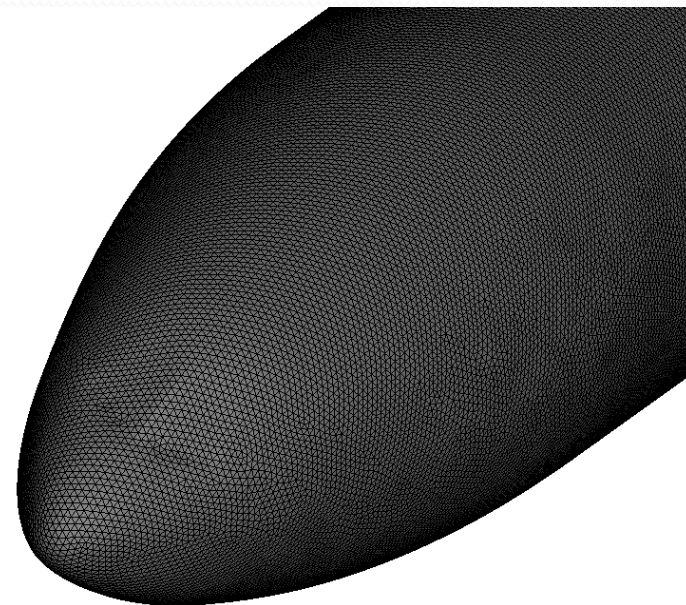


# Fine surface grid



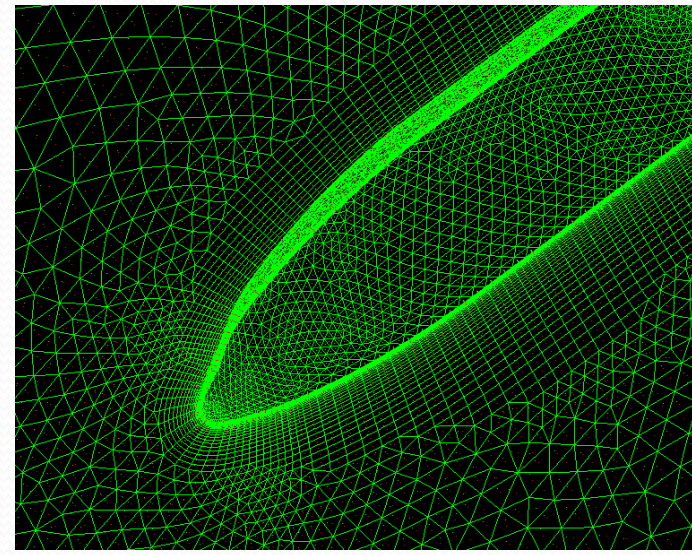
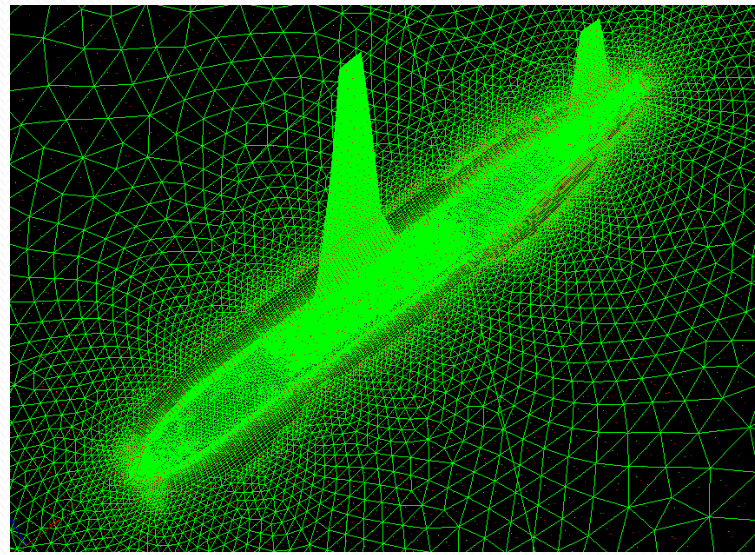
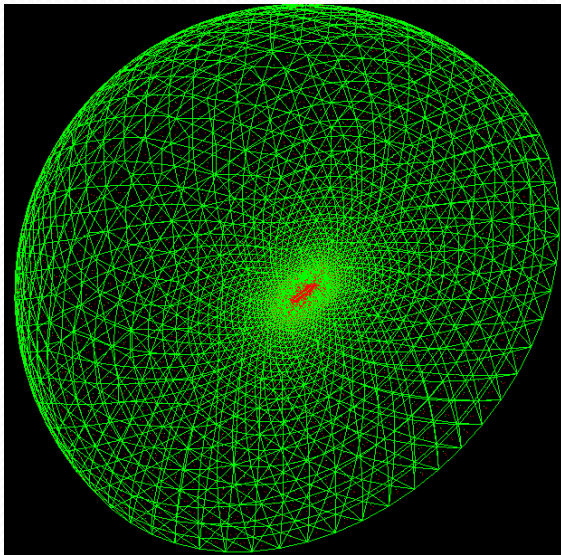
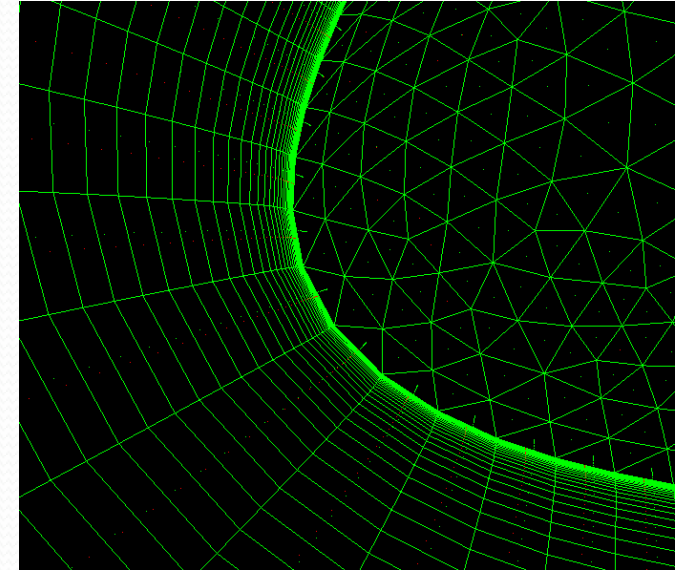
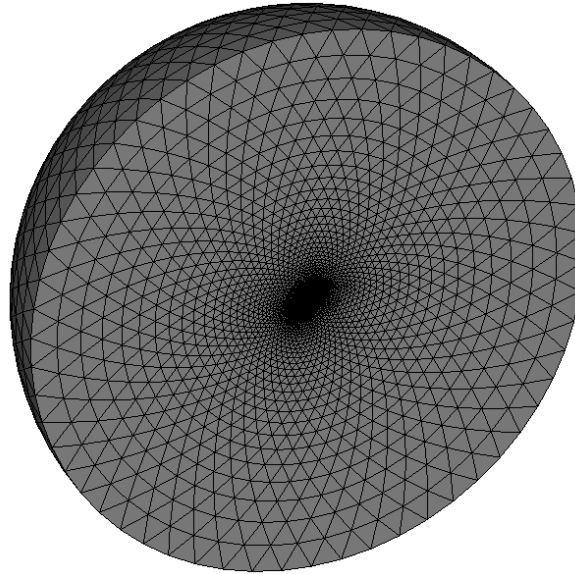


Surface grid for the fine case near the wing body junction and on the nose

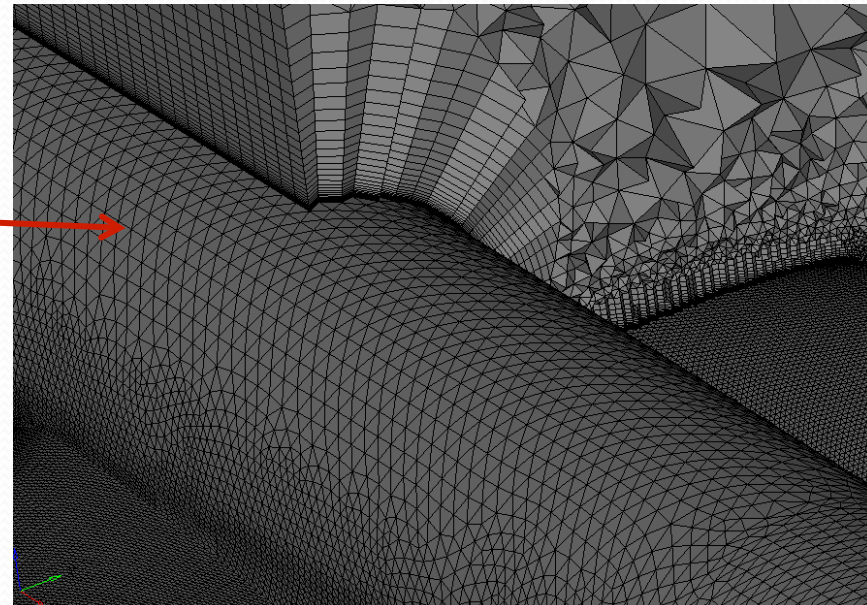
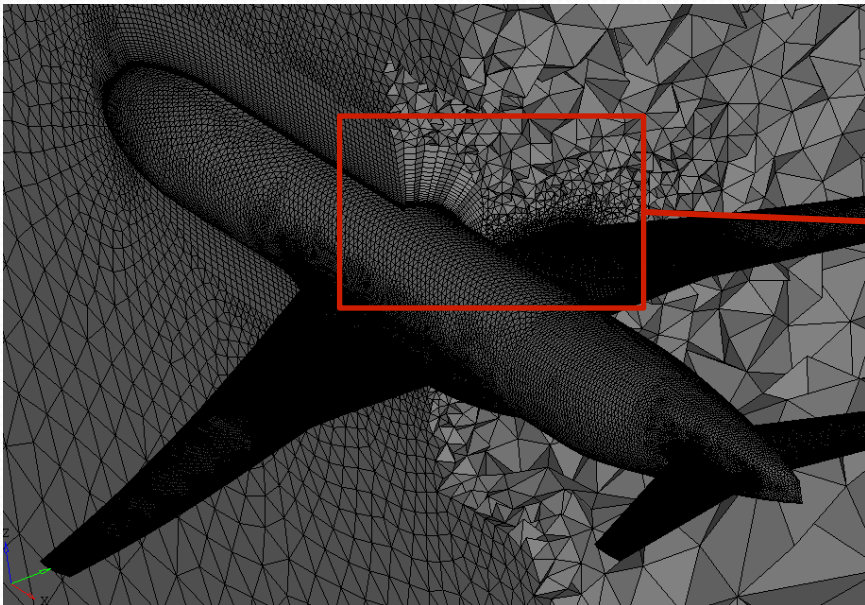
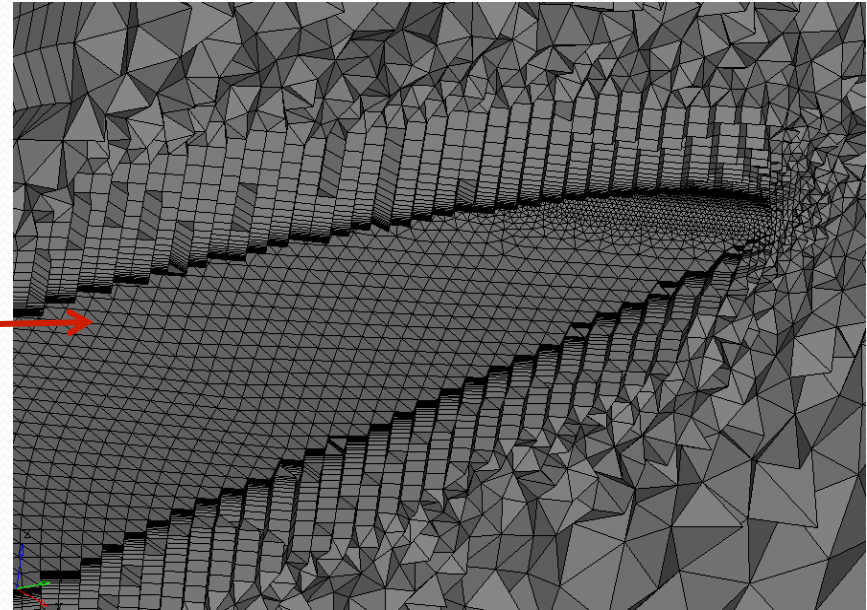
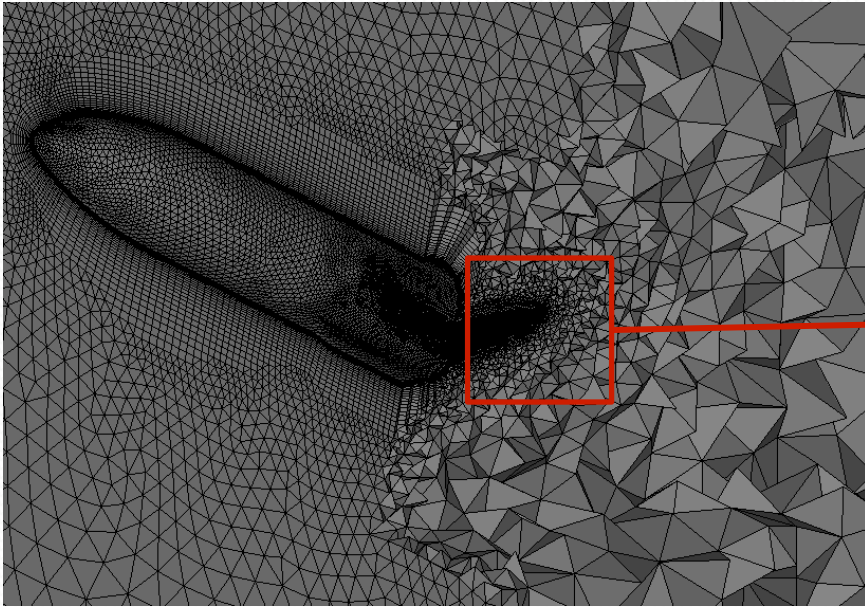




Fine volume grid with  
computational domain



Fine volume Grid with 25 M cells (Triangular prism near the wall and tetras away the wall)





## Boundary layer grid for fine case

