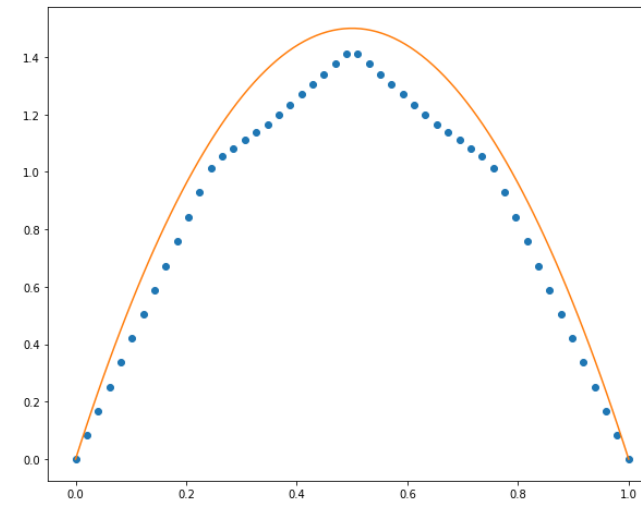
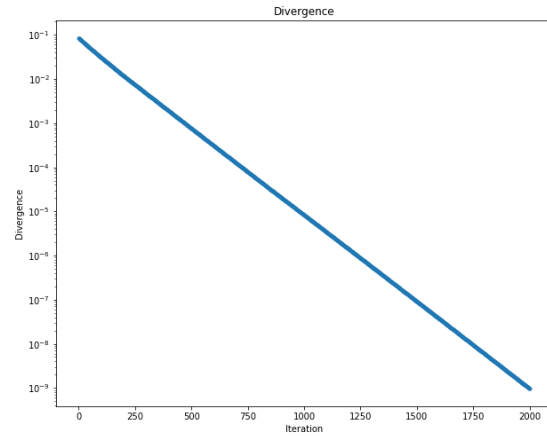
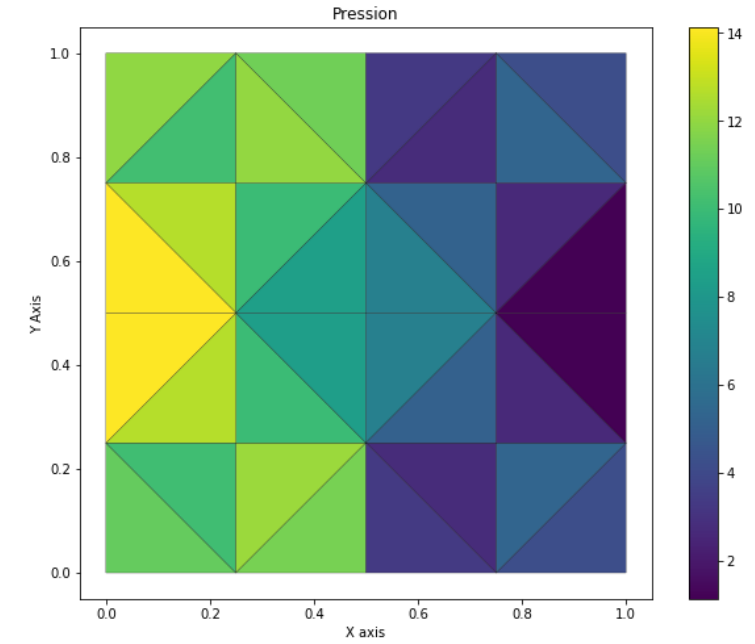
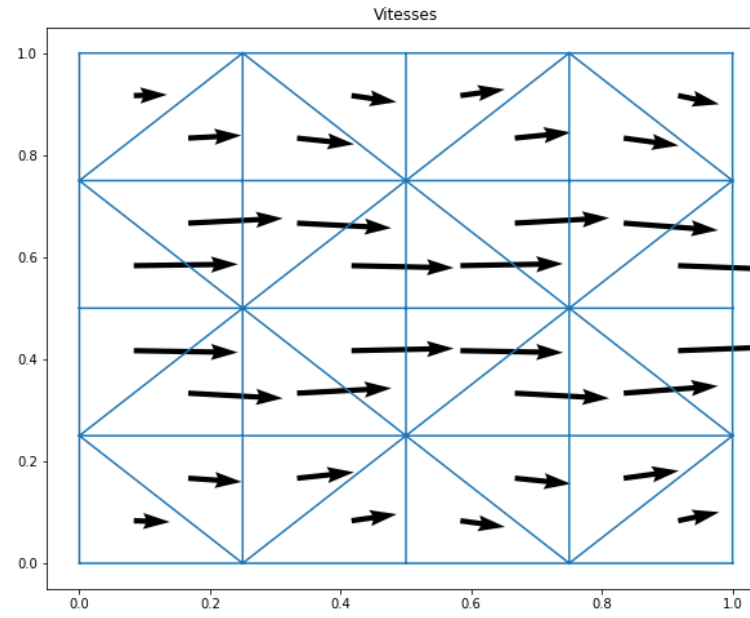
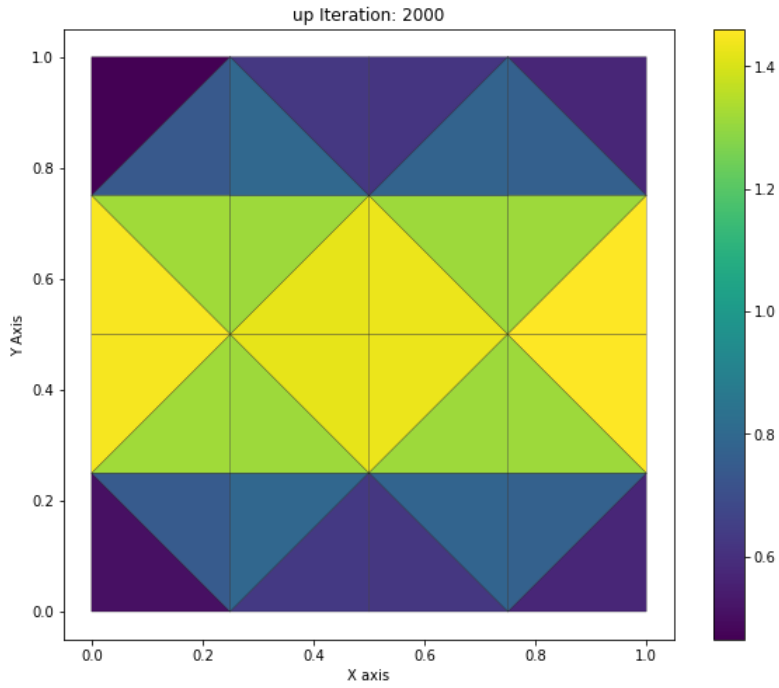
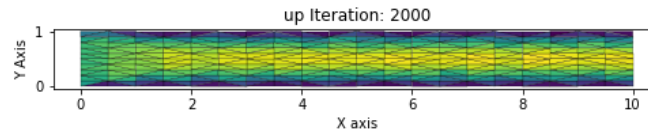
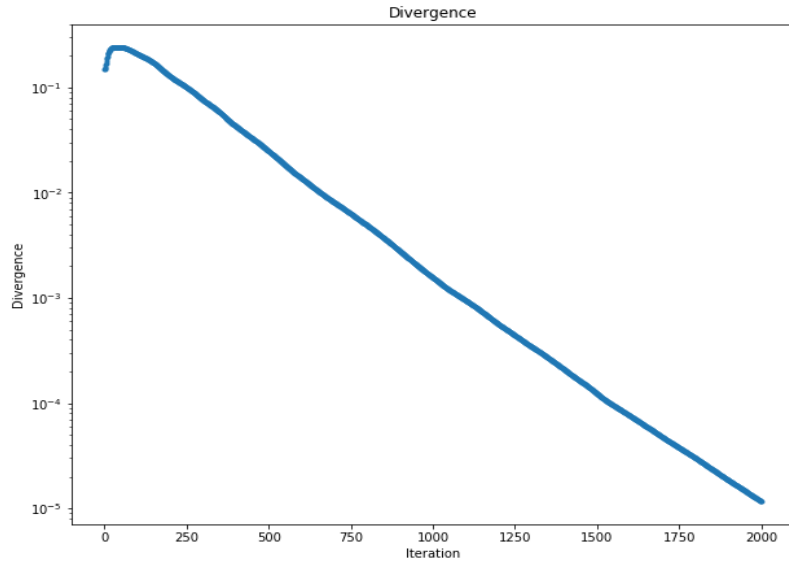


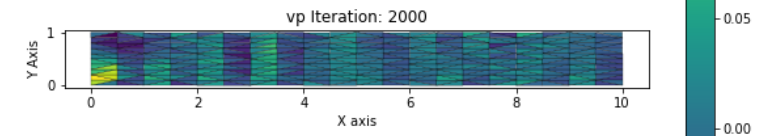
# Écoulement de Poiseuille avec entrée développée, $Re = 1$ , domaine $1 \times 1$ Schéma Upwind ,RectMesh 4,4, $\alpha_P = \alpha_{RC} = 0.1$



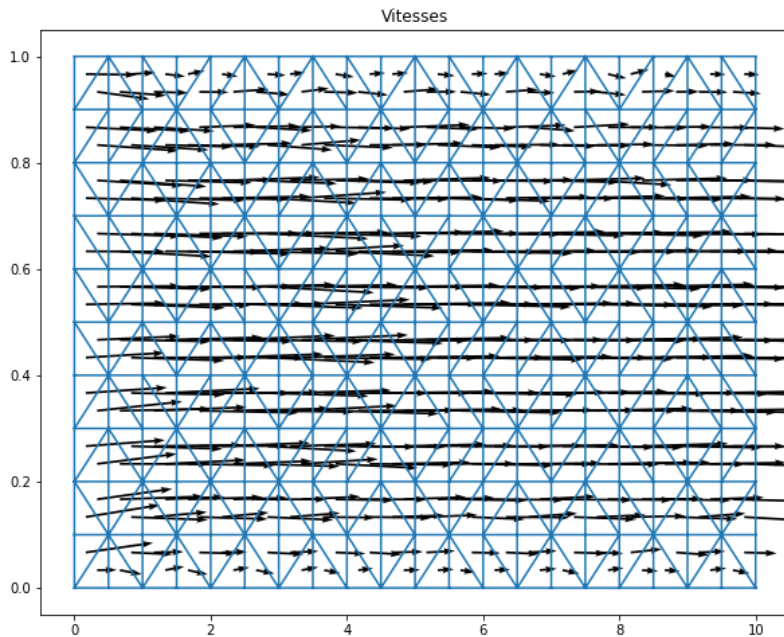
Écoulement de Poiseuille,  $Re = 100$ , entrée plat  
Schéma Centré, RectMesh 20x10,  $\alpha_P = \alpha_{RC} = 0.1$



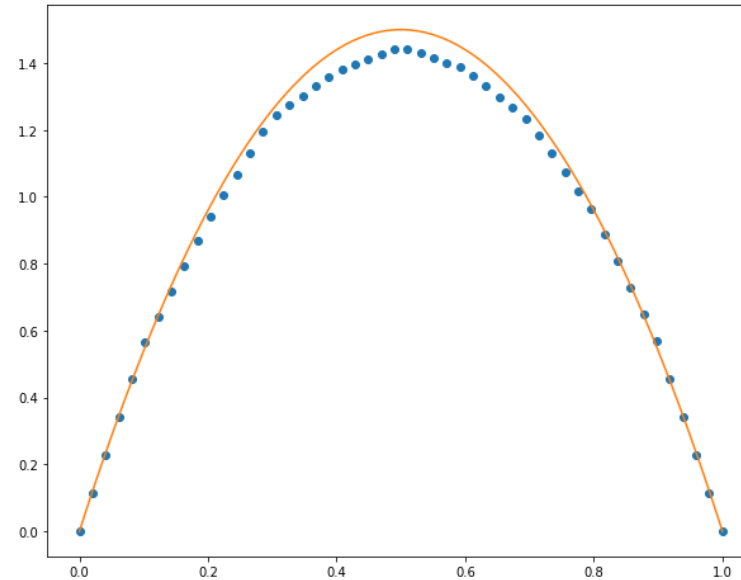
Vitesse selon x



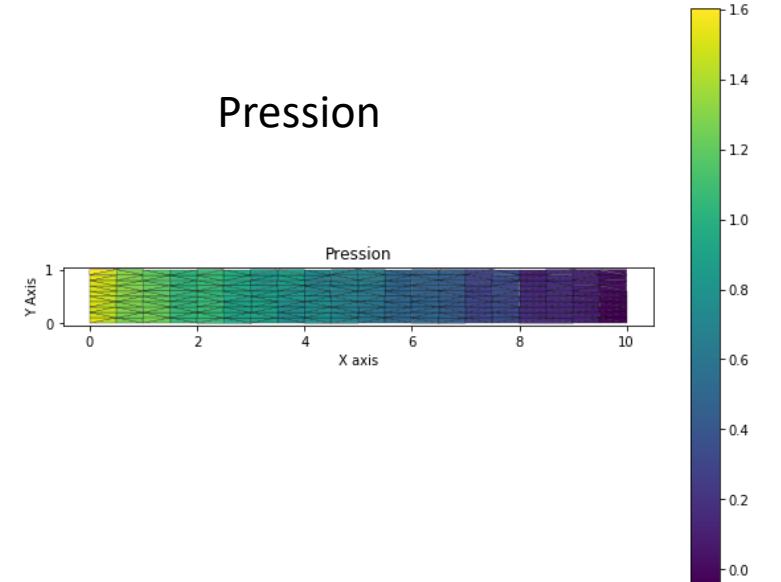
Vitesse selon y



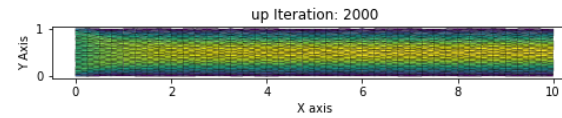
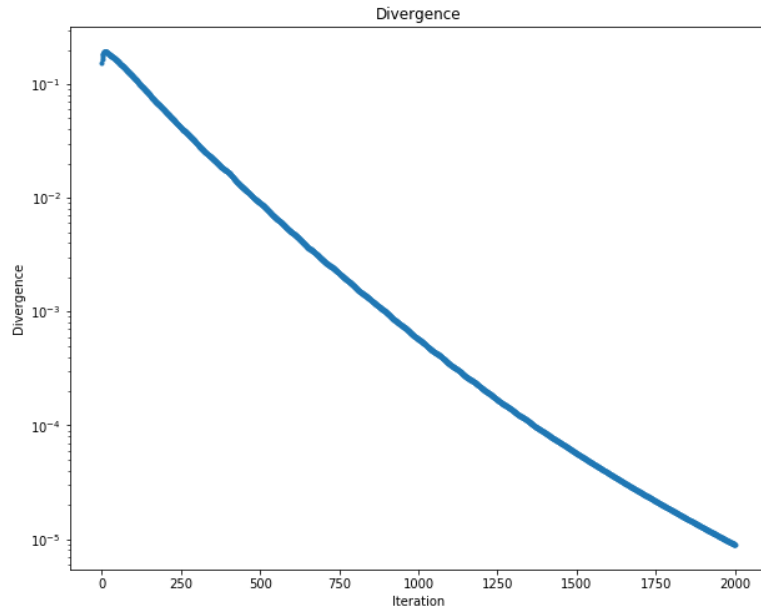
Vitesse x près du plan de sortie



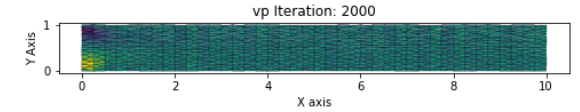
Pression



Écoulement de Poiseuille,  $Re = 100$ , entrée plat  
Schéma Centré, RectMesh 40x20,  $\alpha_P = \alpha_{RC} = 0.1$

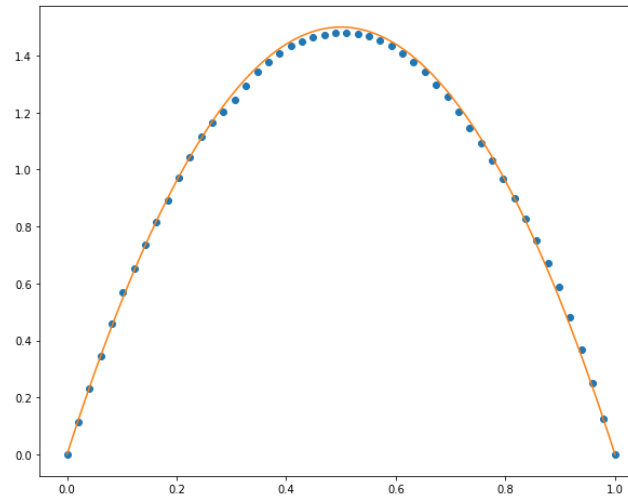


Vitesse selon x

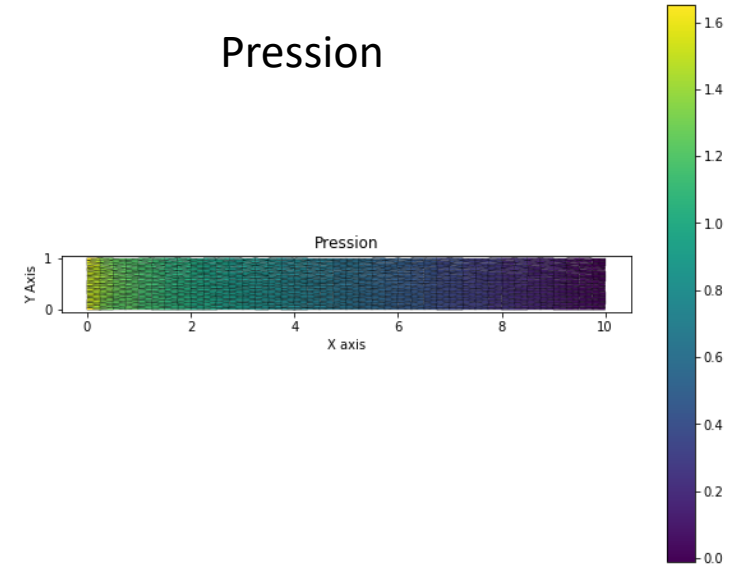


Vitesse selon y

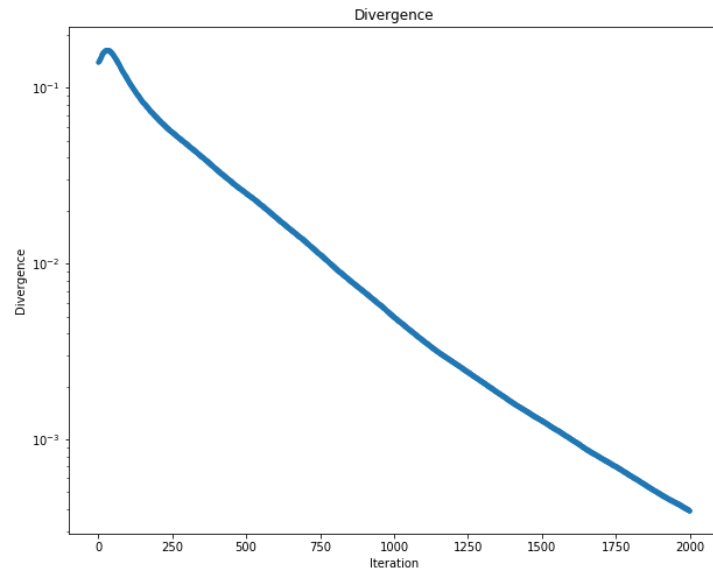
Vitesse x près du plan de sortie



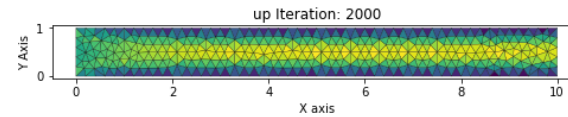
Pression



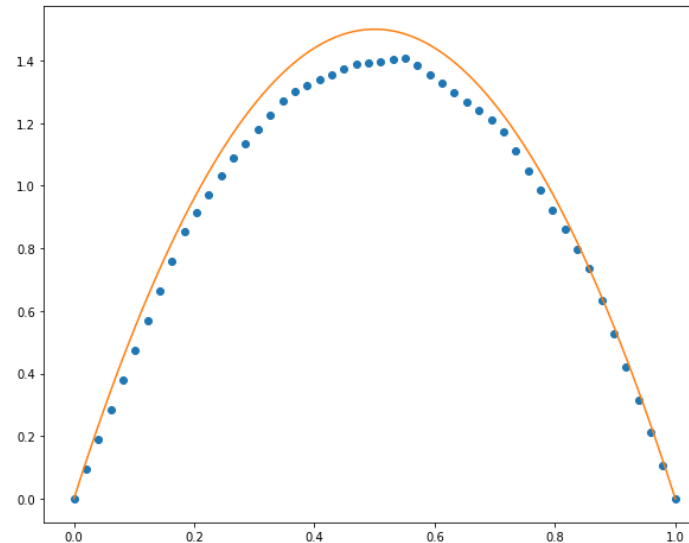
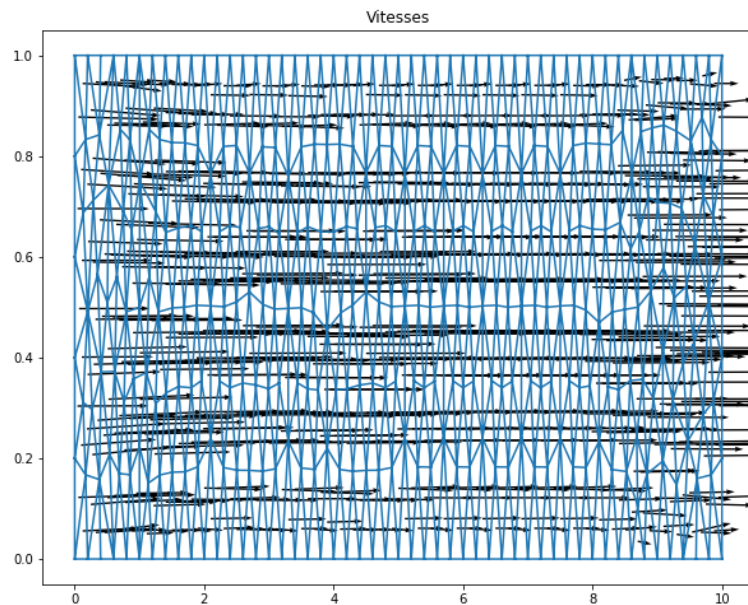
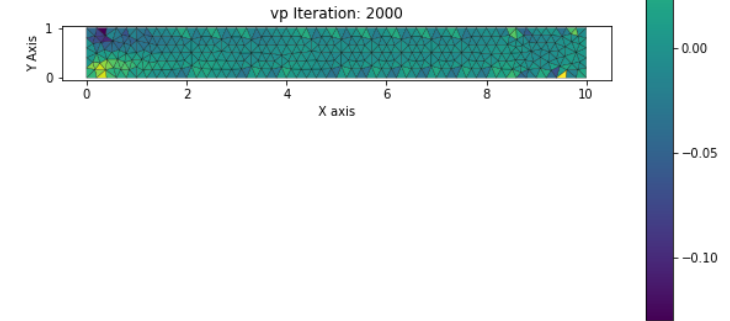
Écoulement de Poiseuille,  $Re = 100$ , entrée plat  
Schéma Centré, RectGmsh,  $Lc=0.2$ ,  $\alpha_P=\alpha_{RC}=0.1$   
622 triangles,  $\sim 10$  min. pour 2000 iter.



Vitesse selon x

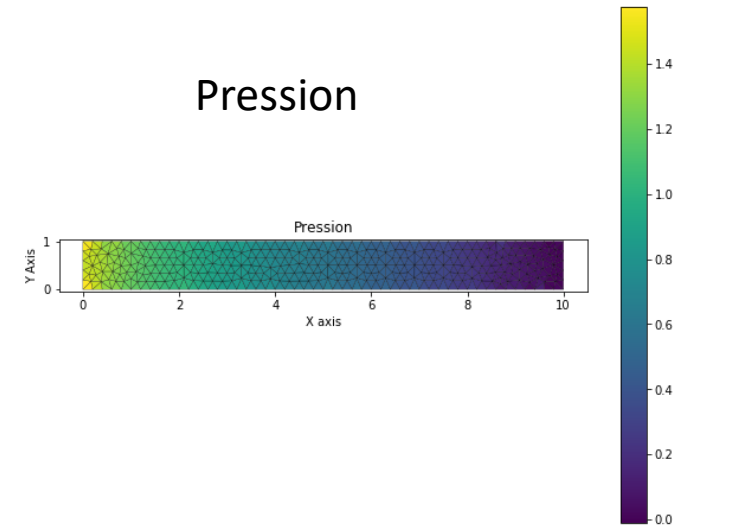


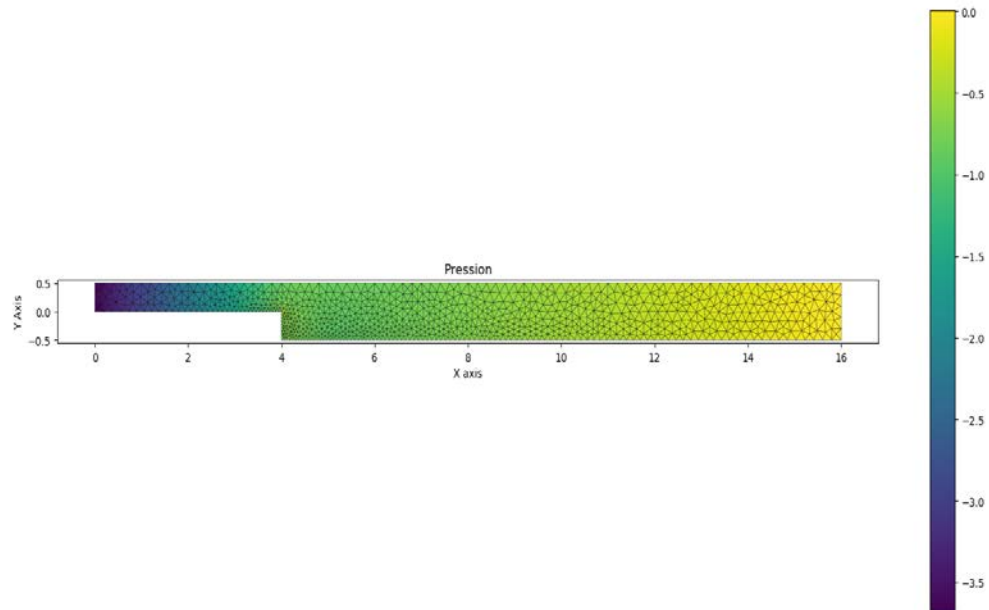
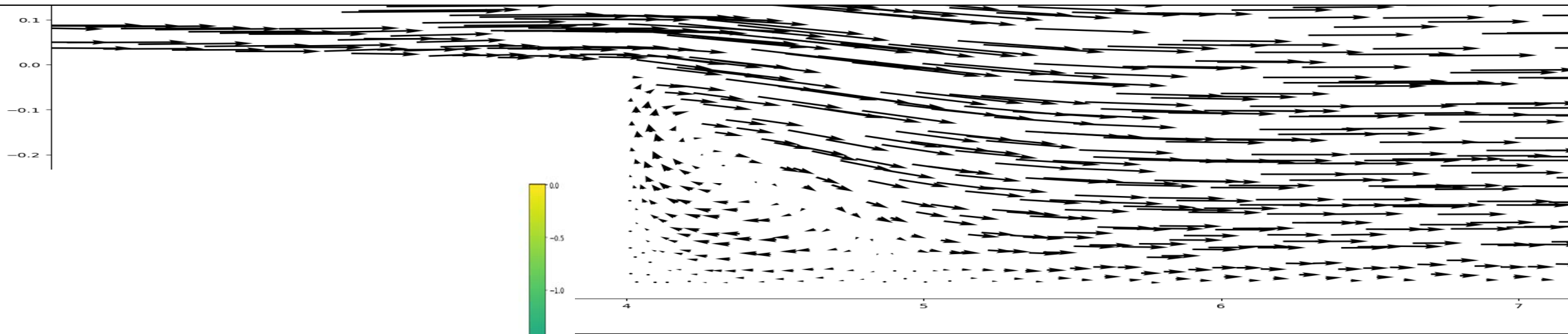
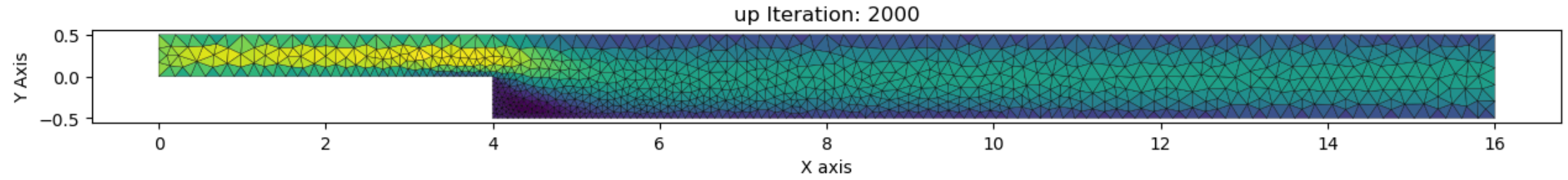
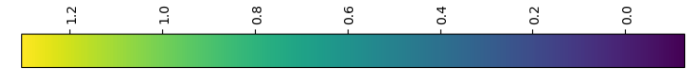
Vitesse selon y



Vitesse x près du plan de sortie

Pression





Backward facing step. BackstepMesh modifié  
. 1686 triangles. Entrée plat.  $Re=100$ .  
Schéma Upwind. Divergence  $10^{-8}$  en 2000 iterations.