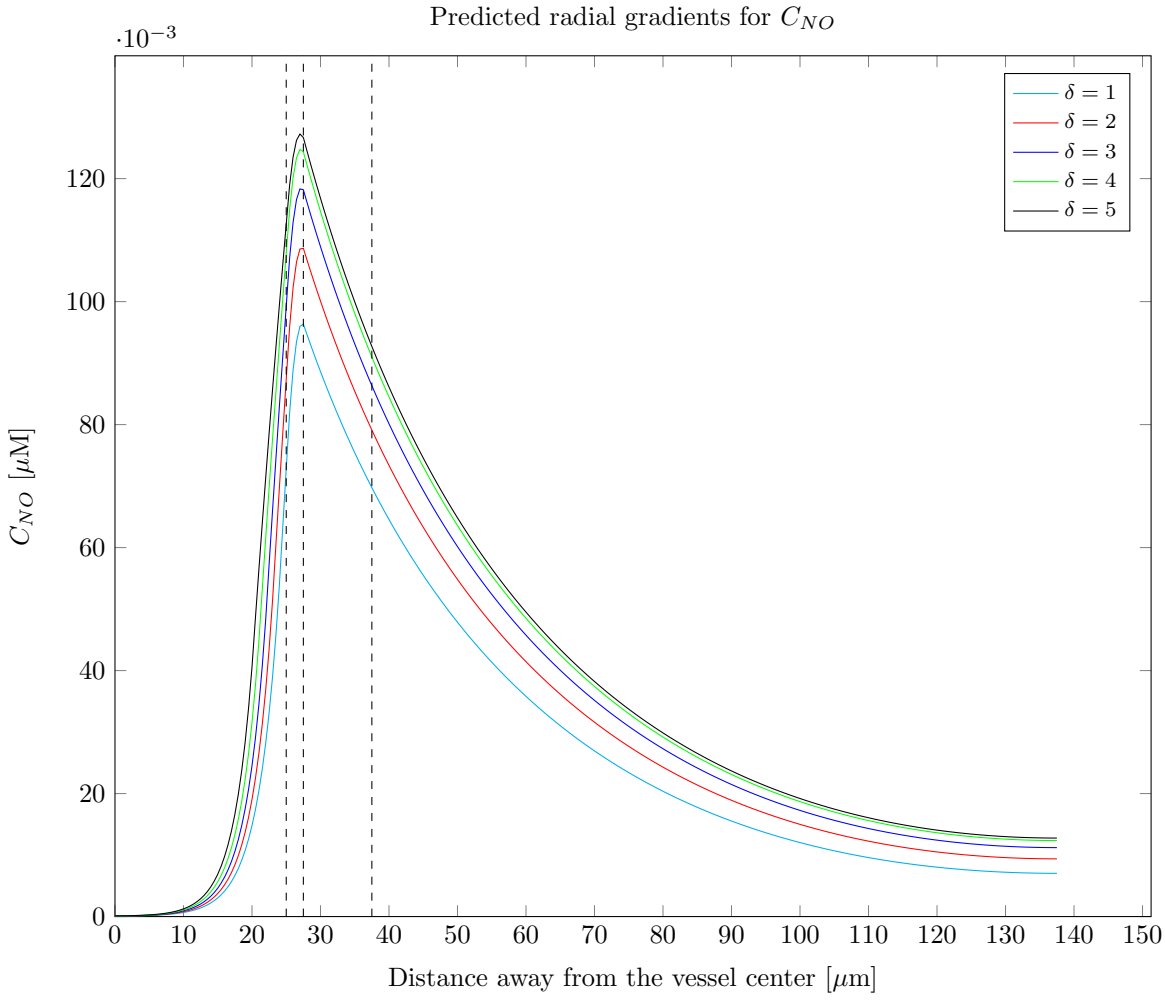
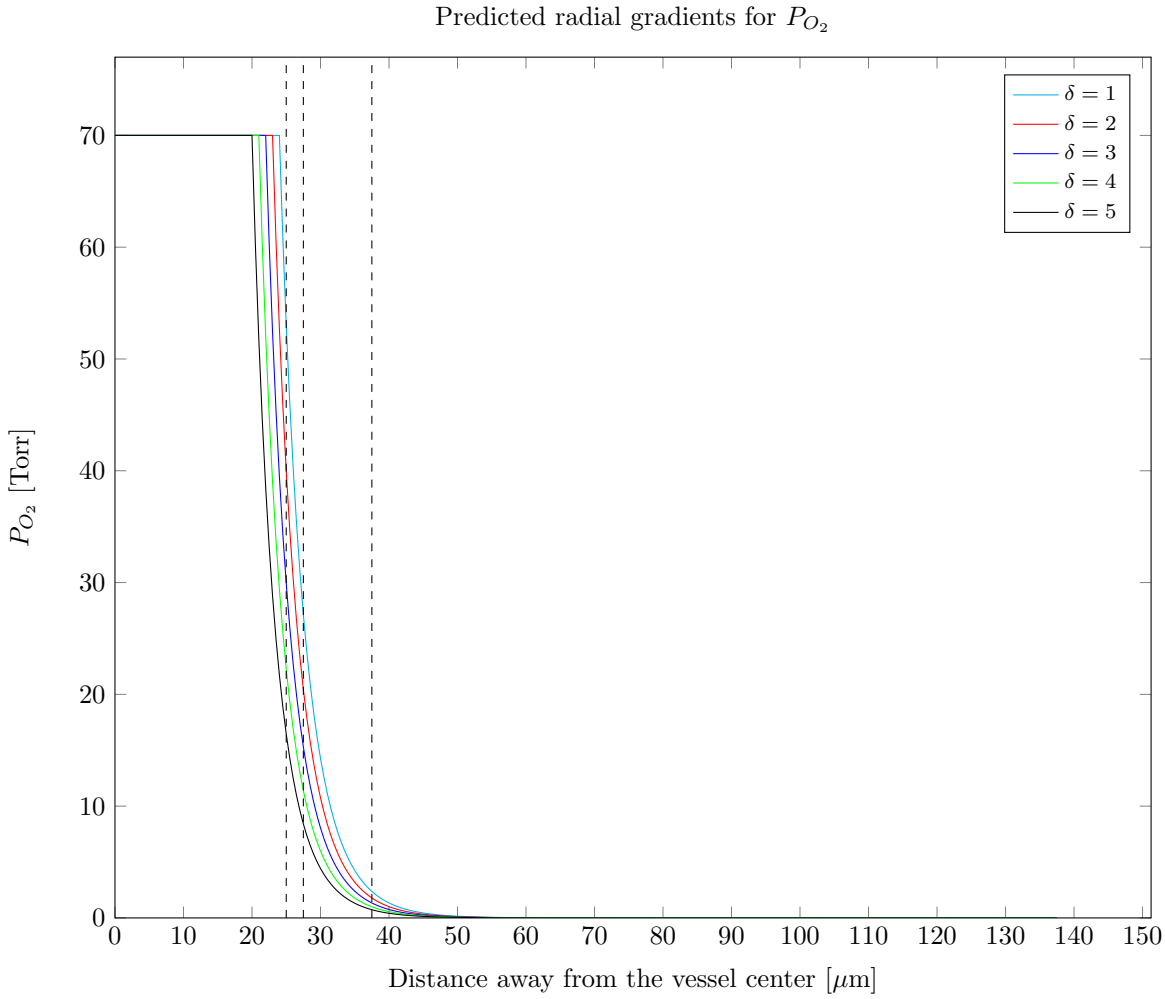
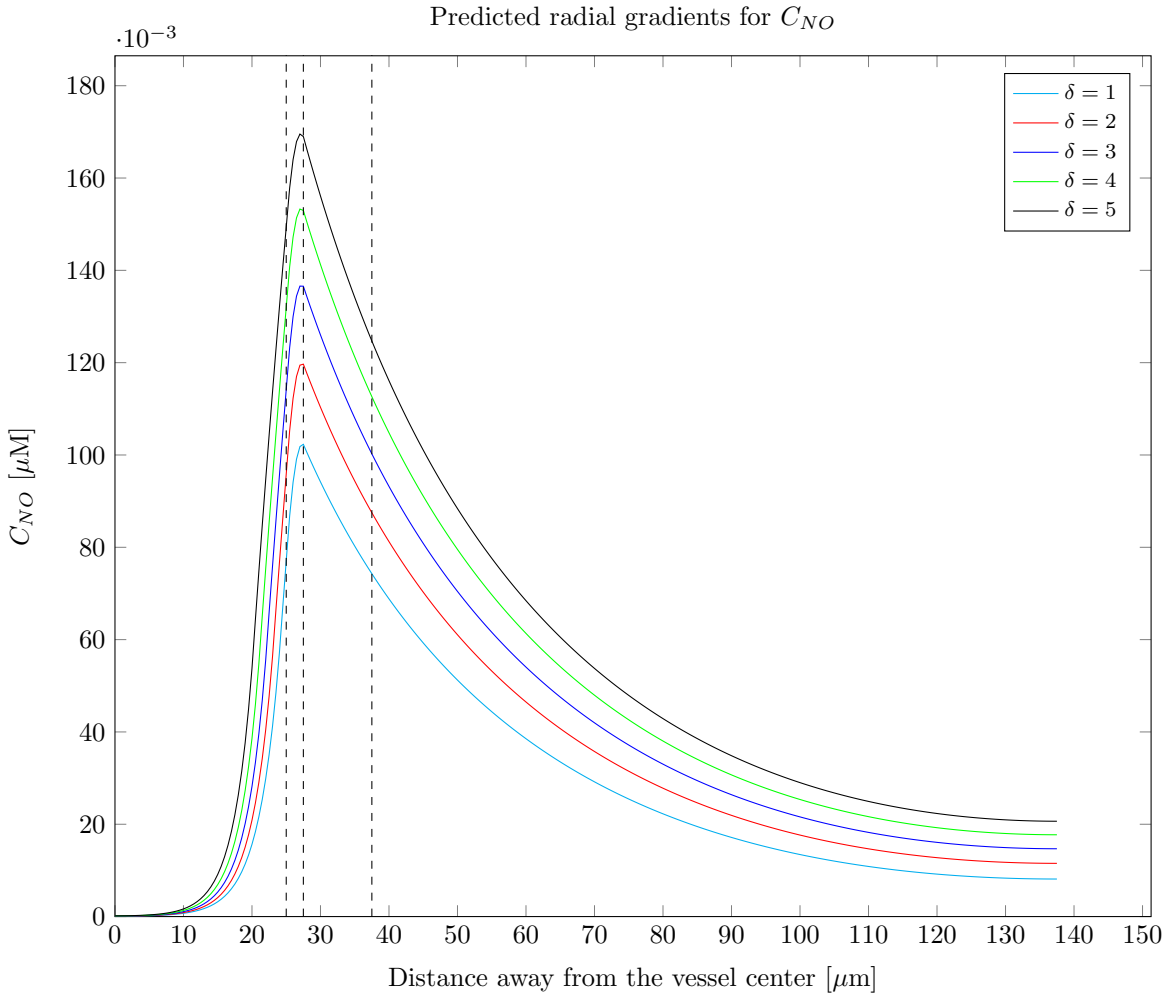
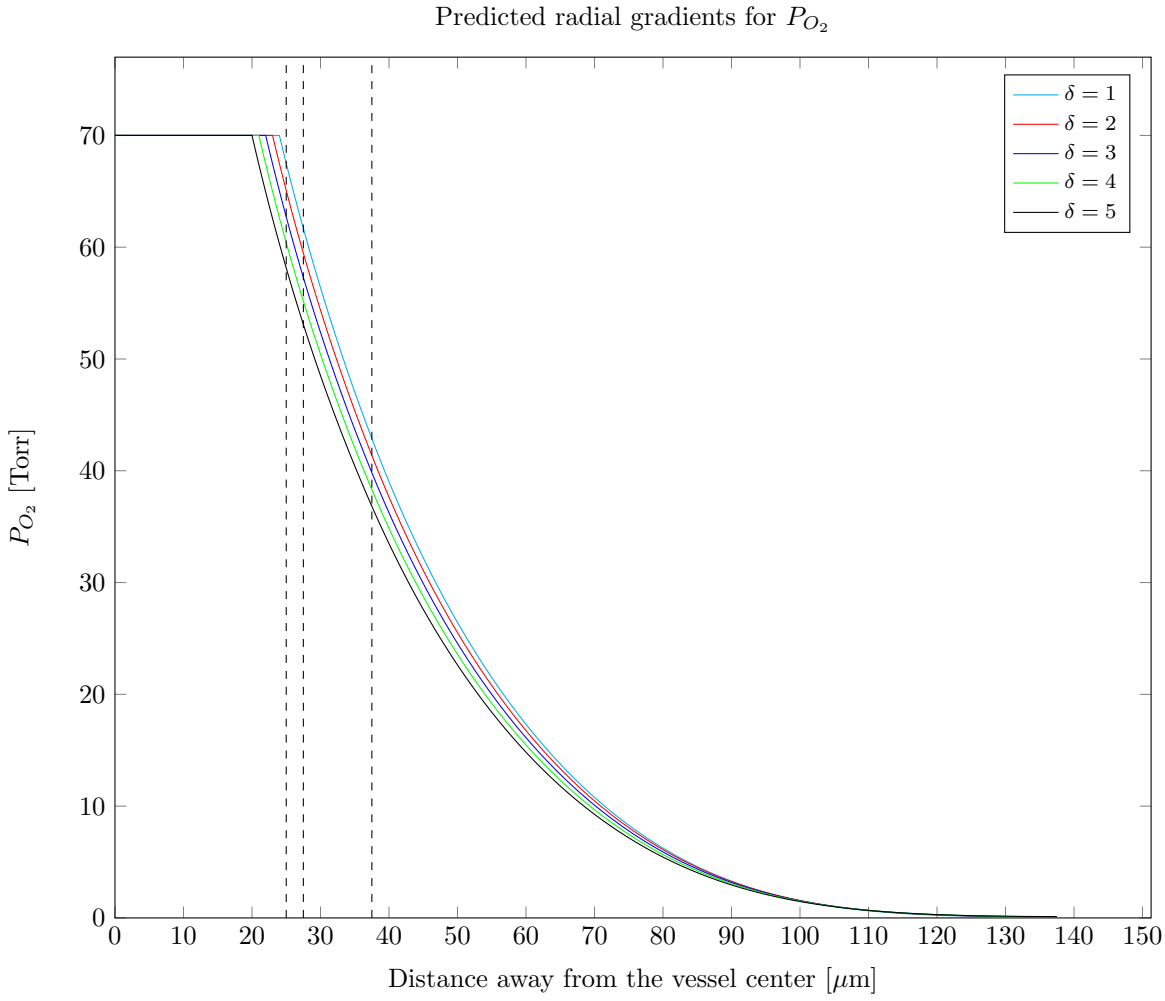
I think first two are incorrect since they are different from the paper. I used the large matrix to O_2 which may be the reason. The next two are same with the paper, I used iterative method for both NO and O_2.


Predicted radial gradients for C_{NO}
$\cdot 10^{-3}$
C_{NO} [μM]
Distance away from the vessel center [μm]
$\delta = 1$
$\delta = 2$
$\delta = 3$
$\delta = 4$
$\delta = 5$


Predicted radial gradients for P_{O_2}
P_{O_2} [Torr]
Distance away from the vessel center [μm]
$\delta = 1$
$\delta = 2$
$\delta = 3$
$\delta = 4$
$\delta = 5$


Predicted radial gradients for C_{NO}
$\cdot 10^{-3}$
180
160
140
120
100
80
60
40
20
0
C_{NO} [μM]
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
Distance away from the vessel center [μm]
$\delta = 1$
$\delta = 2$
$\delta = 3$
$\delta = 4$
$\delta = 5$


Predicted radial gradients for P_{O_2}
70
60
50
40
30
20
10
0
P_{O_2} [Torr]
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
Distance away from the vessel center [μm]
$\delta = 1$
$\delta = 2$
$\delta = 3$
$\delta = 4$
$\delta = 5$