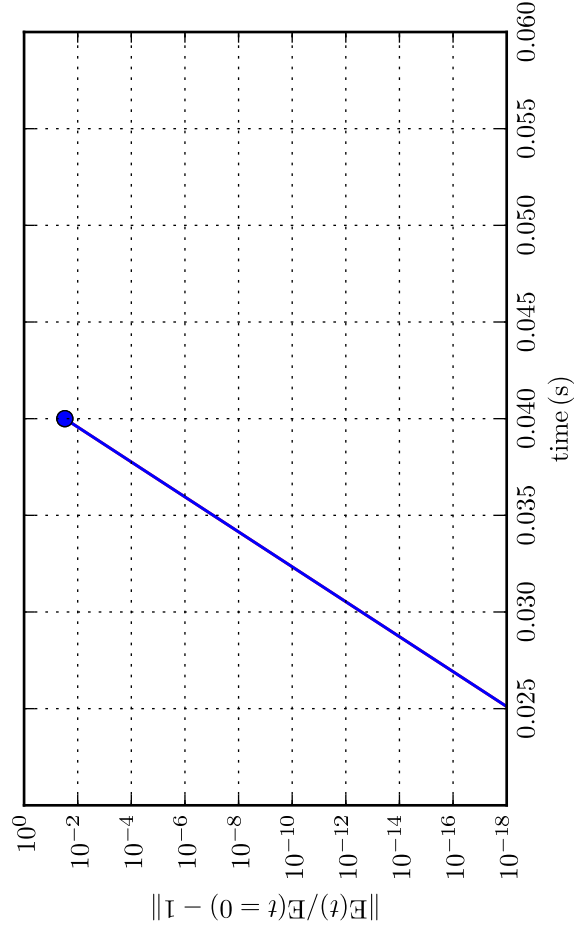
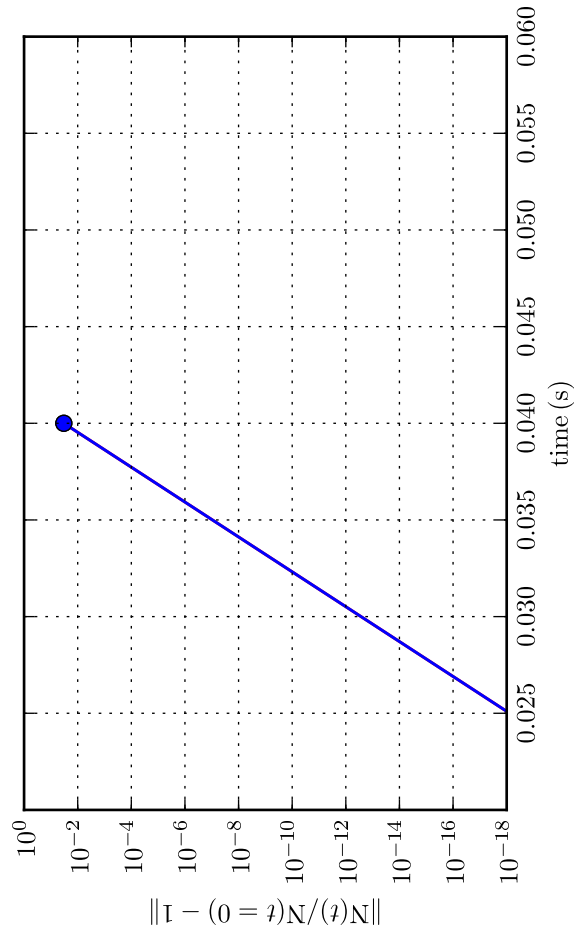
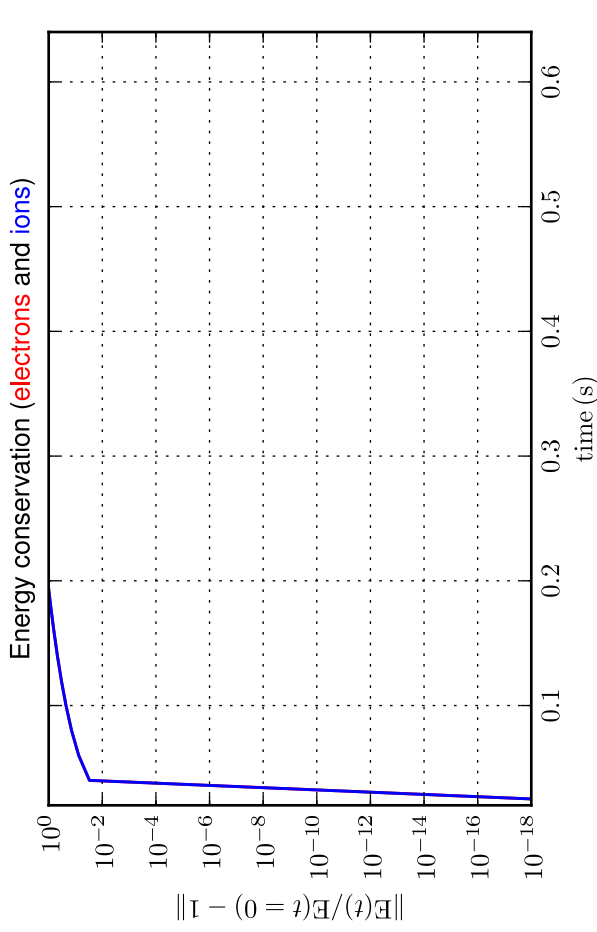
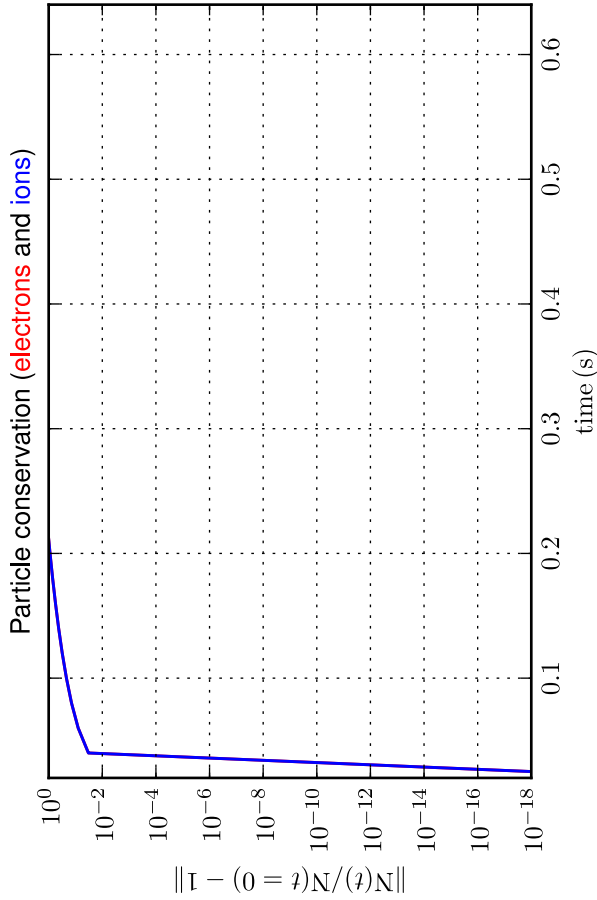


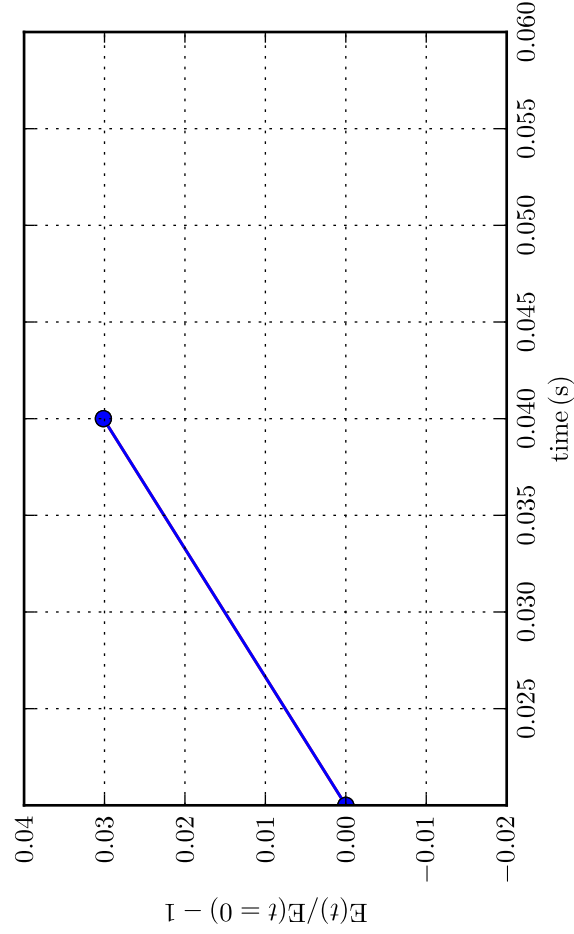
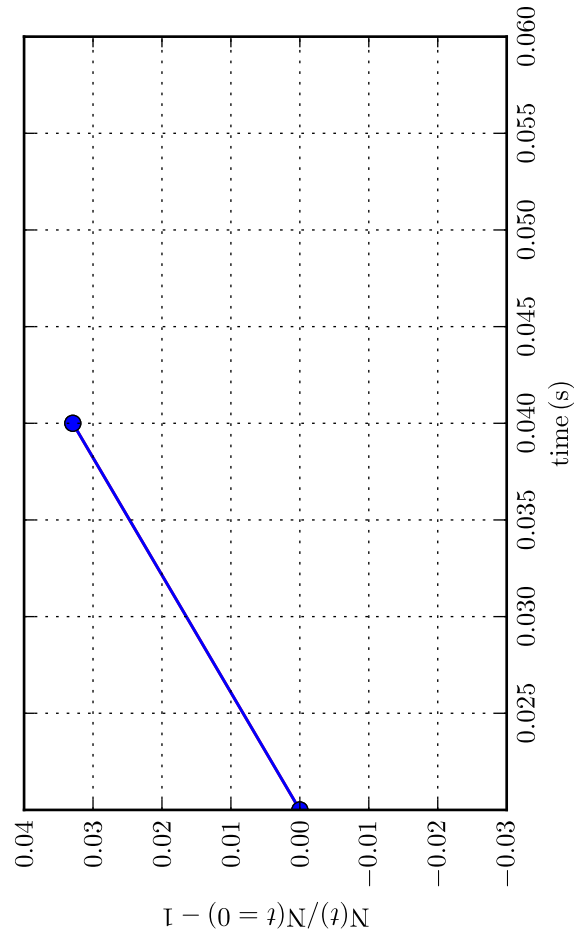
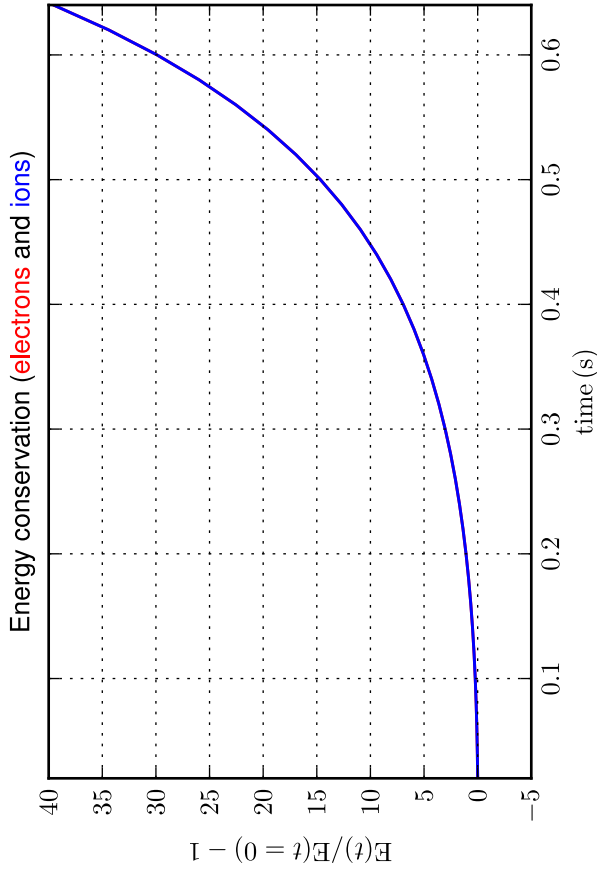
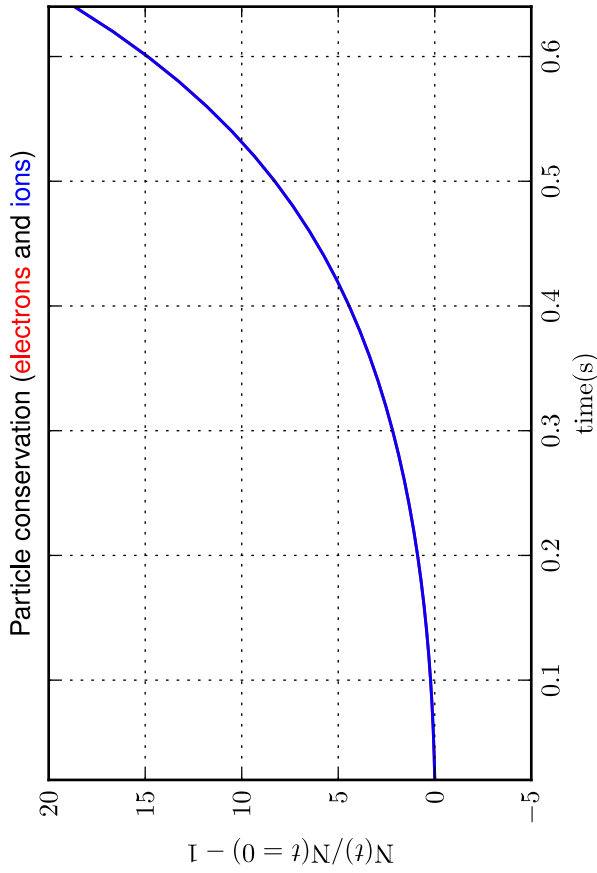
Part. & Energy conservation [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 501$]

Comparison with initial solution - log scale; total time and zoom over time

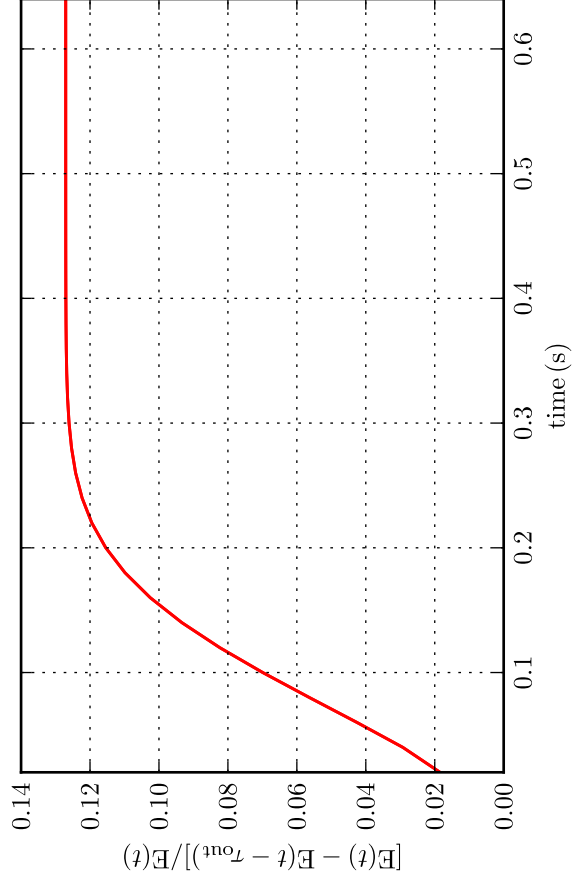
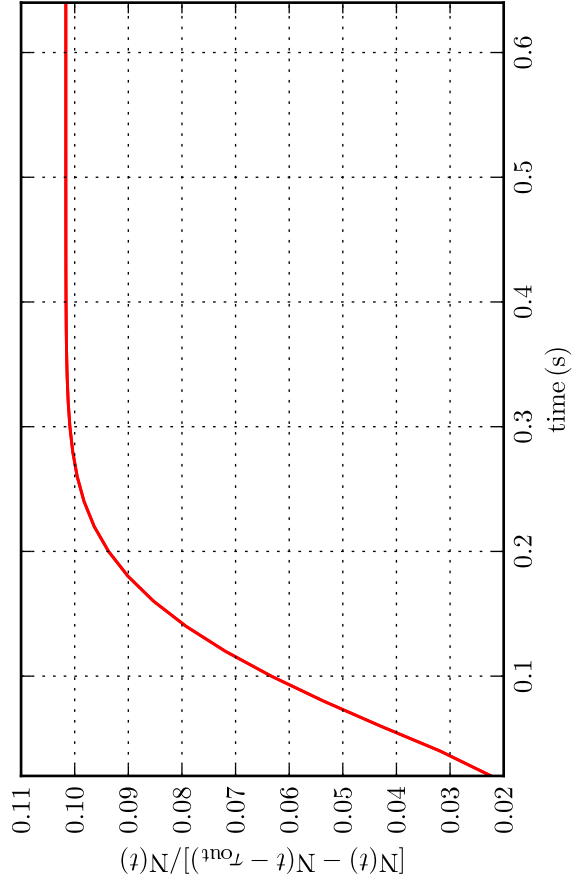
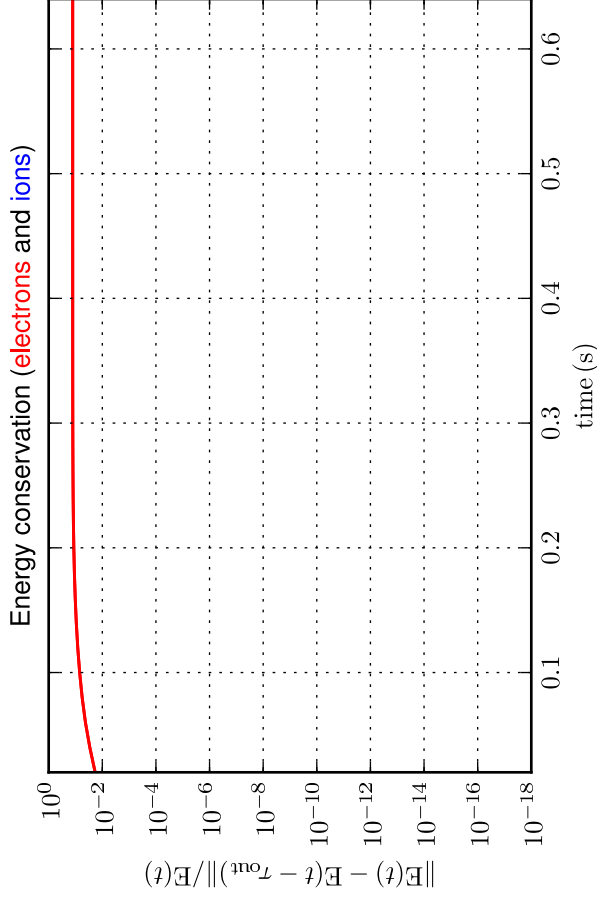
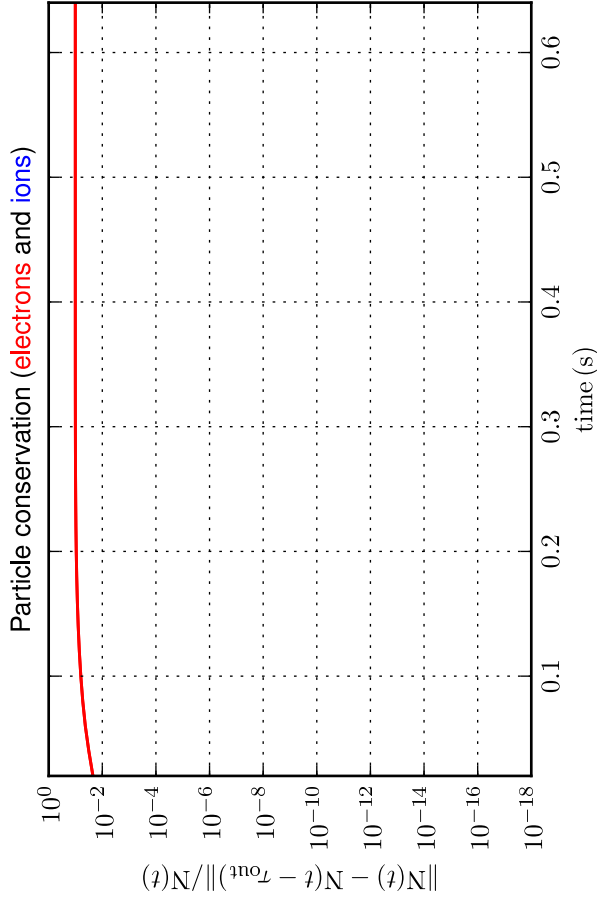


Part. & Energy conservation [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 501$]

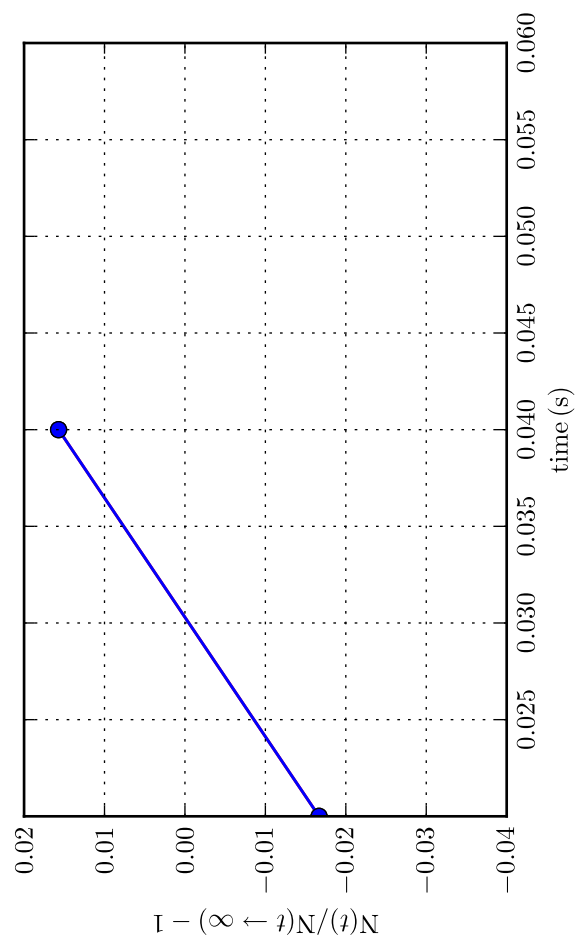
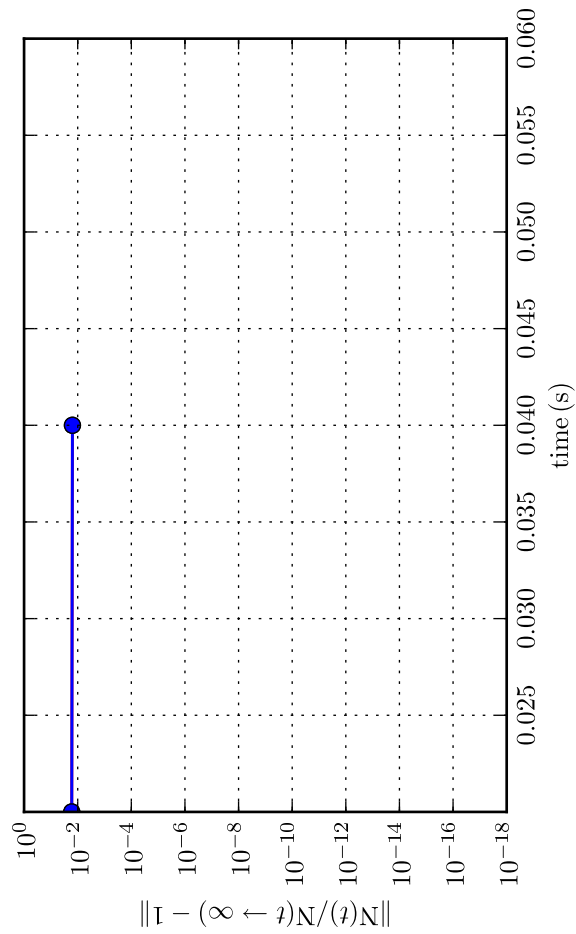
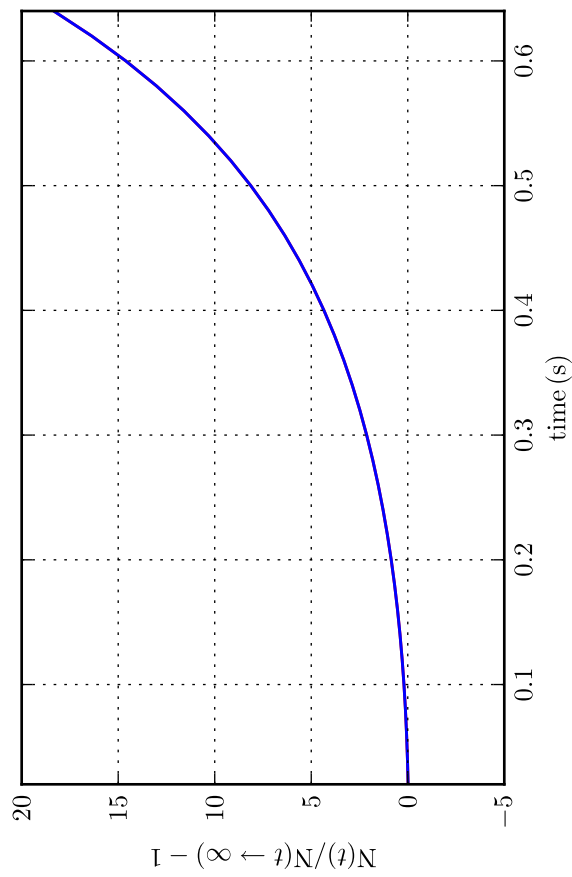
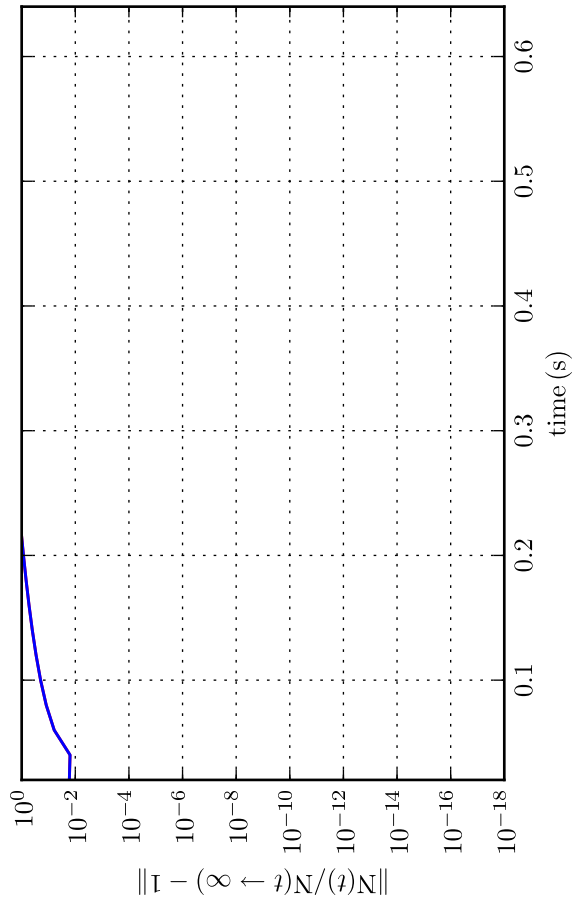
Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 501$]
Comparison with previous time-sampled (τ_{out}) solution - log and linear scales

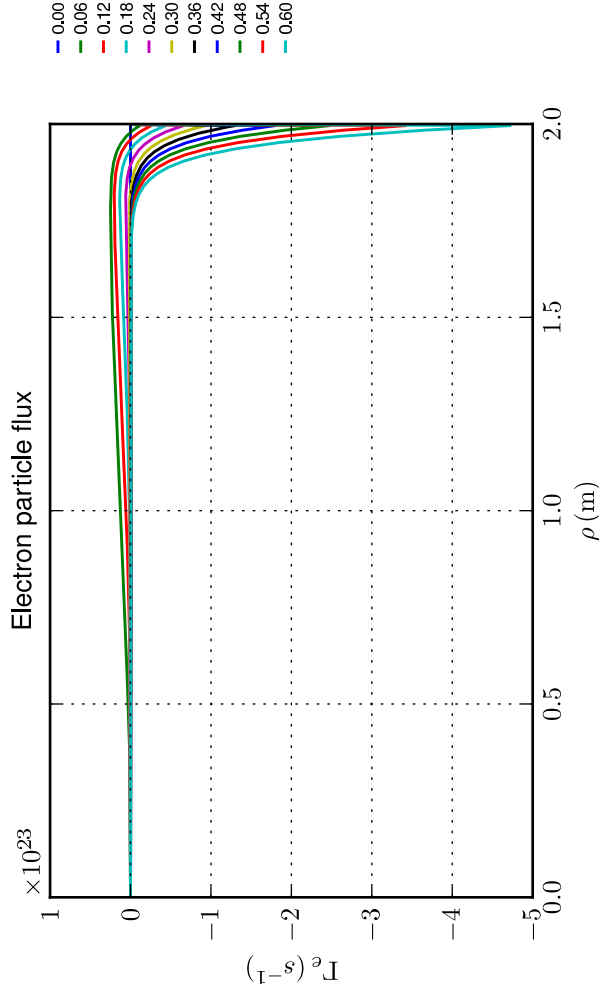
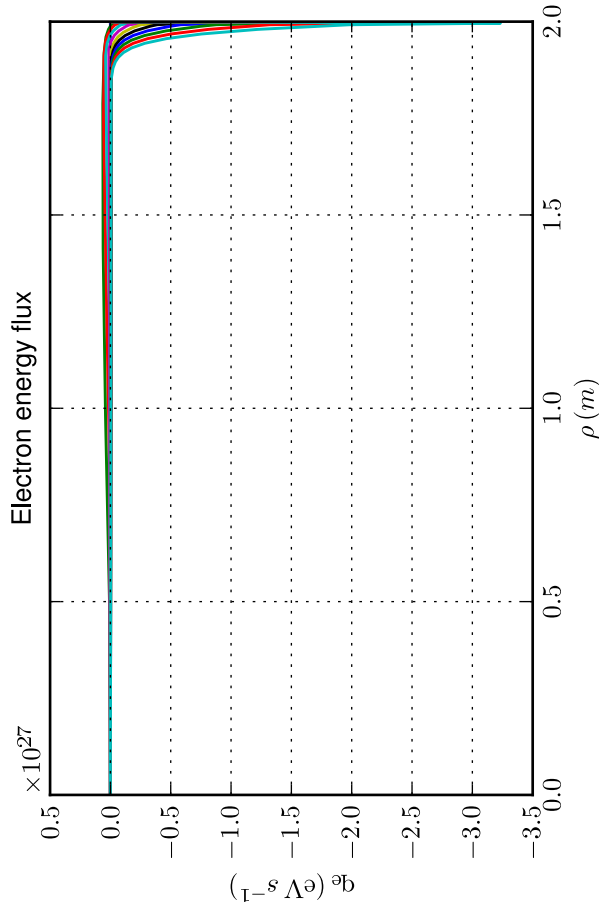
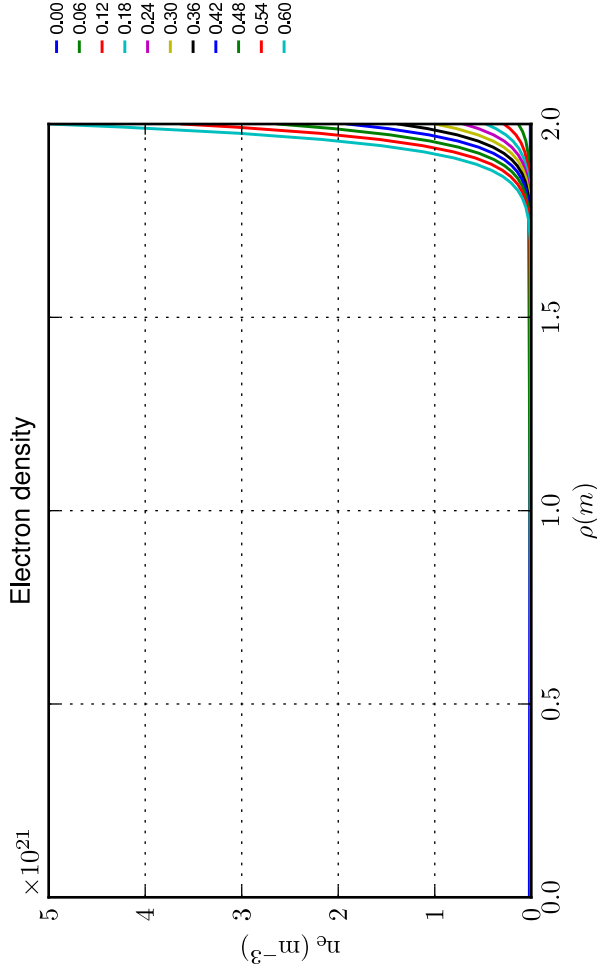
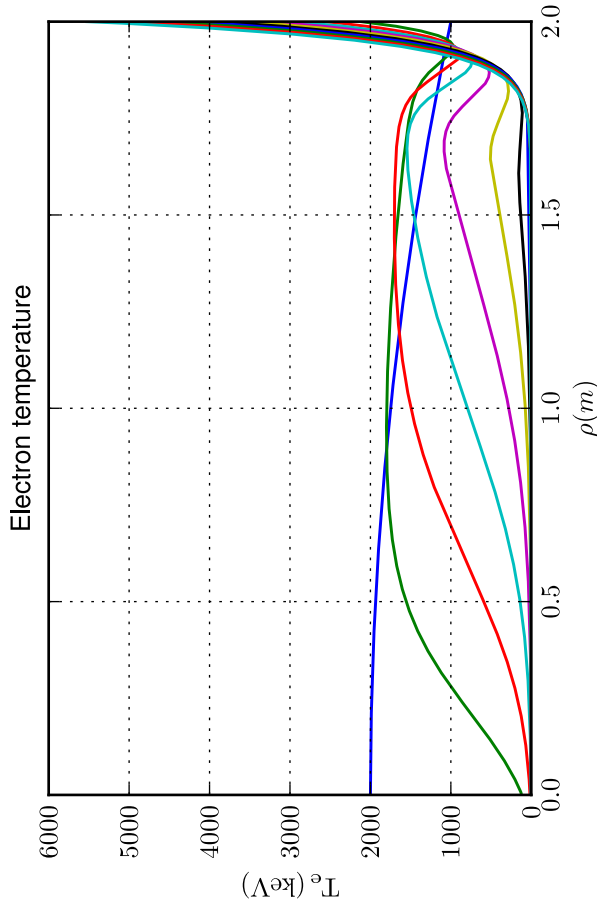


Particle conservation [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 501$]
 Comparison with asymptotic solution (electrons and ions); total time and zoom over time



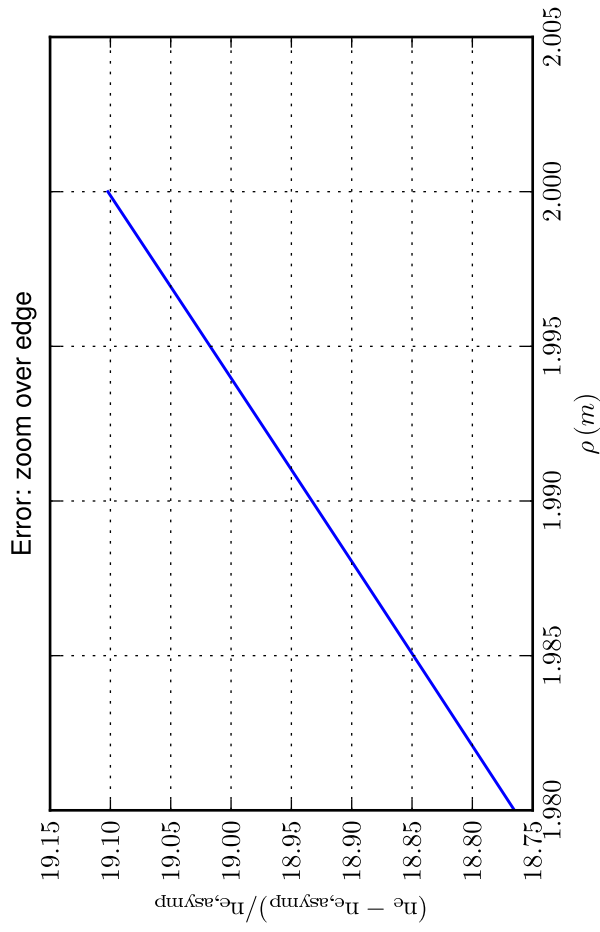
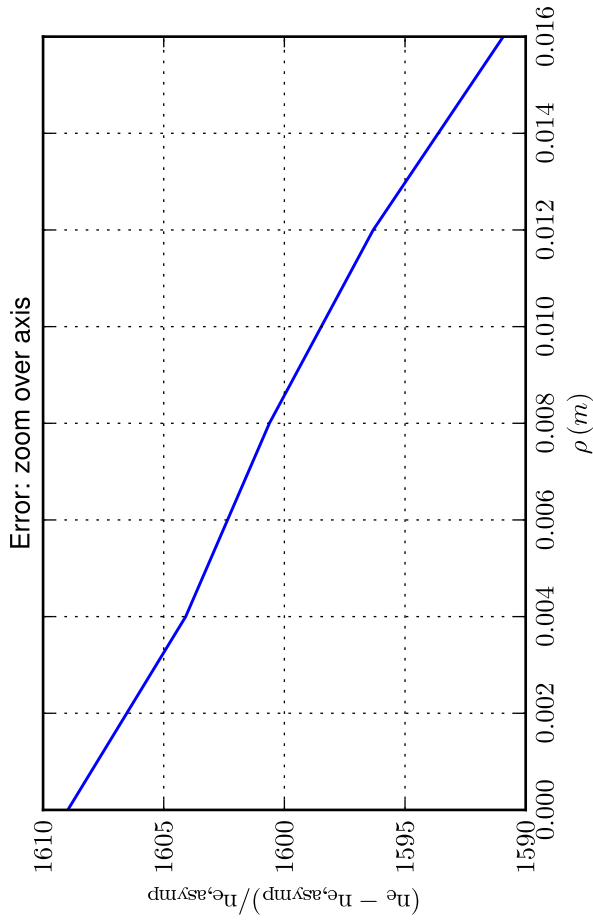
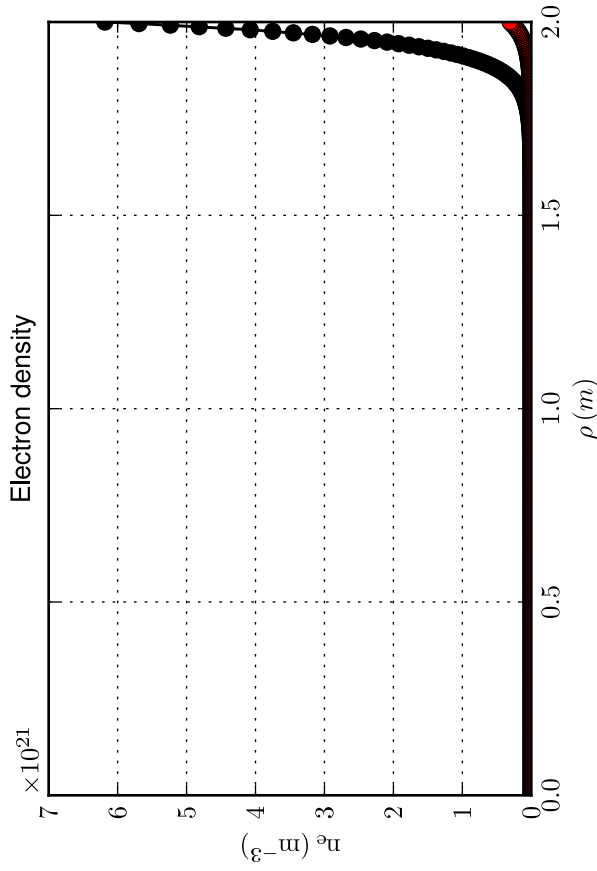
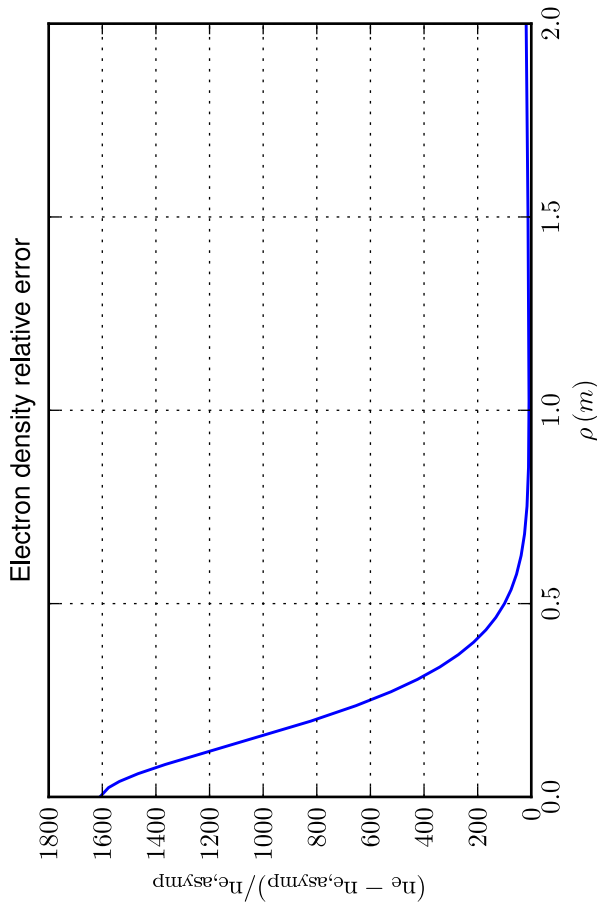
Profiles [Case: 1.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]

Time sampling: total simulation time/10



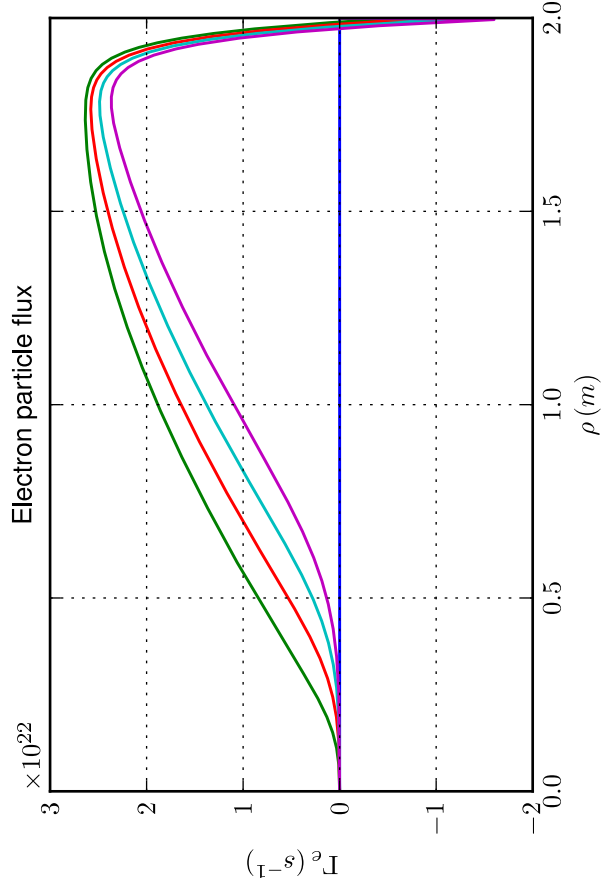
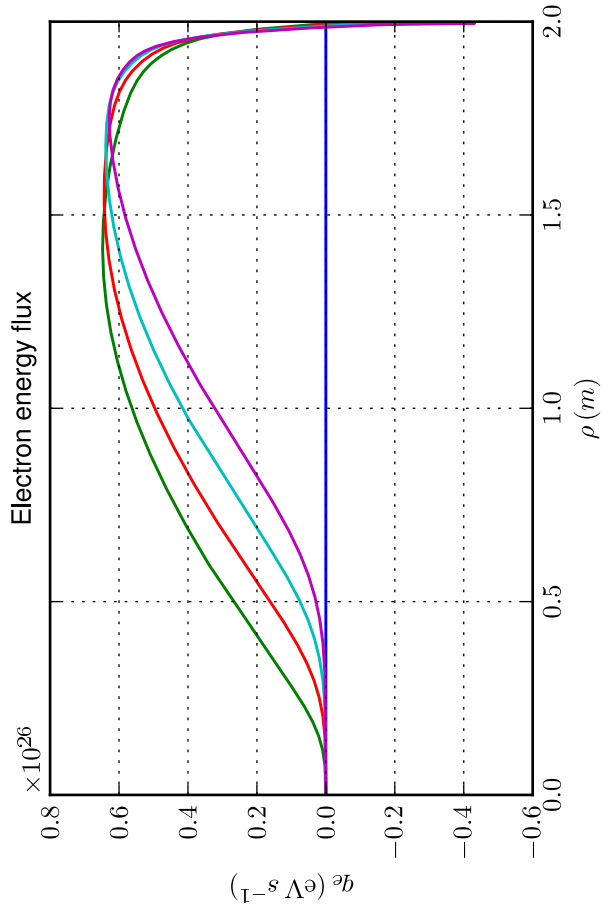
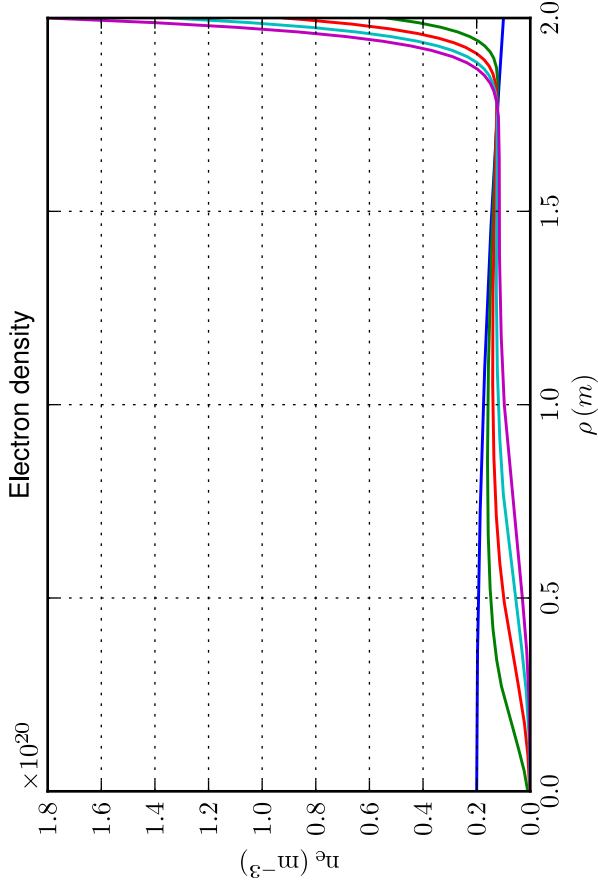
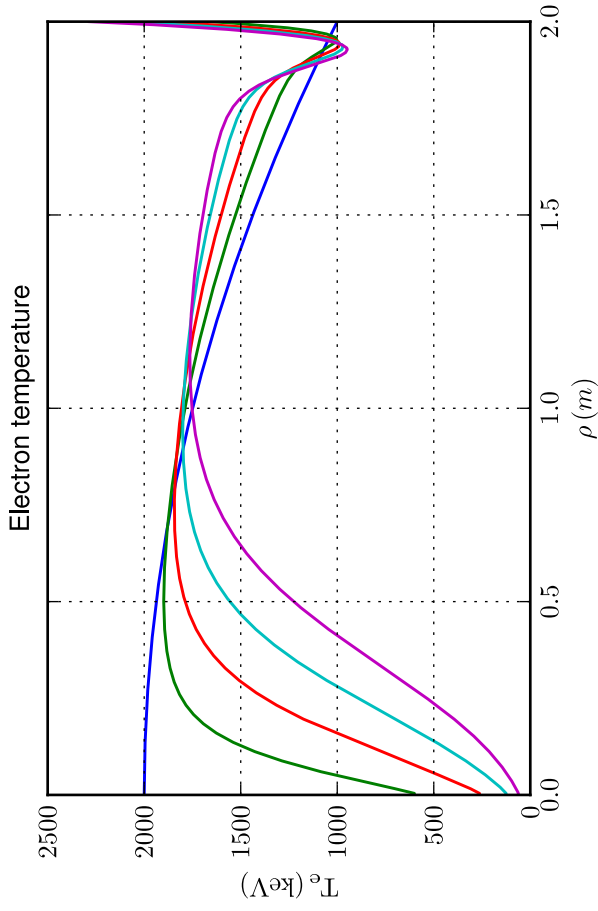
Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]

Comparison with asymptotic solution



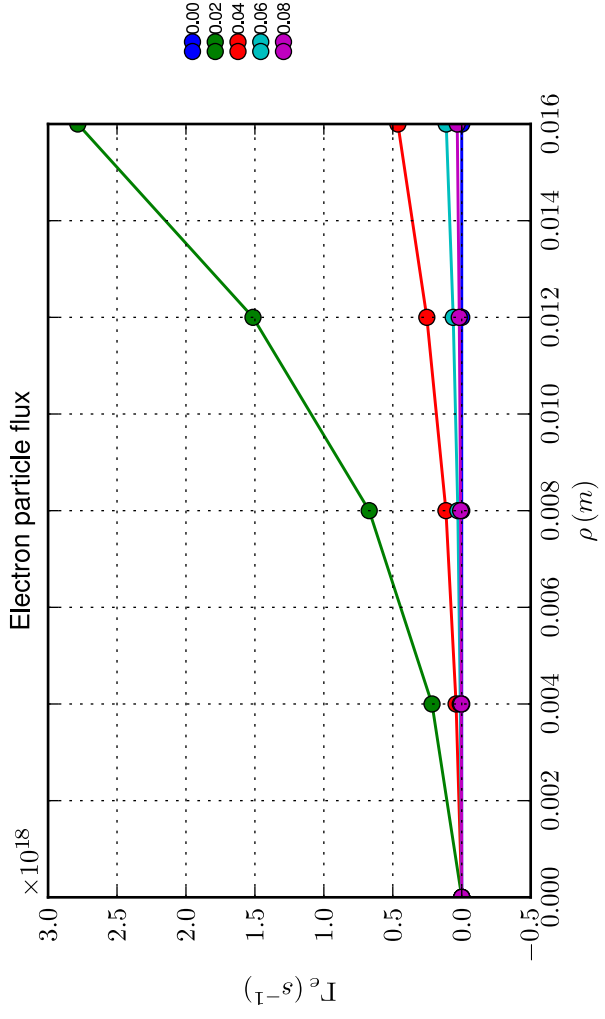
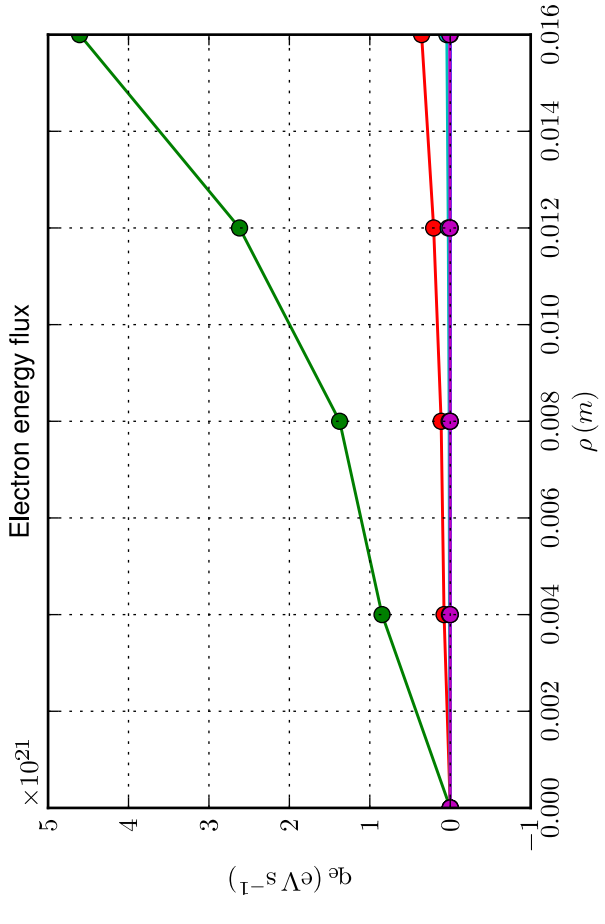
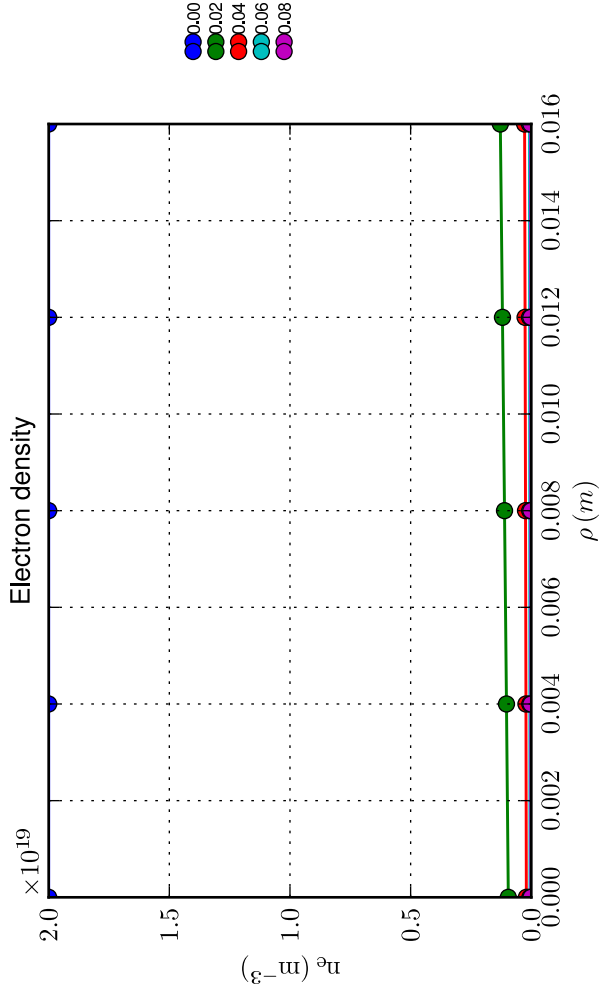
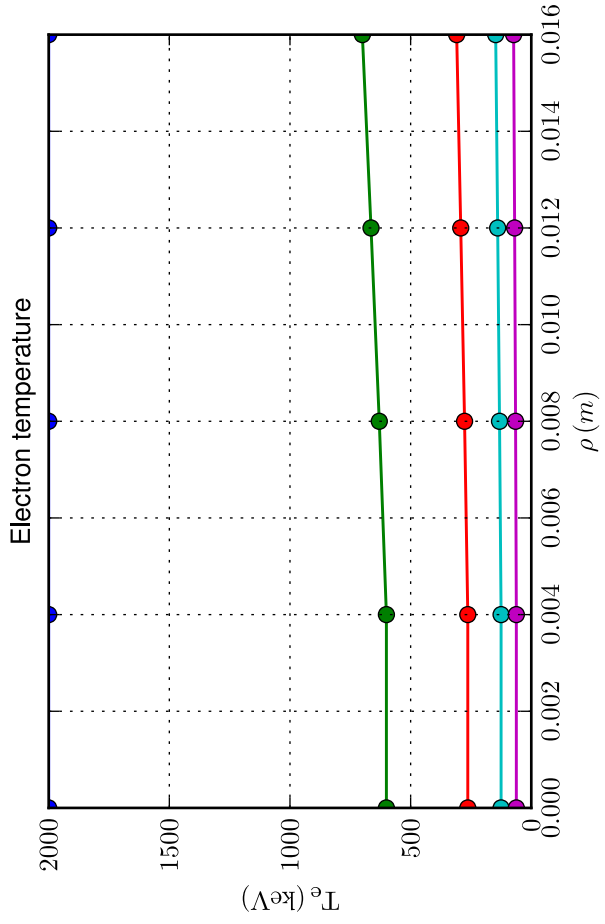
Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 501$]

Time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.10 \text{ s}$

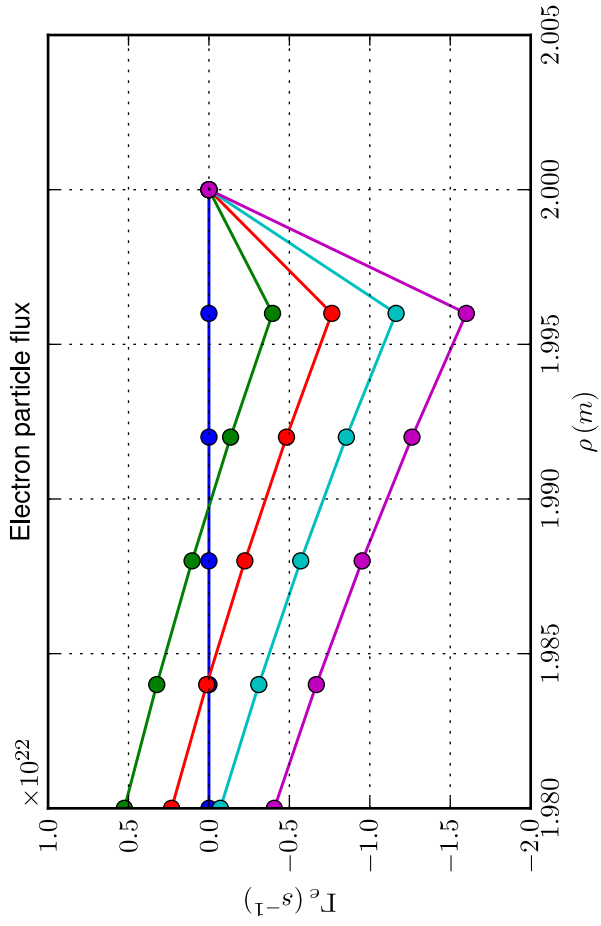
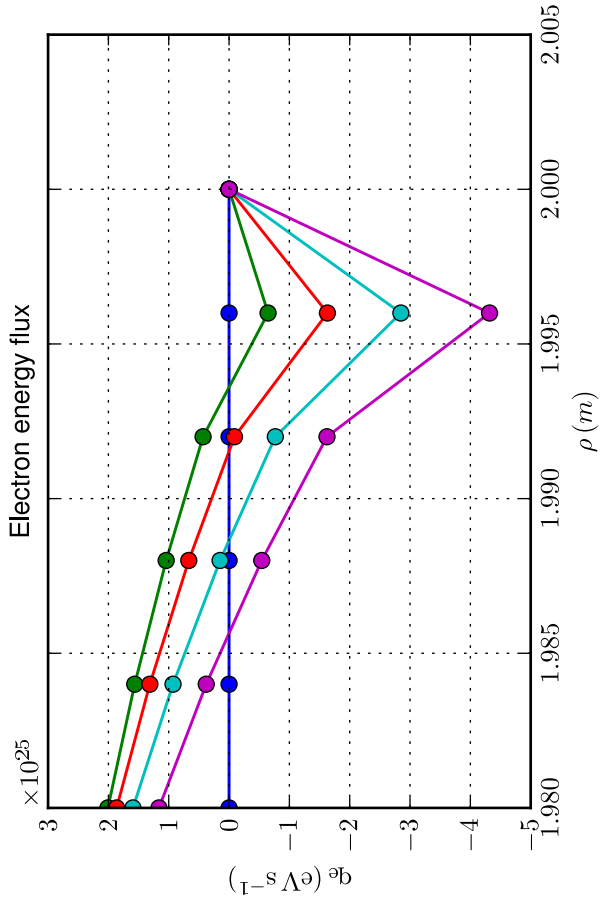
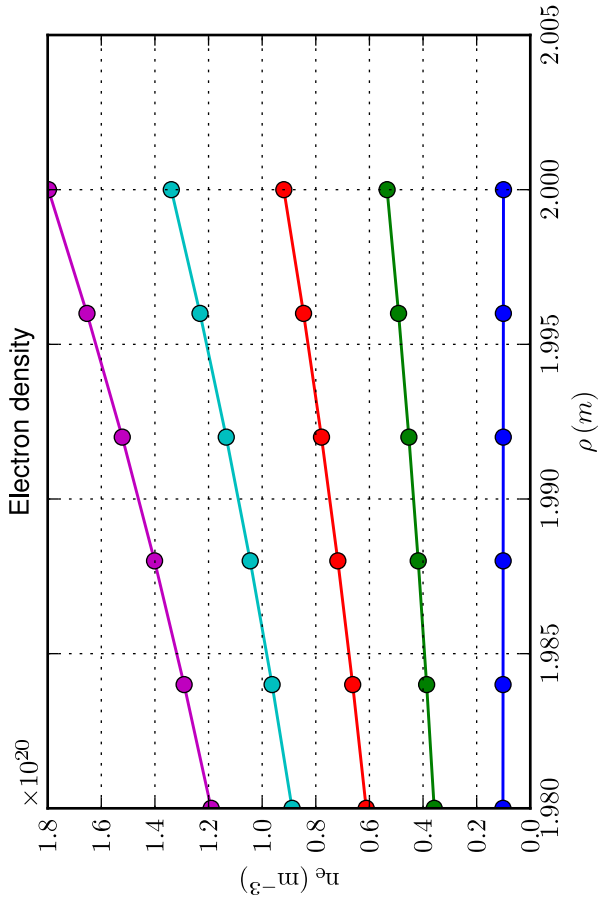
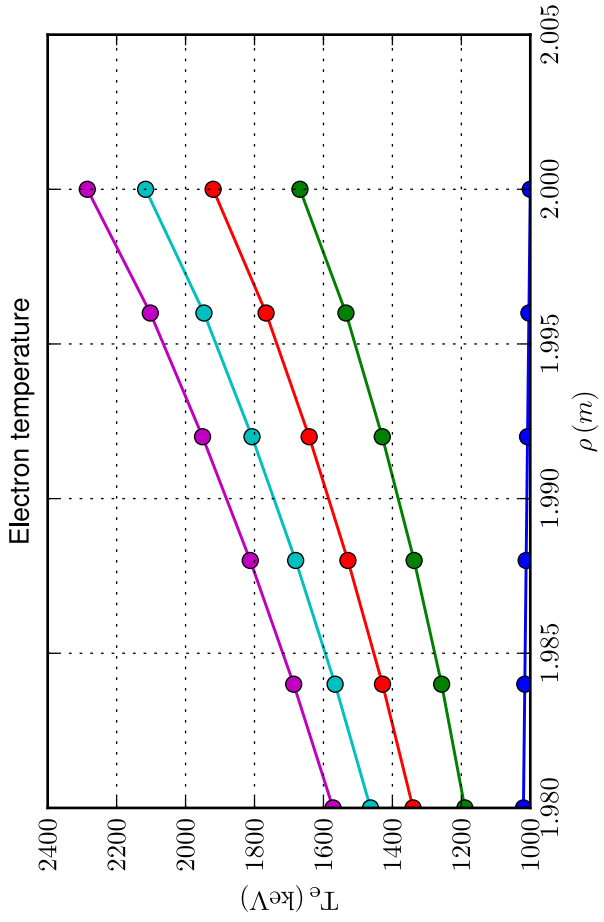


0.00
0.02
0.04
0.06
0.08

Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]
 Spatial zoom over magnetic axis; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.10 \text{ s}$

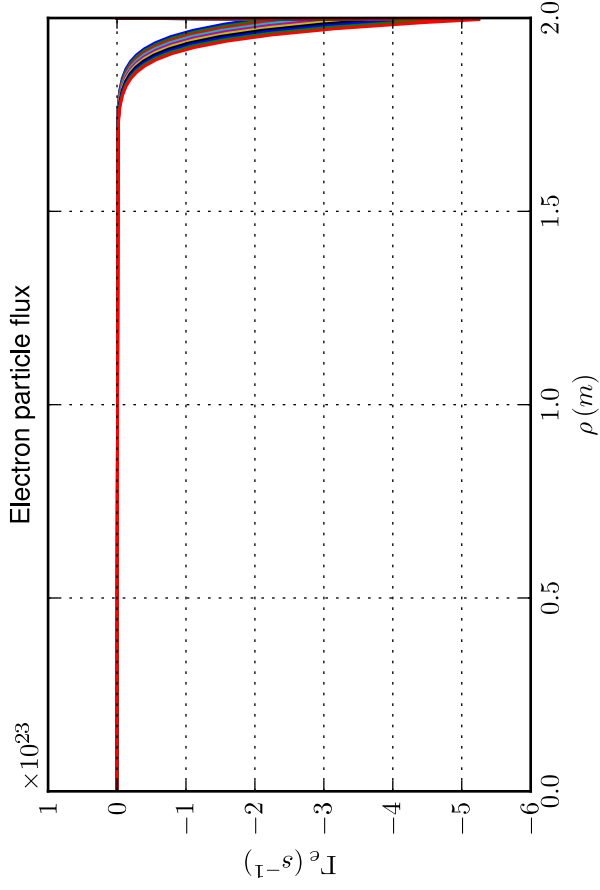
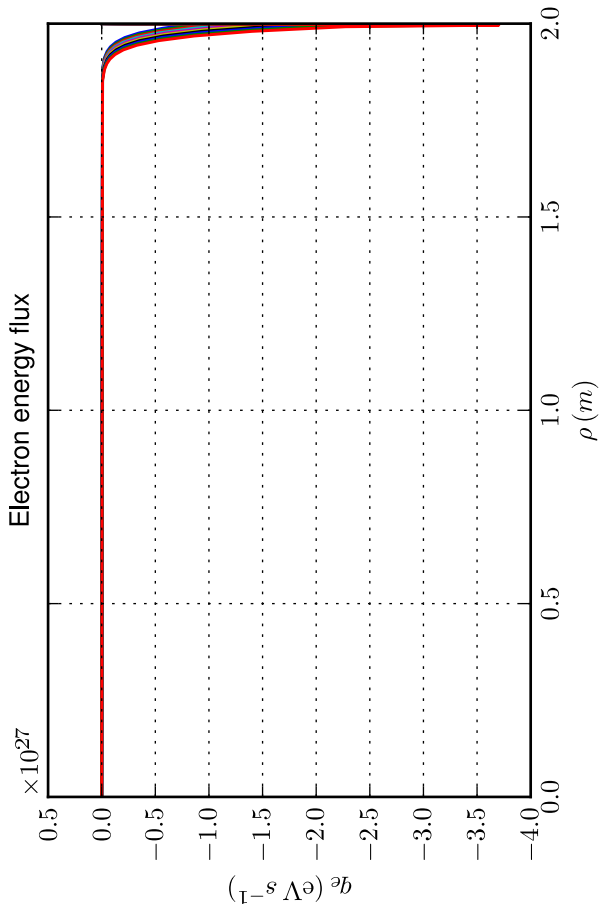
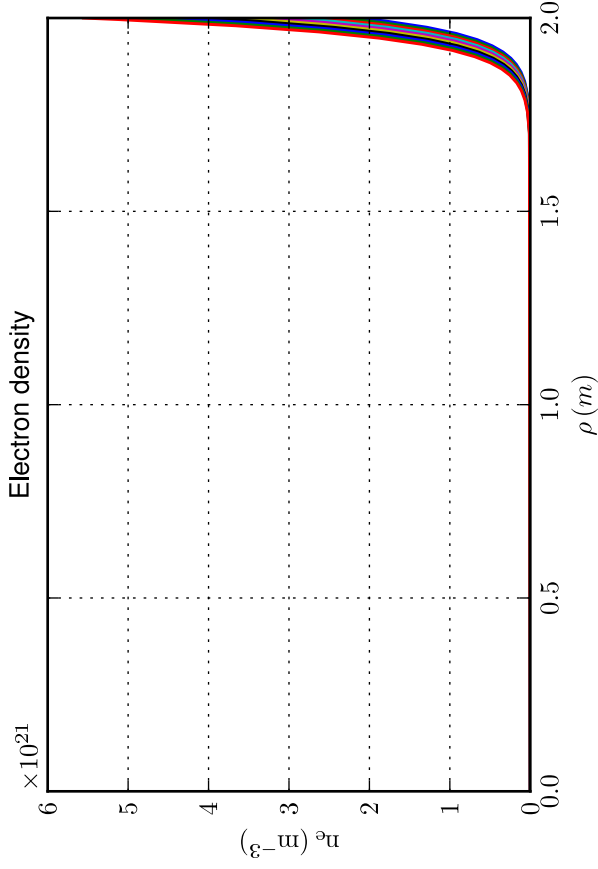
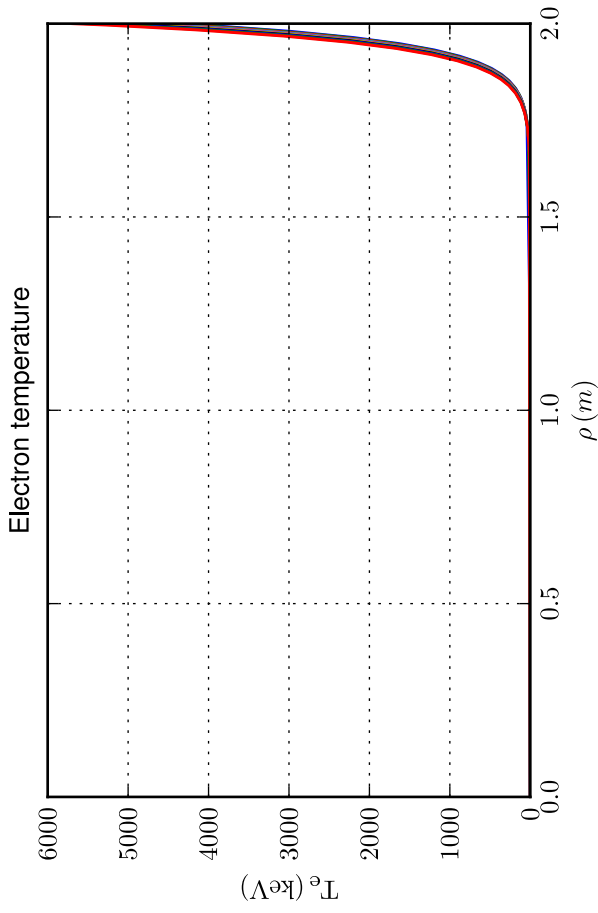


Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]
 Spatial zoom over edge; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (V_a/D)| = 0.10 \text{ s}$



Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]

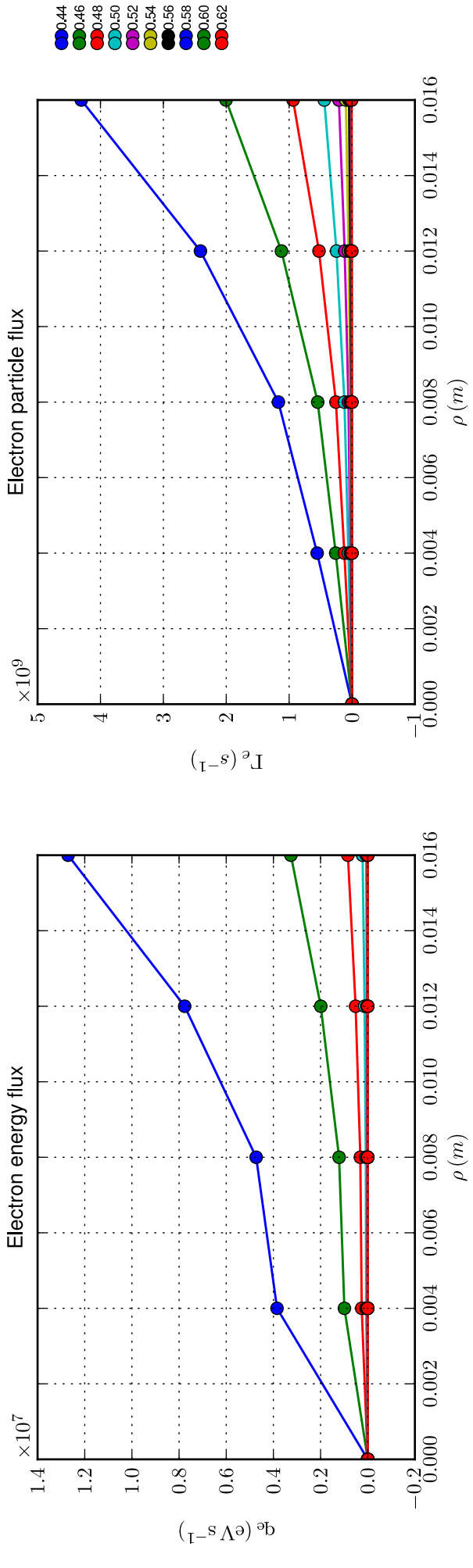
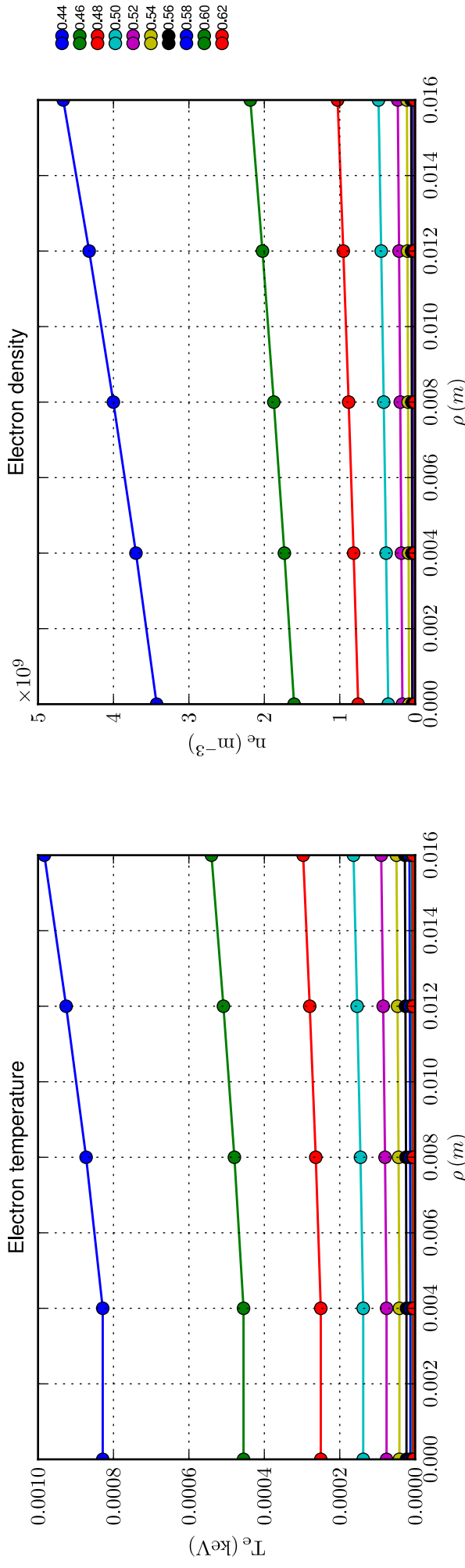
Time sampling: last 10 time slices



0.44
0.46
0.48
0.50
0.52
0.54
0.56
0.58
0.60
0.62

Profiles [Case: 1.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]

Spatial zoom over magnetic axis; time sampling: last 10 time slices



Profiles [Case: I.1.5.d, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 2.00 \text{ m/s}$, $\Delta t = 2.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 501$]
 Spatial zoom over edge; time sampling: last 10 time slices

