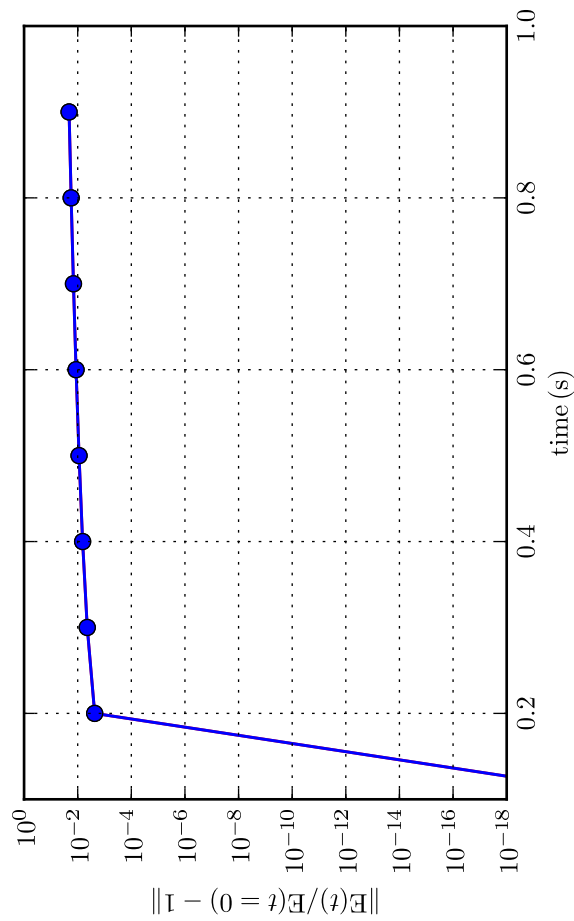
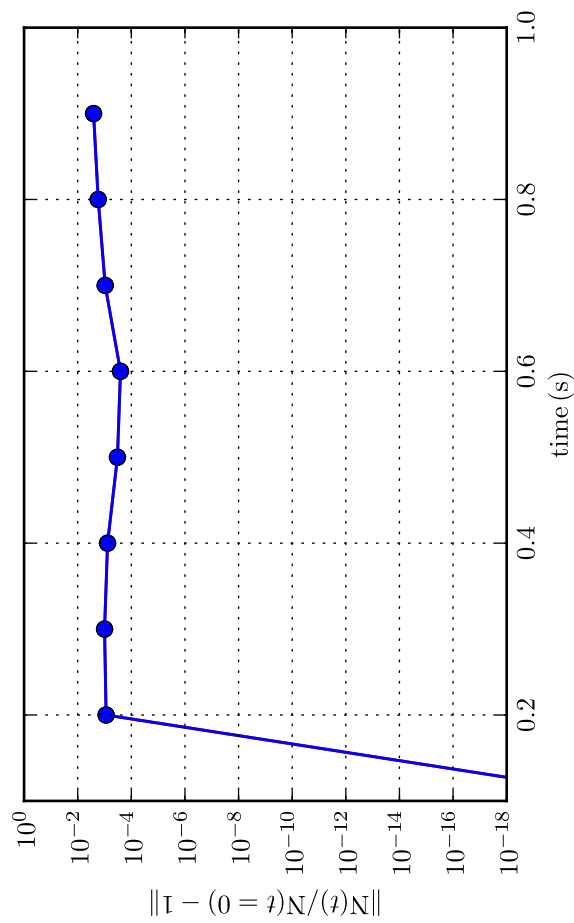
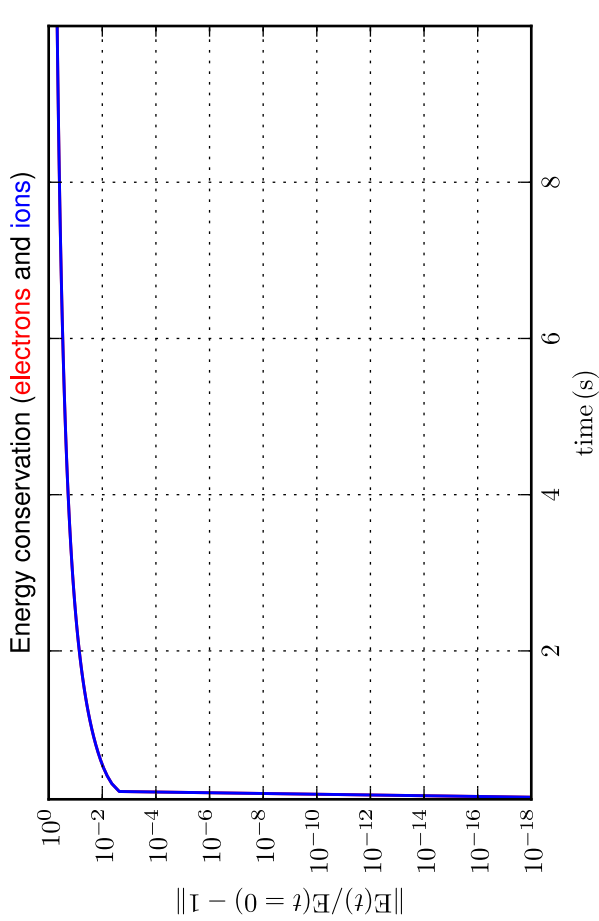
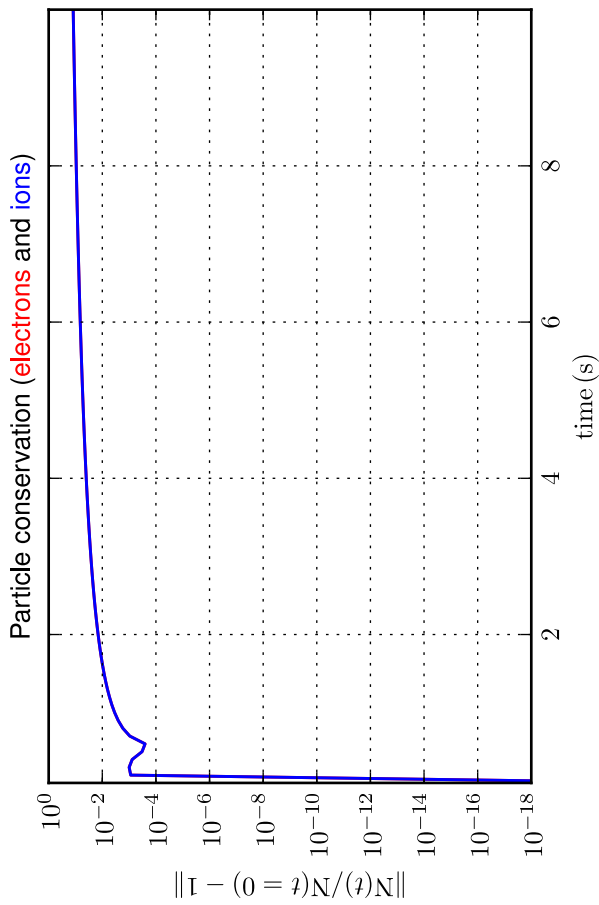
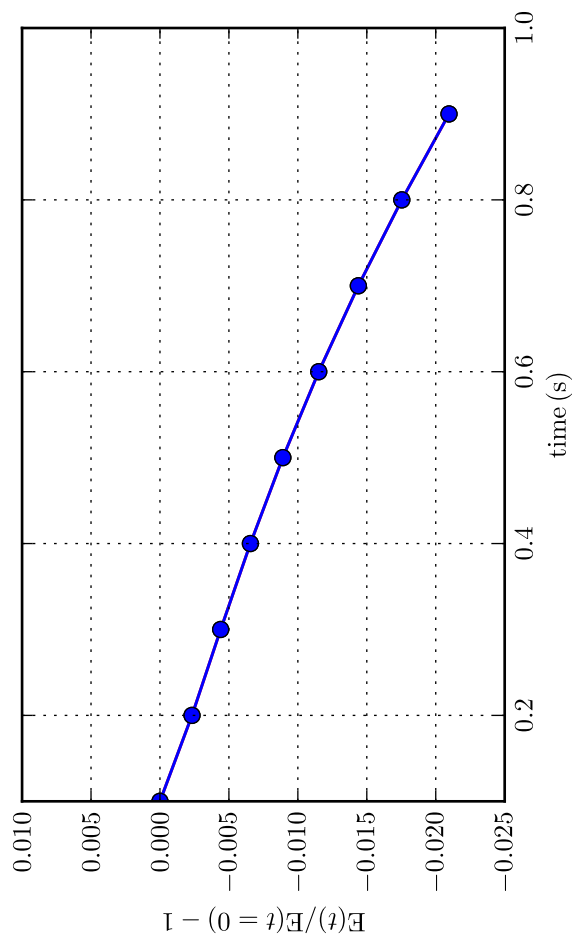
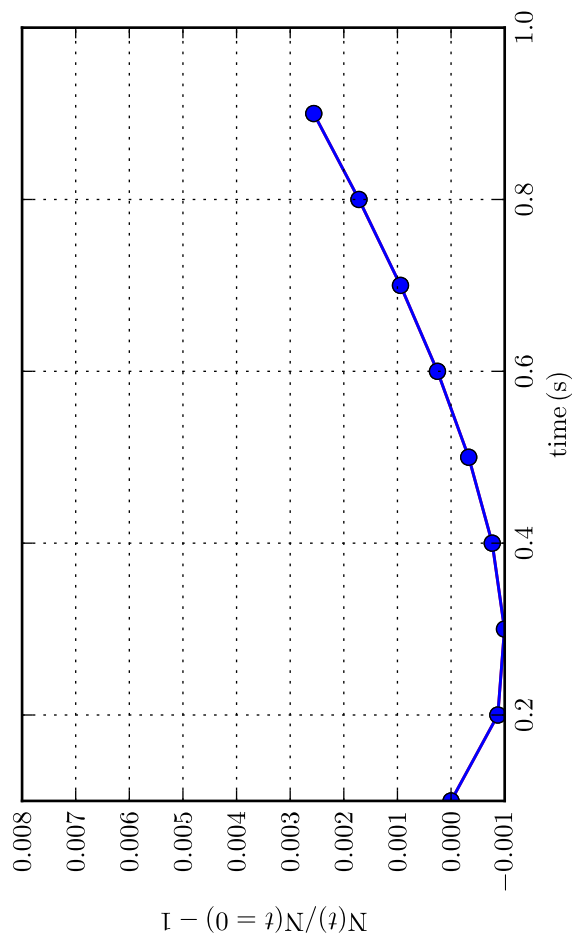
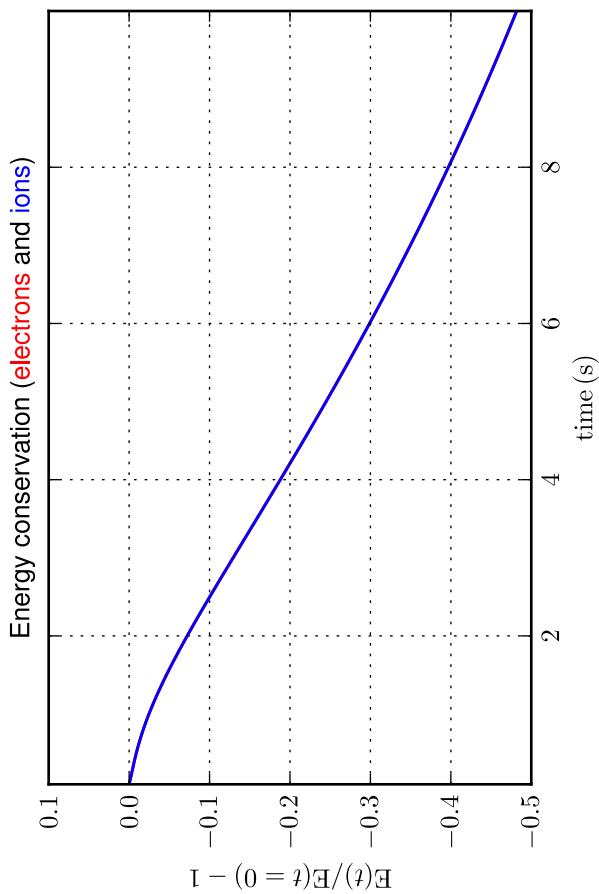
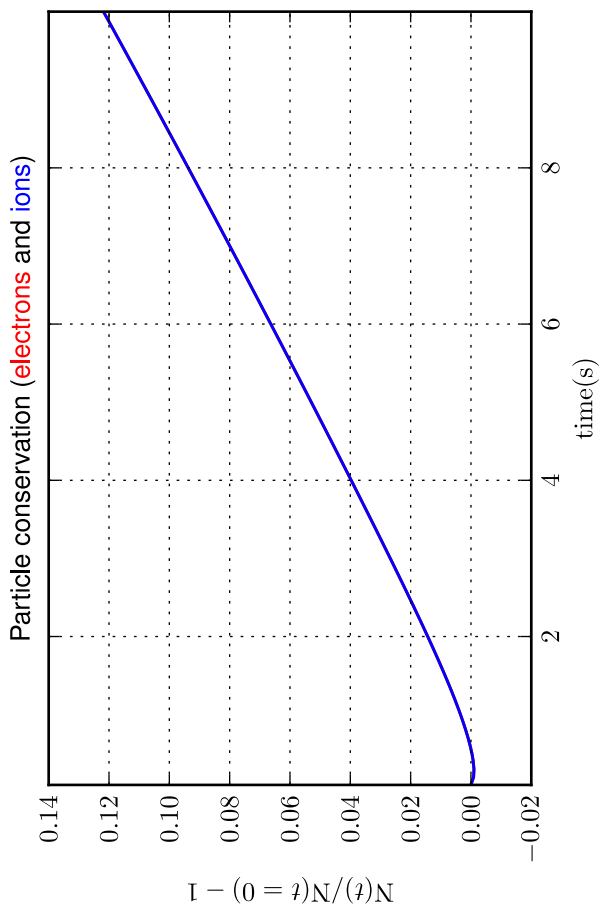


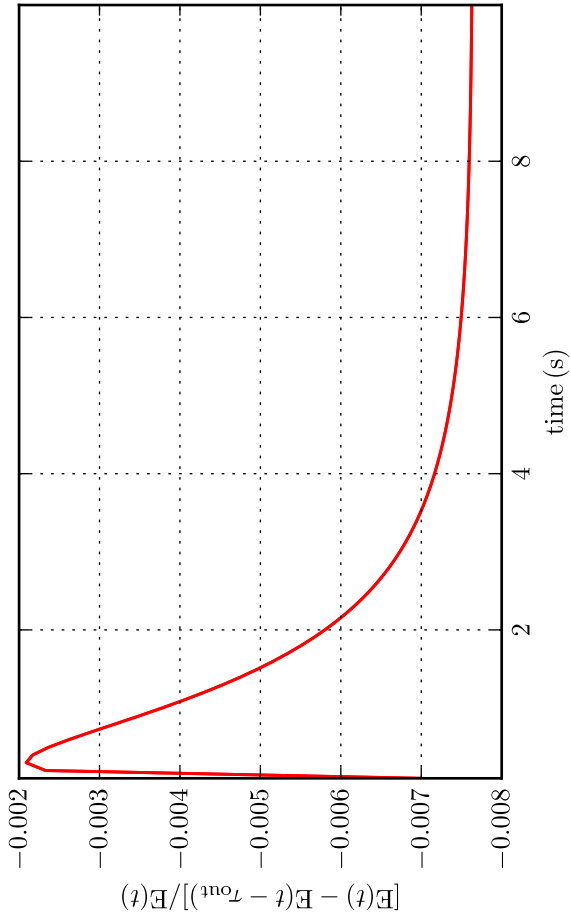
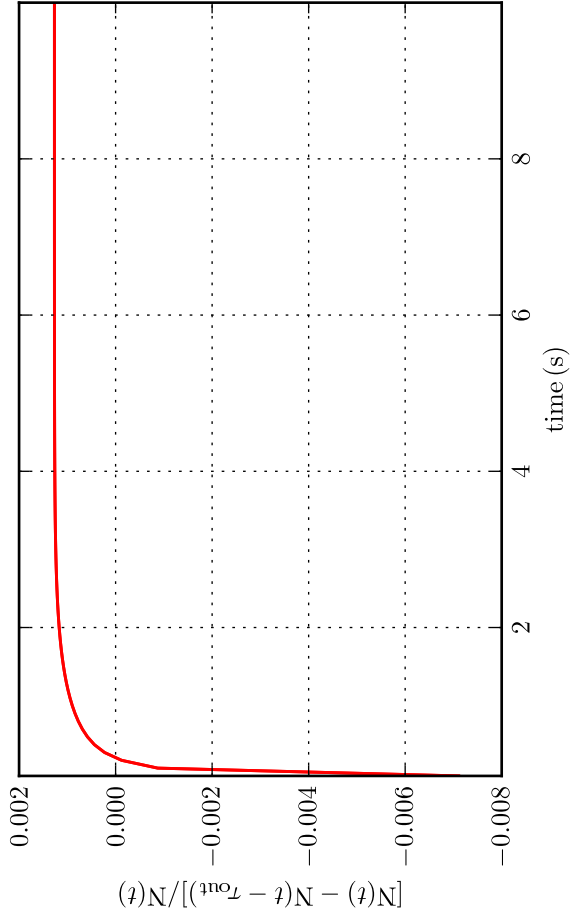
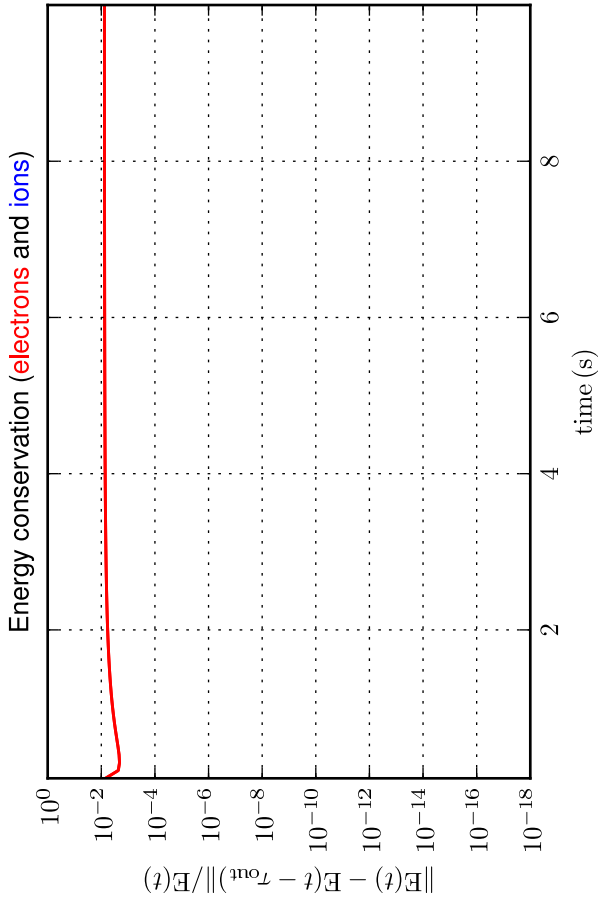
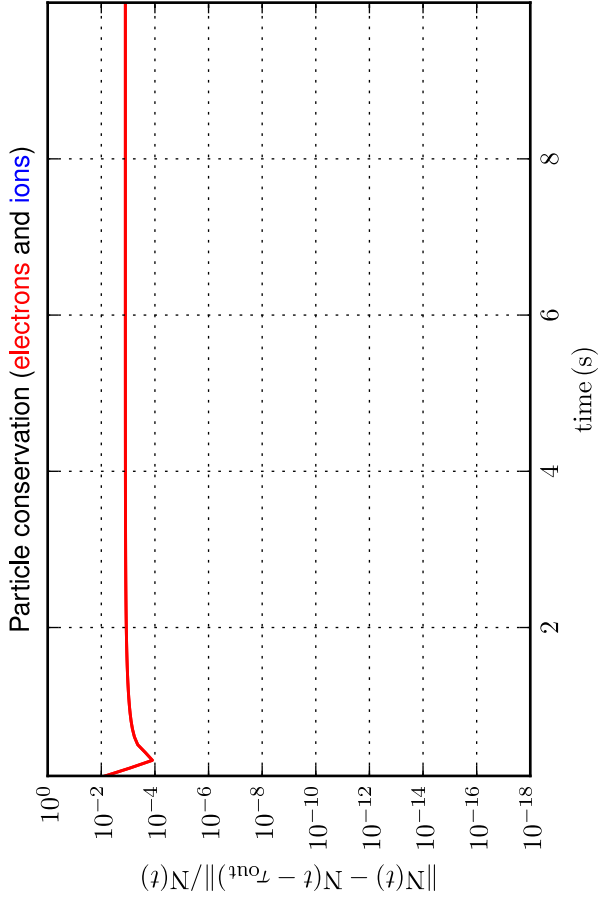
Part. & Energy conservation [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Comparison with initial solution - log scale; total time and zoom over time



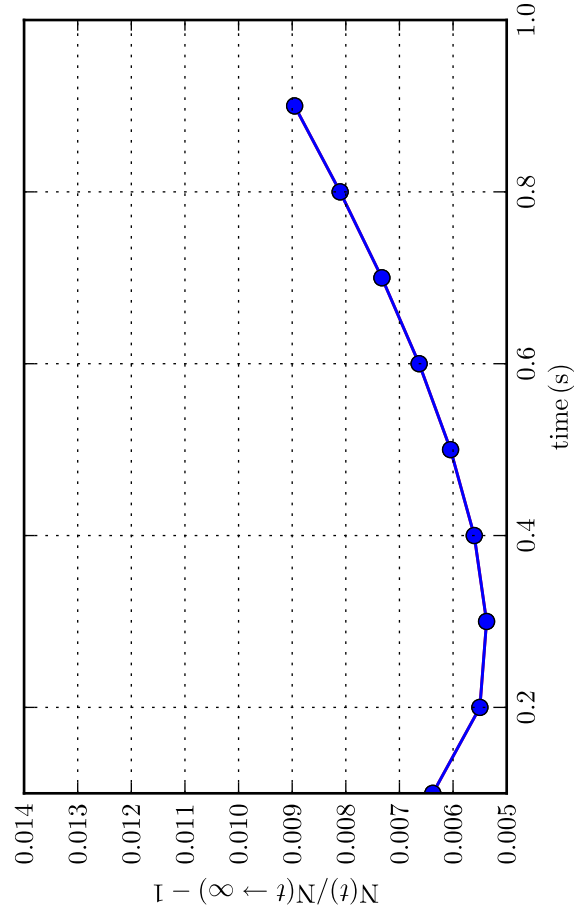
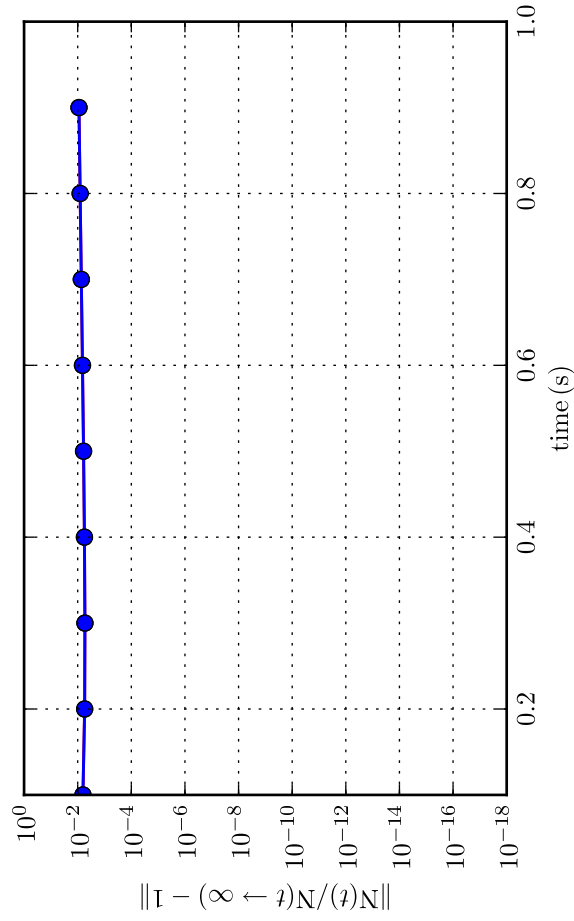
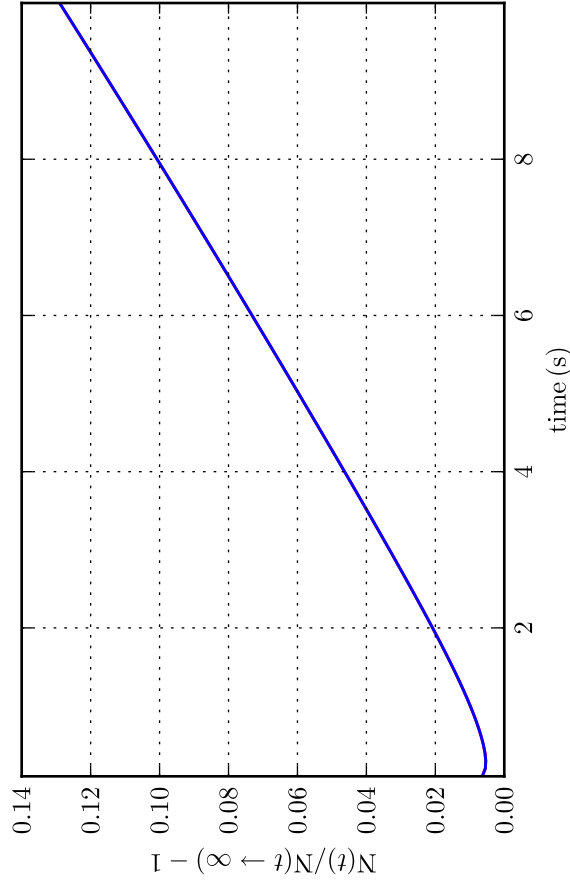
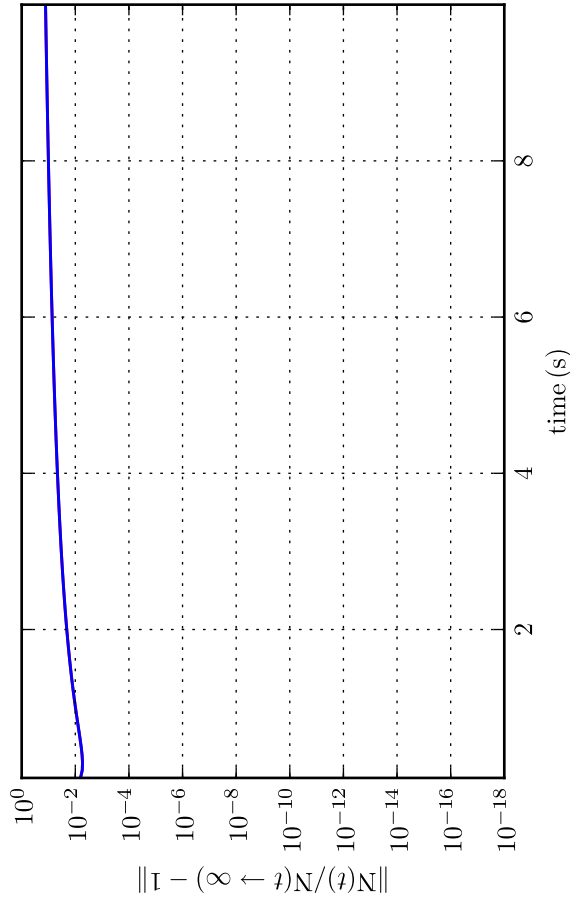
Part. & Energy conservation [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Comparison with previous time-sampled (τ_{out}) solution - log and linear scales

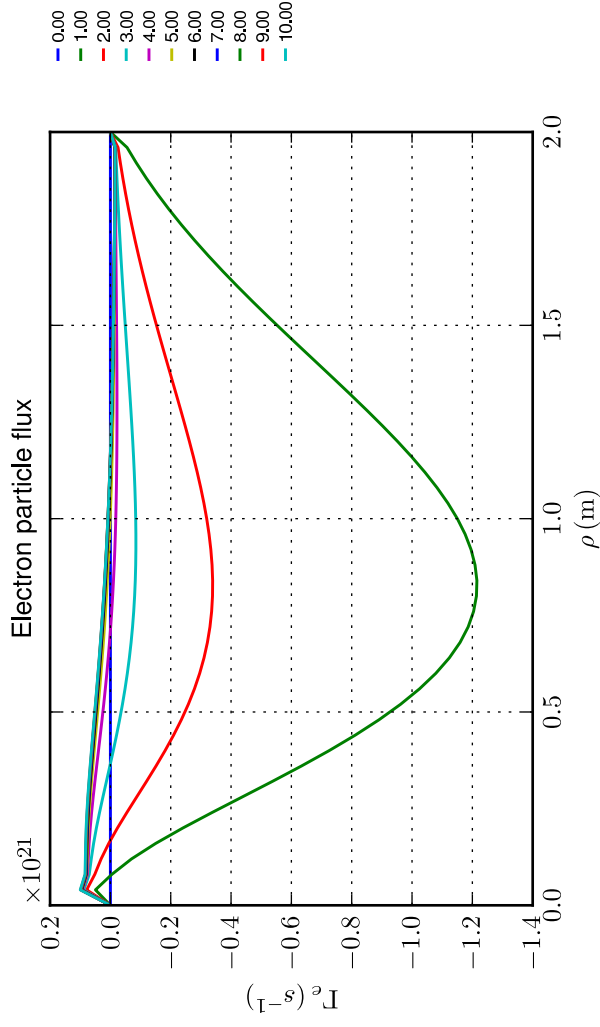
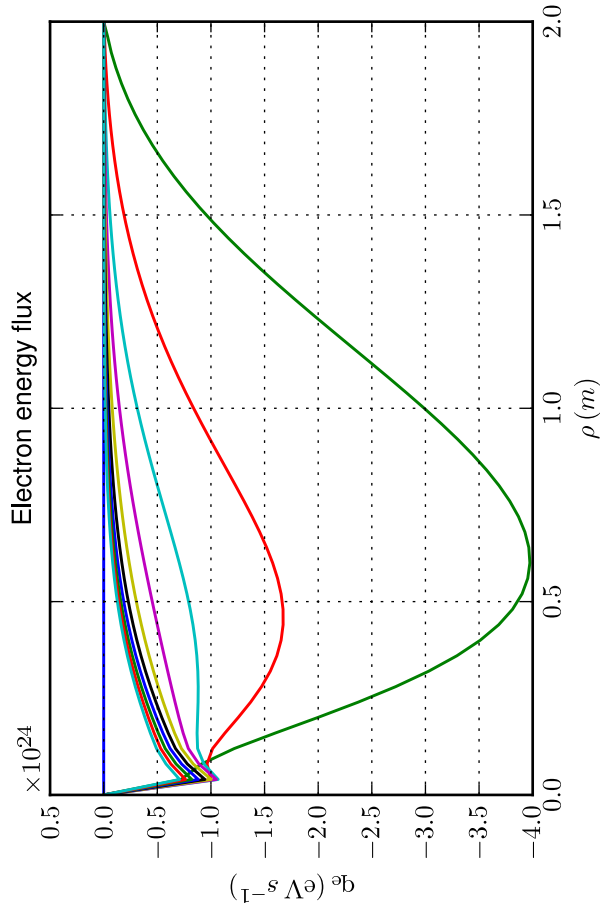
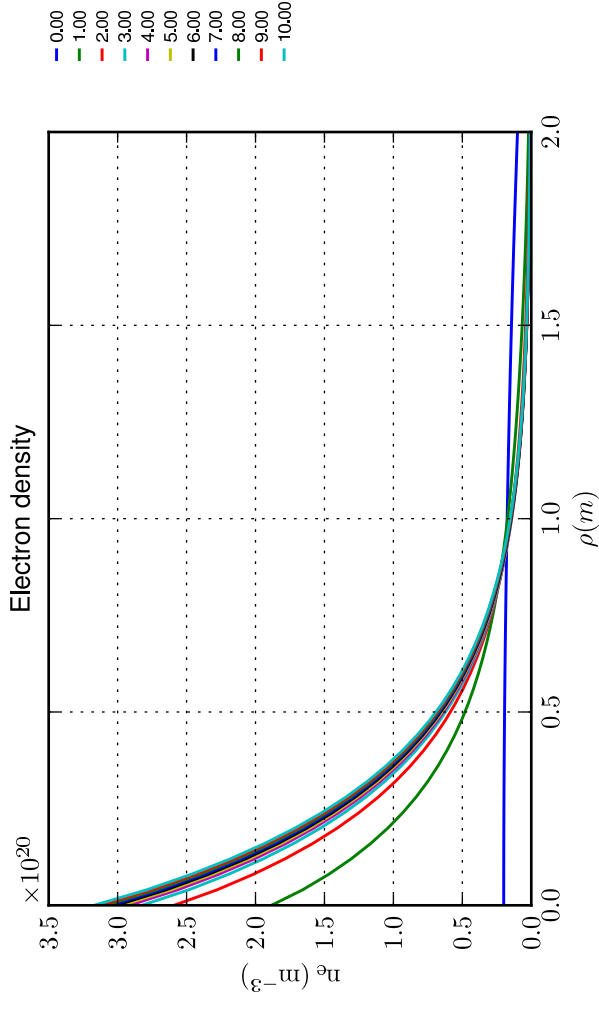
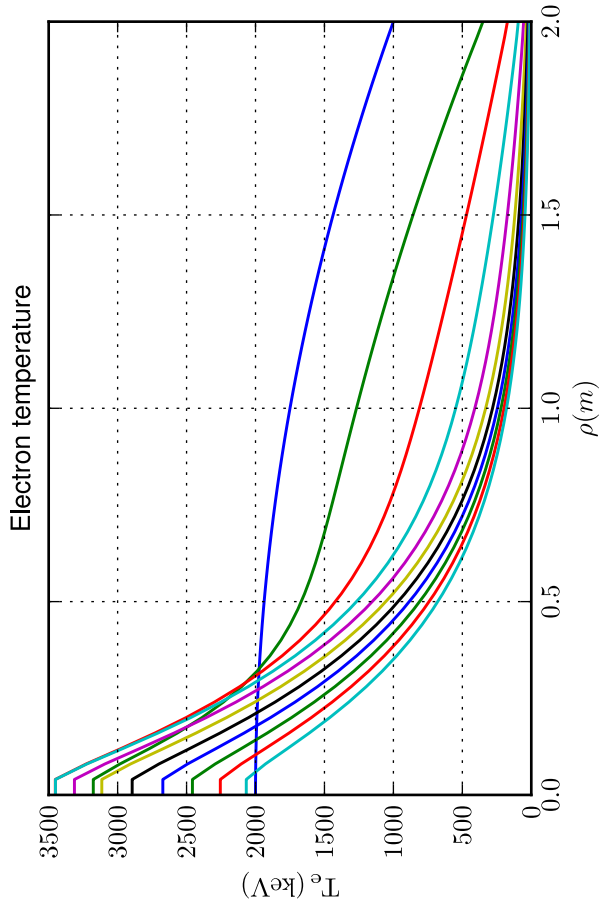


Particle conservation [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Comparison with asymptotic solution (electrons and ions); total time and zoom over time



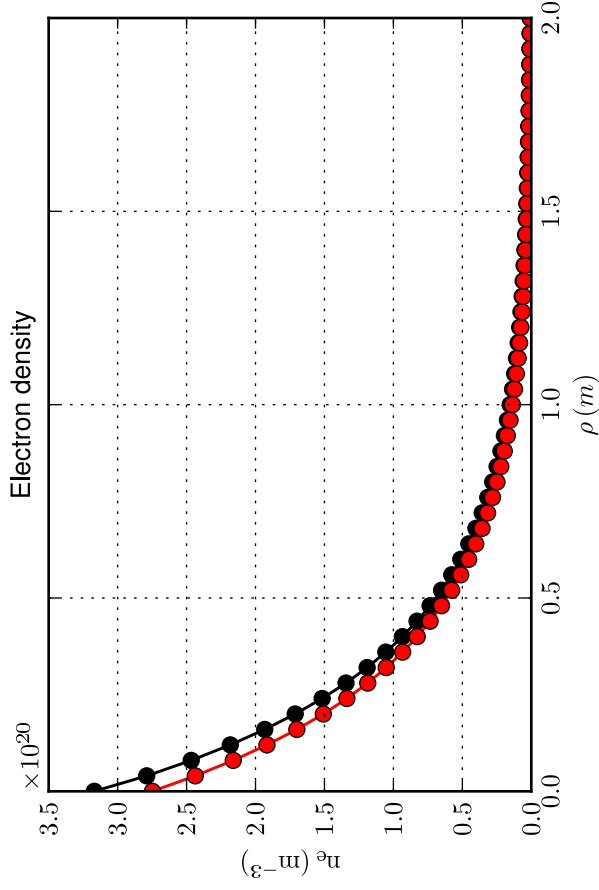
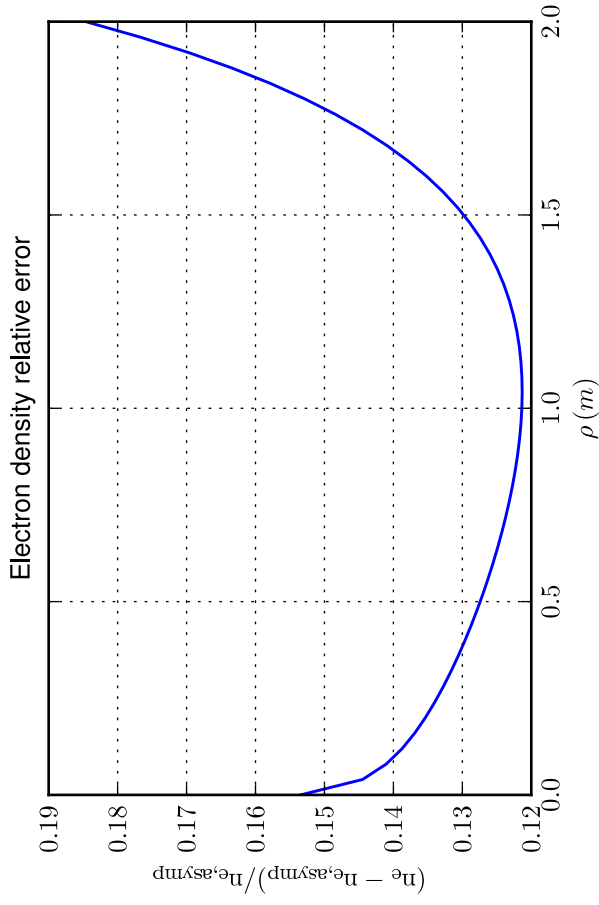
Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 51$]

Time sampling: total simulation time/10

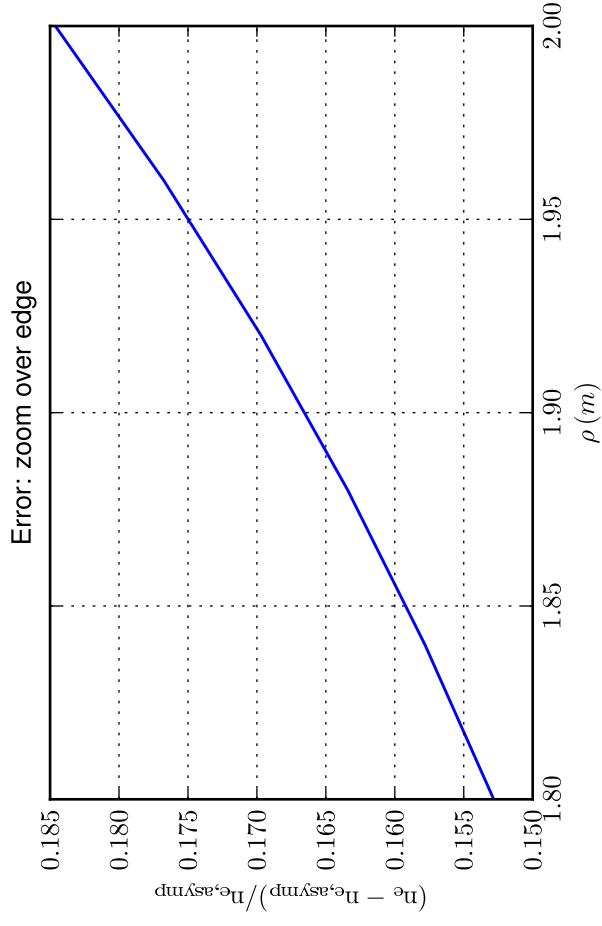
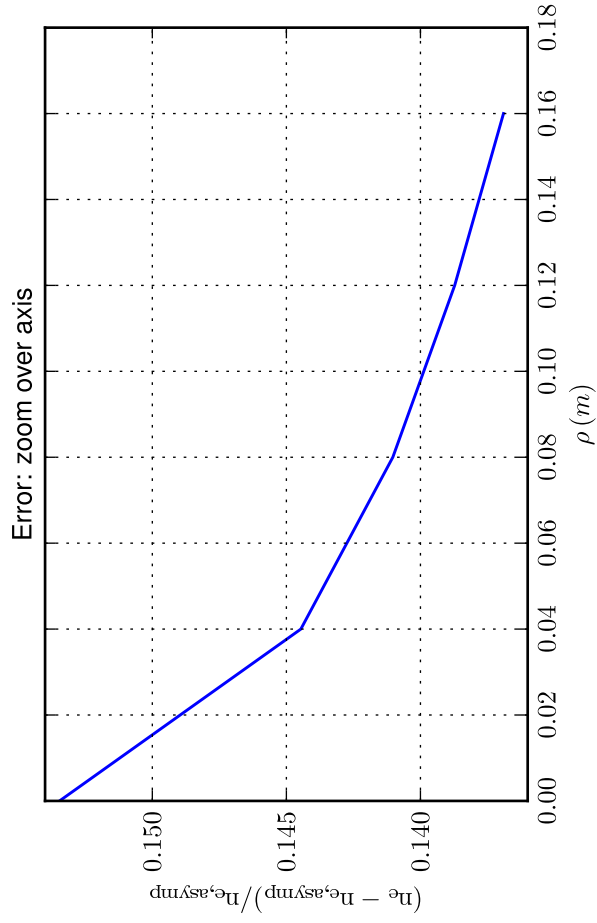


Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 51$]

Comparison with asymptotic solution

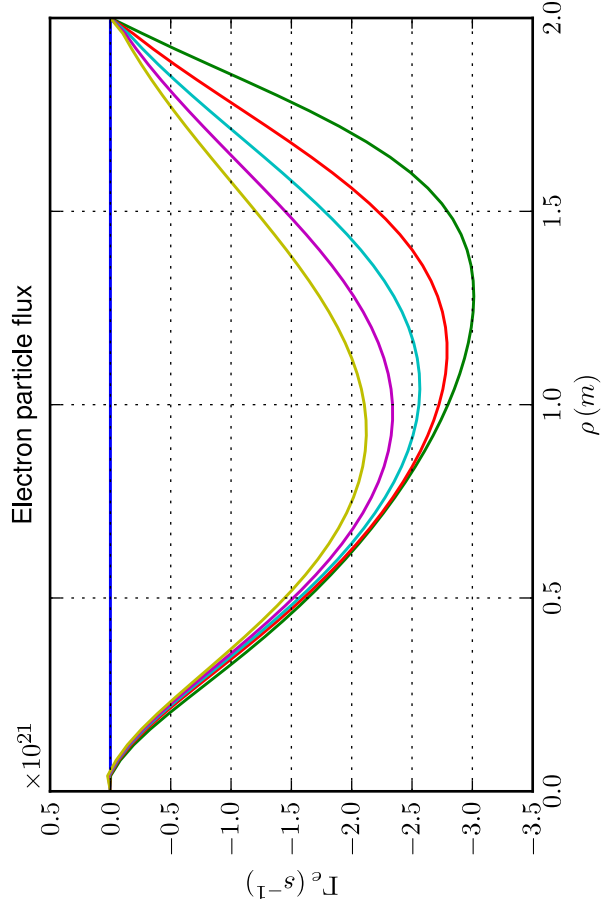
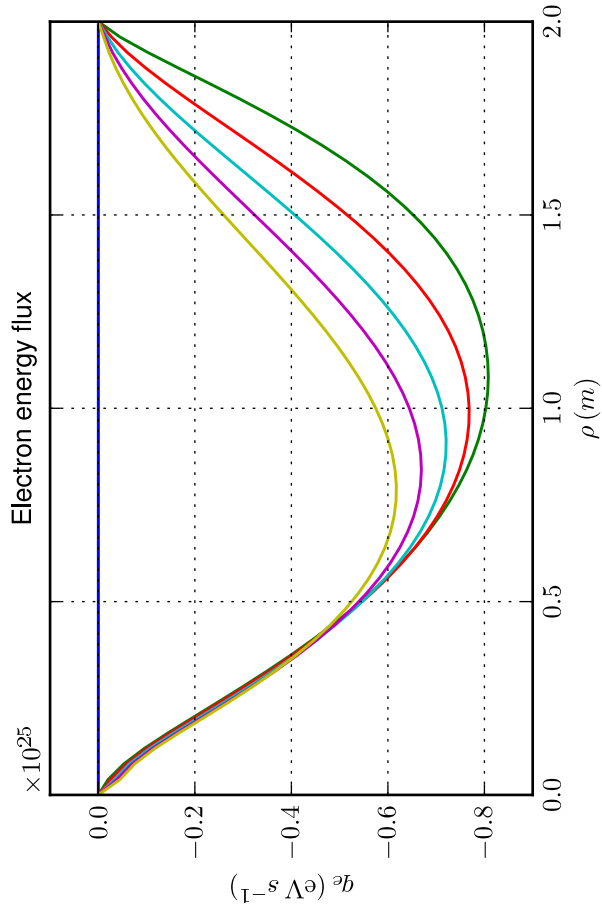
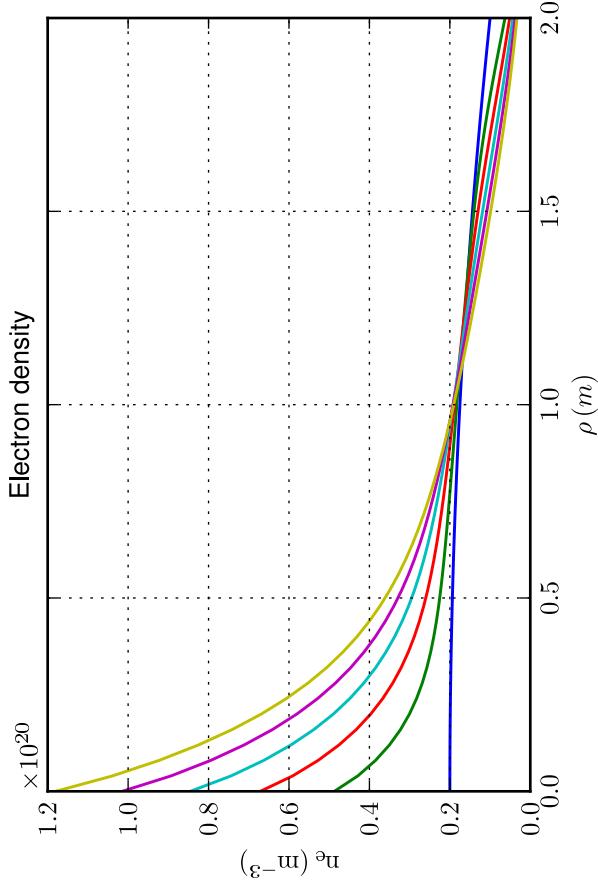
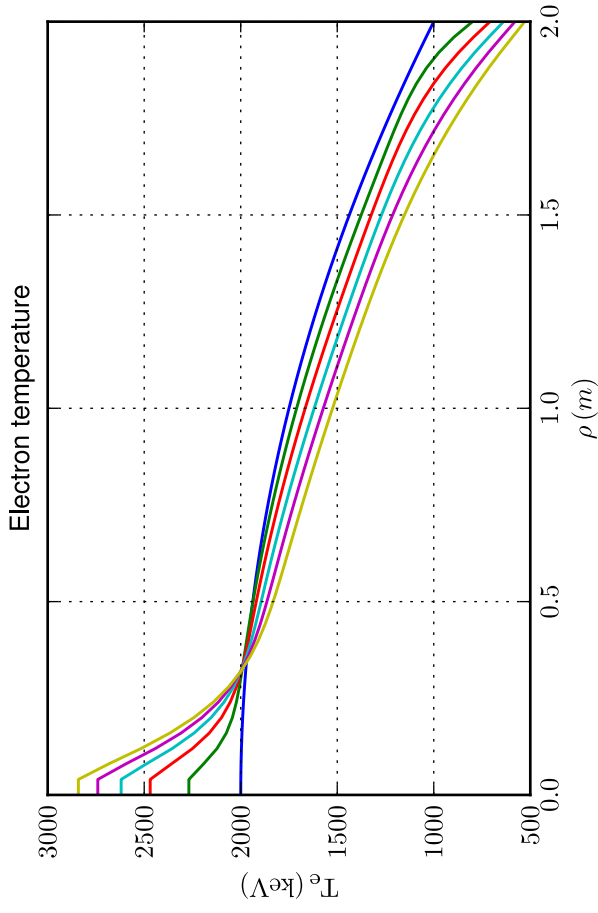


● final calculation
● asymptotic



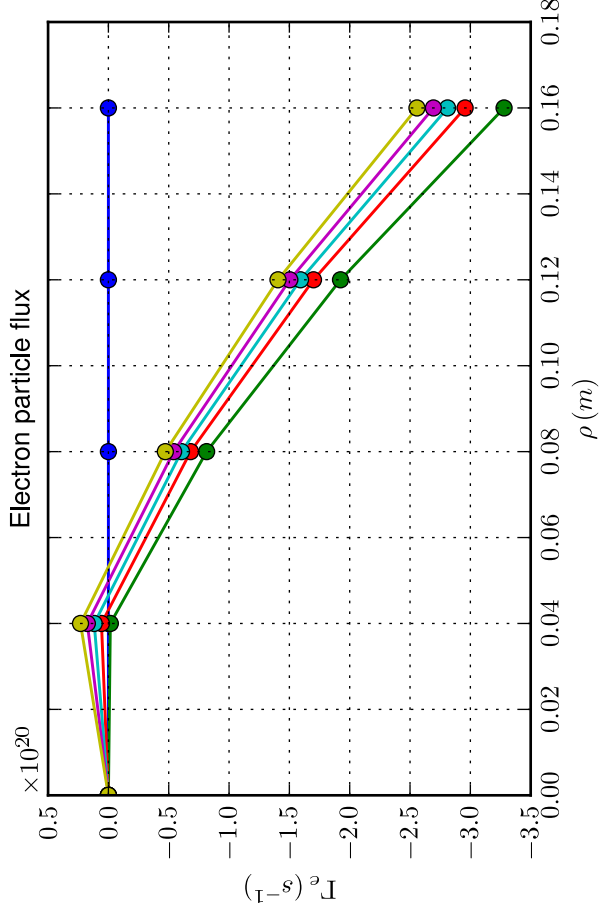
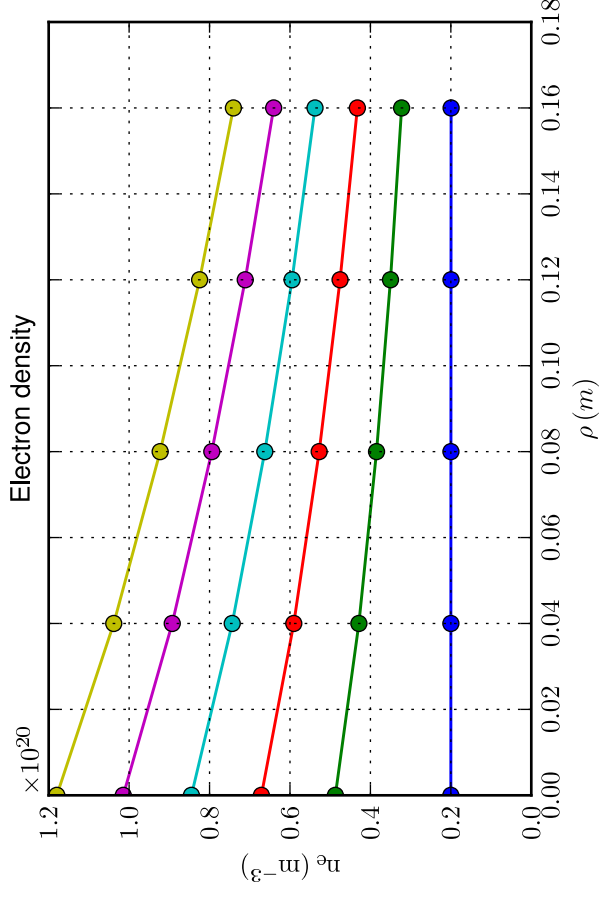
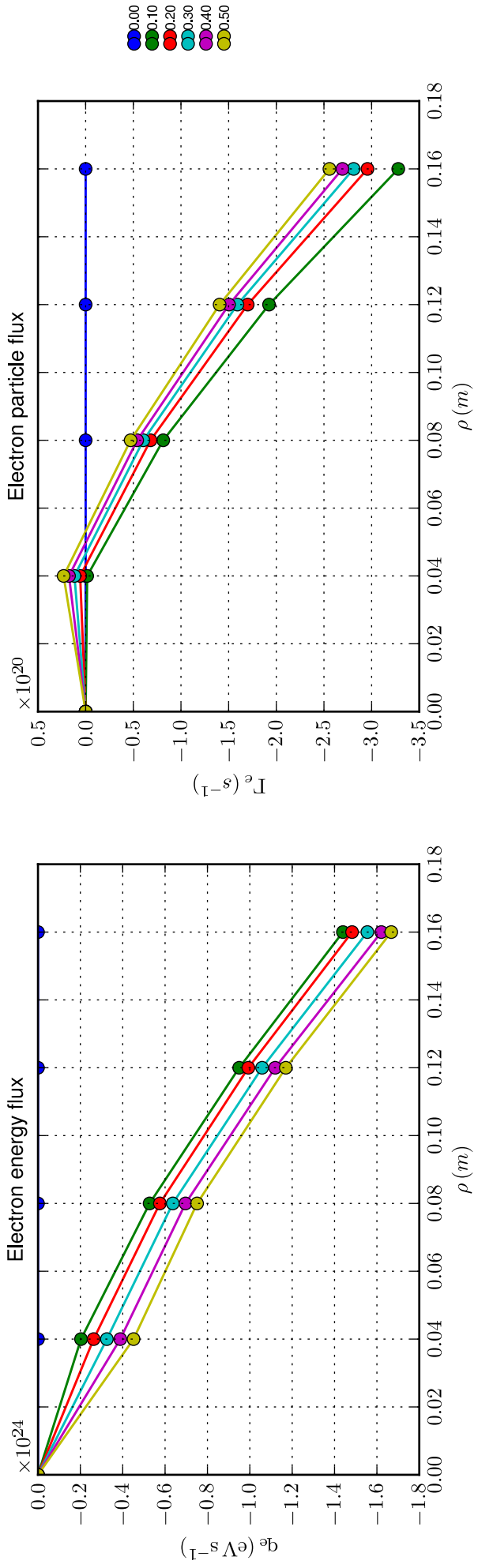
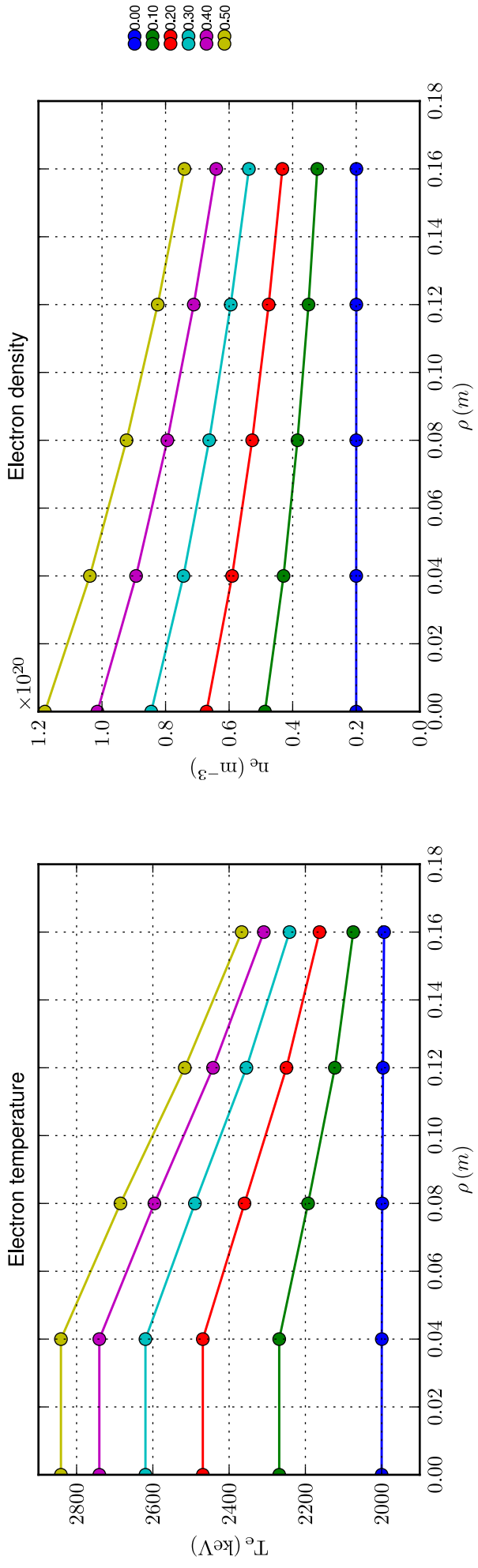
Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 51$]

Time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.57 \text{ s}$

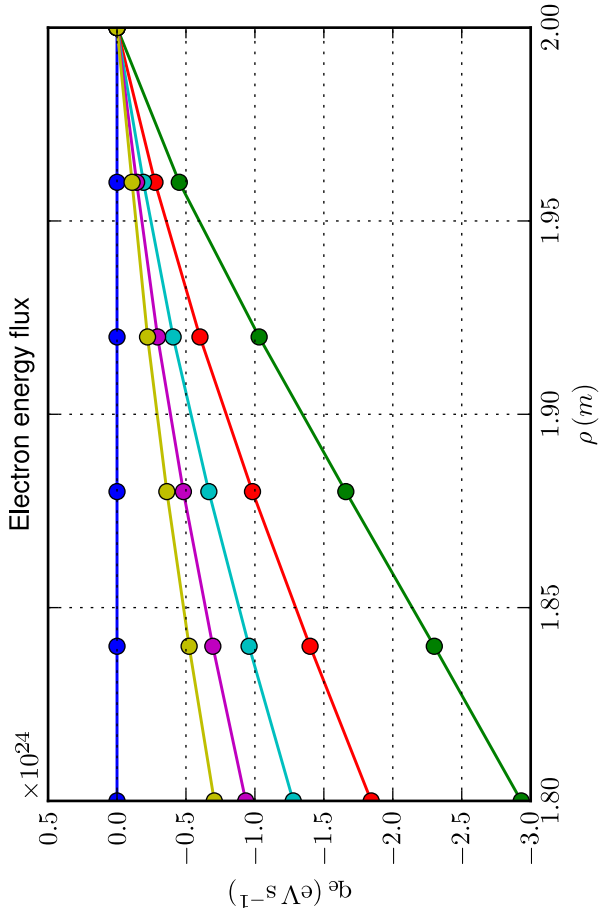
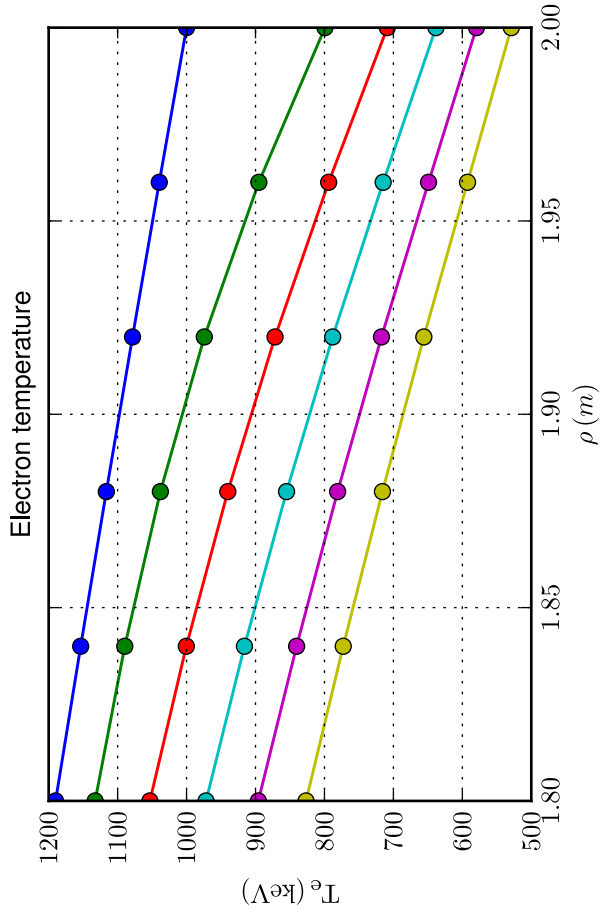
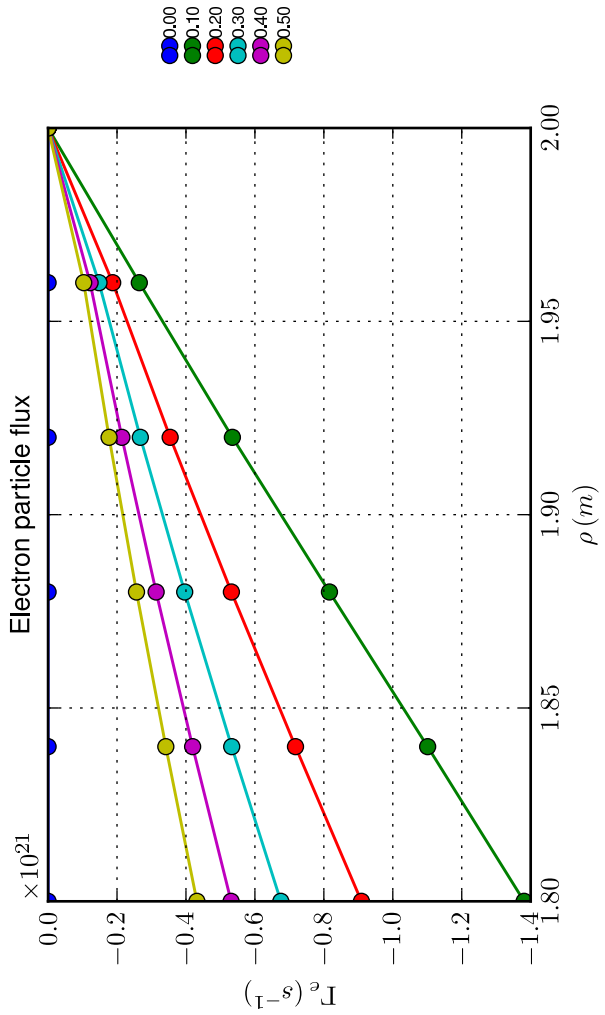
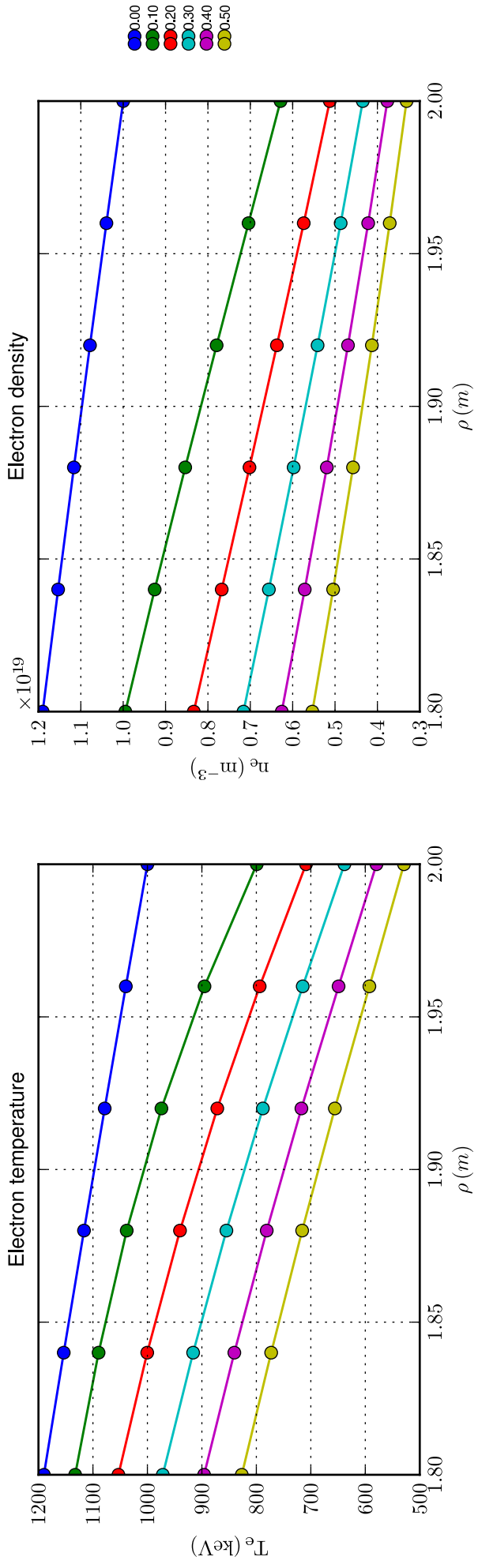


0.00
0.10
0.20
0.30
0.40
0.50

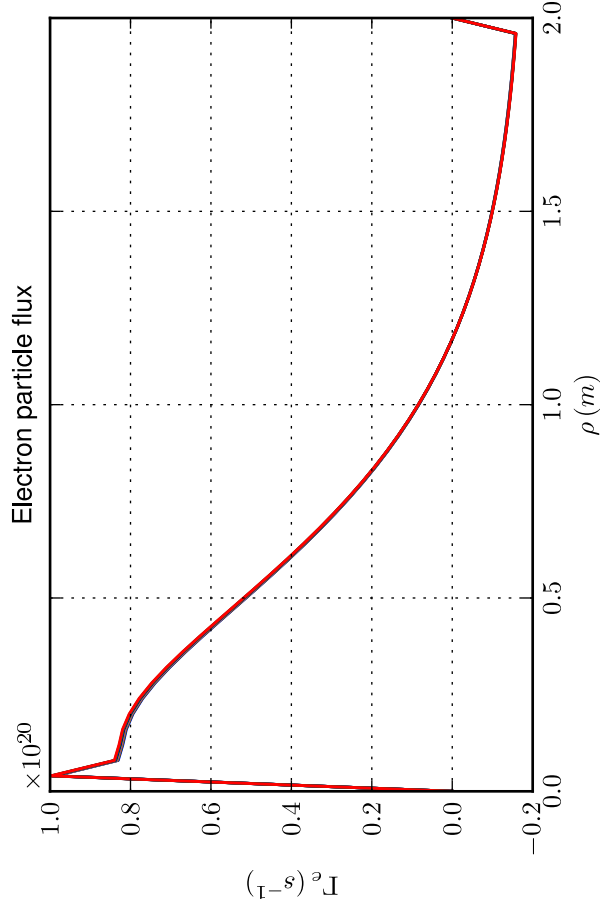
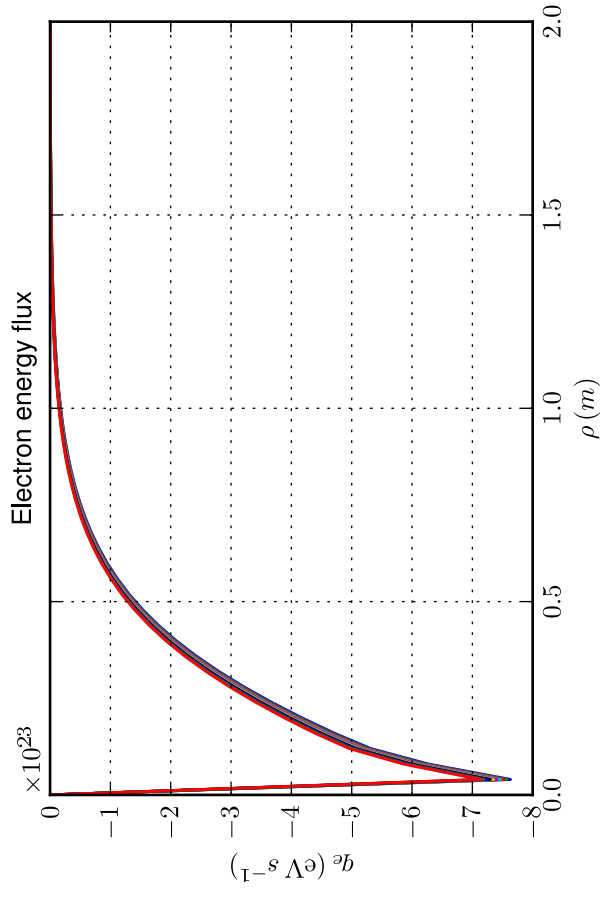
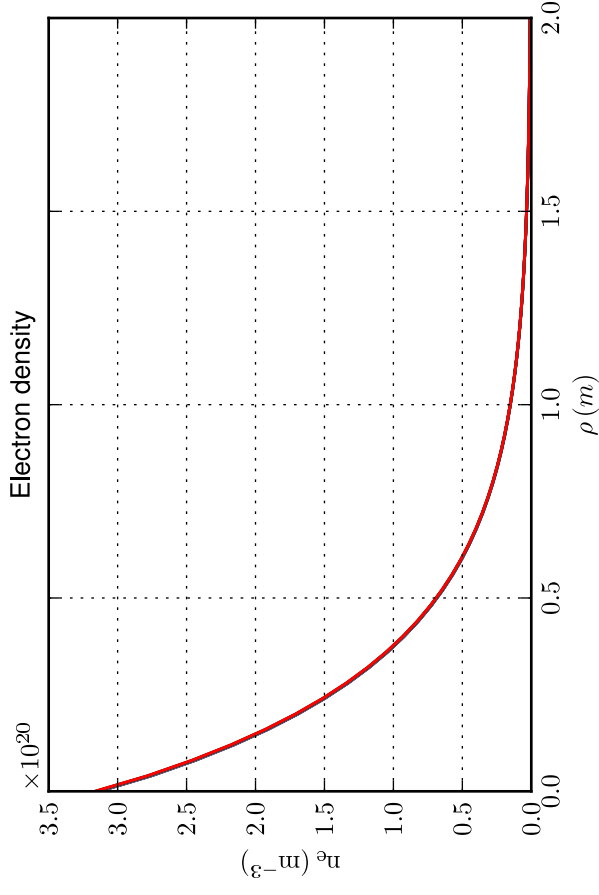
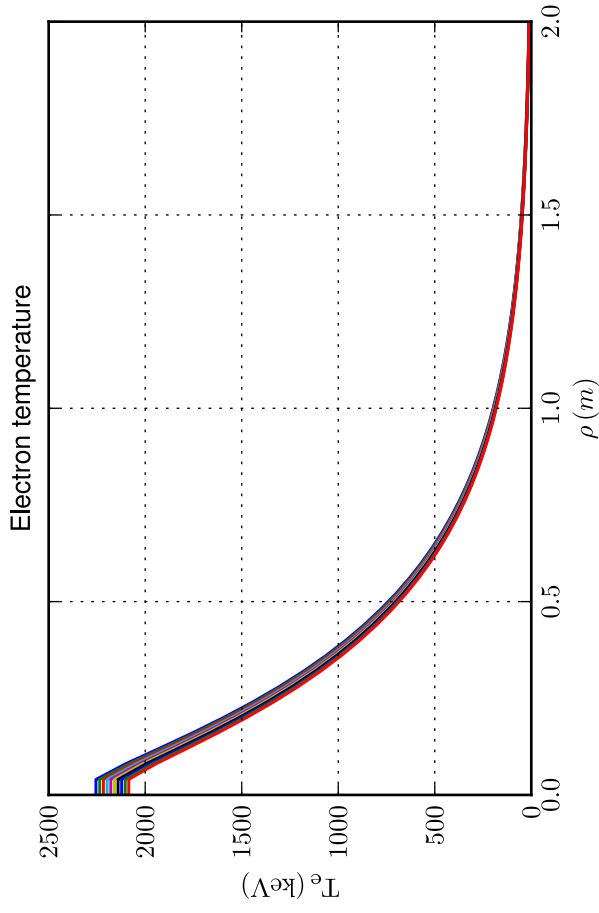
Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 51$]
 Spatial zoom over magnetic axis; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.57 \text{ s}$



Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_\rho = 51$]
 Spatial zoom over edge; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.57 \text{ s}$

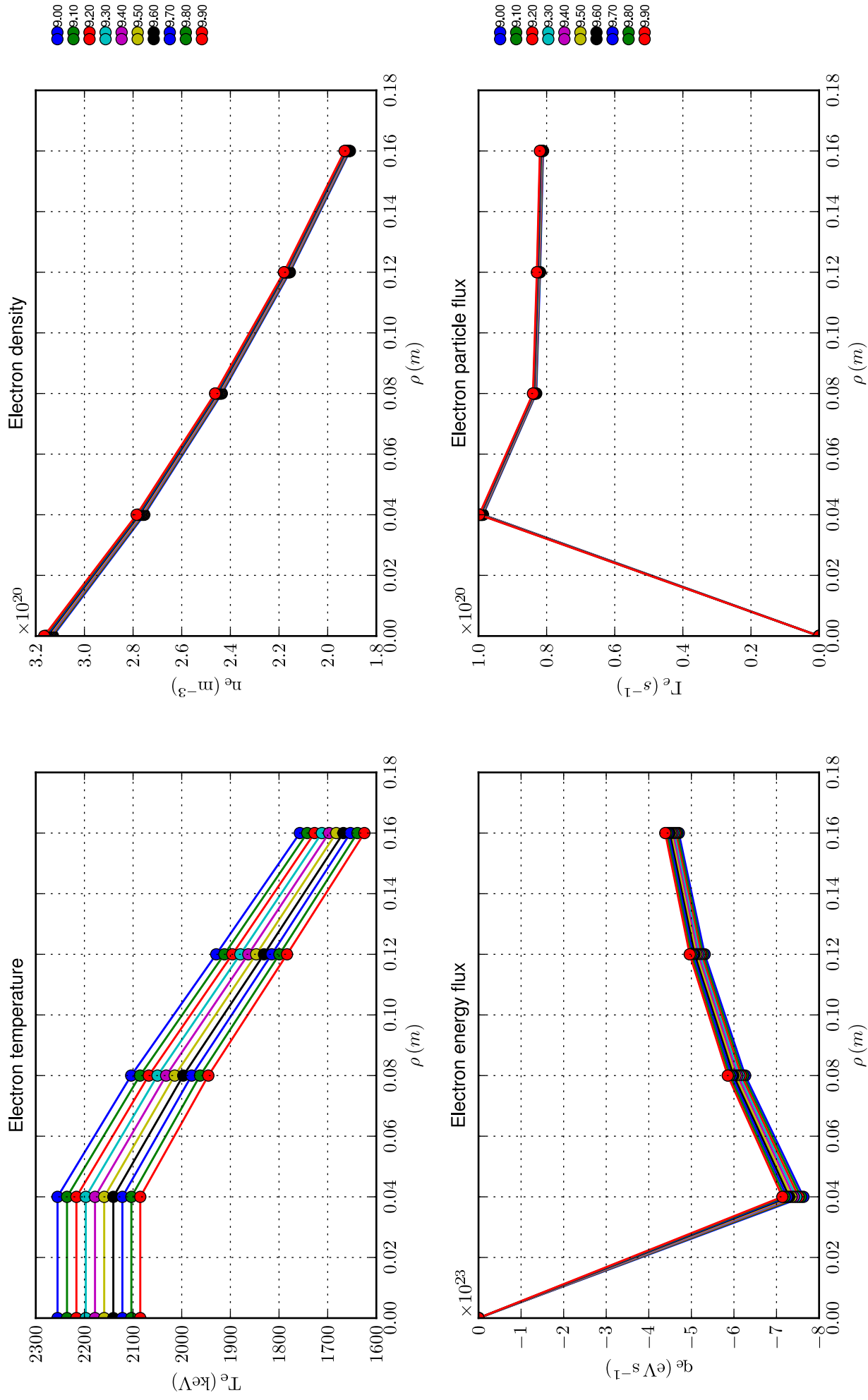


Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Time sampling: last 10 time slices



9.00
 9.10
 9.20
 9.30
 9.40
 9.50
 9.60
 9.70
 9.80
 9.90

Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Spatial zoom over magnetic axis; time sampling: last 10 time slices



Profiles [Case: 1.1.5.i, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.30 \text{ m/s}$, $\Delta t = 10.00$, $\tau = 1.0 \times 10^{-3} \text{ s}$, $N_p = 51$]
 Spatial zoom over edge; time sampling: last 10 time slices

