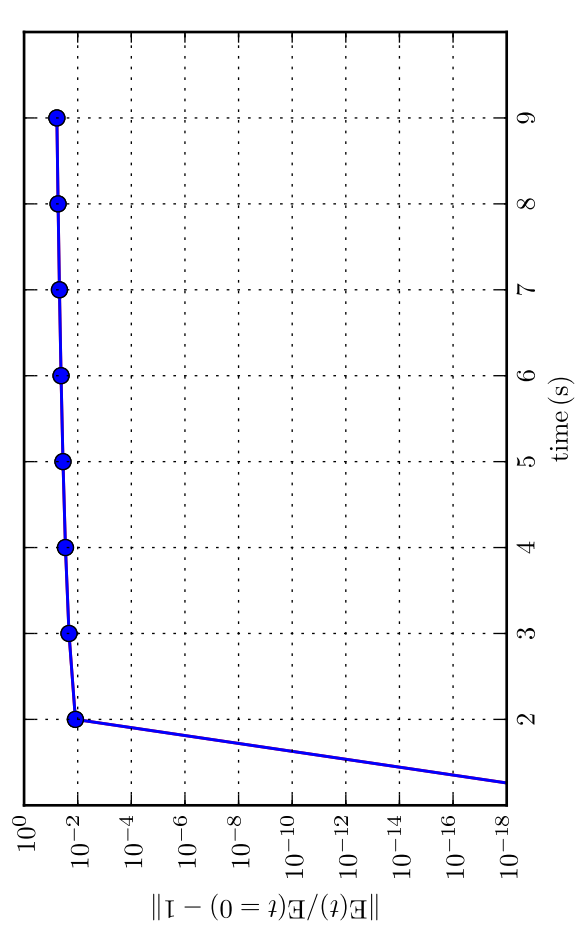
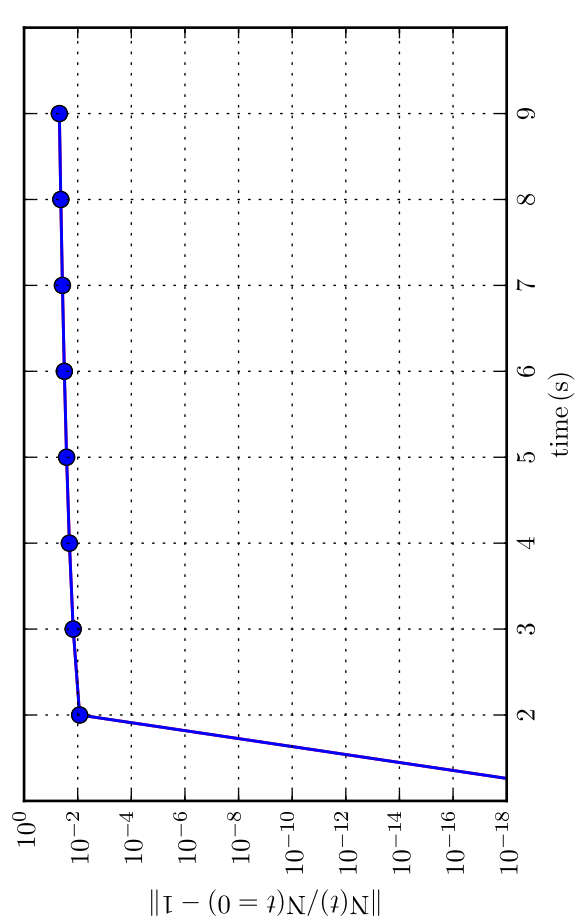
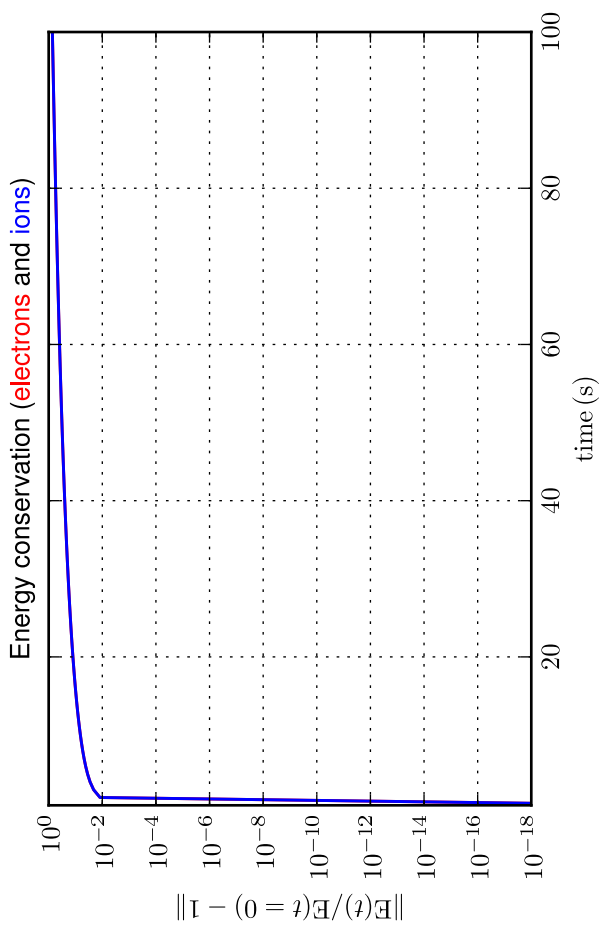
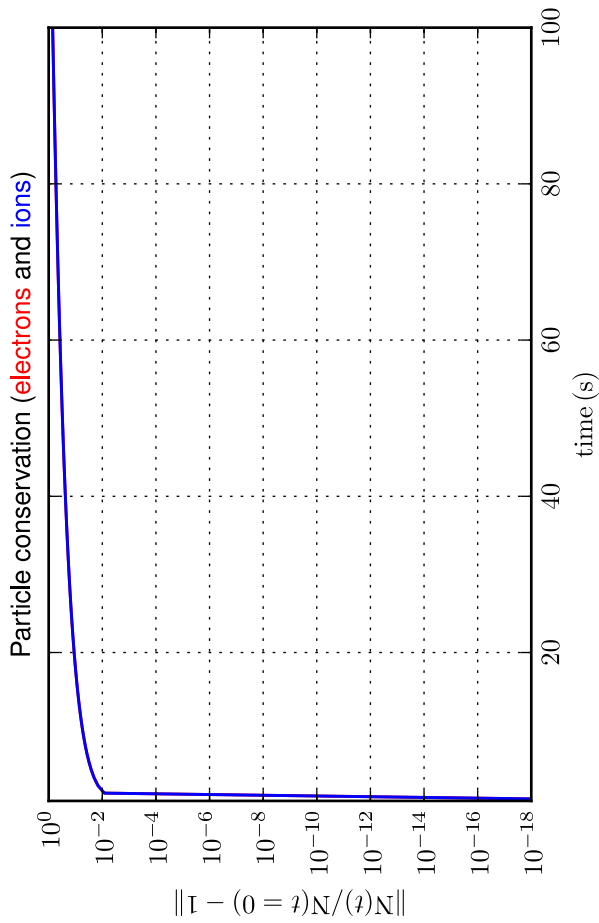
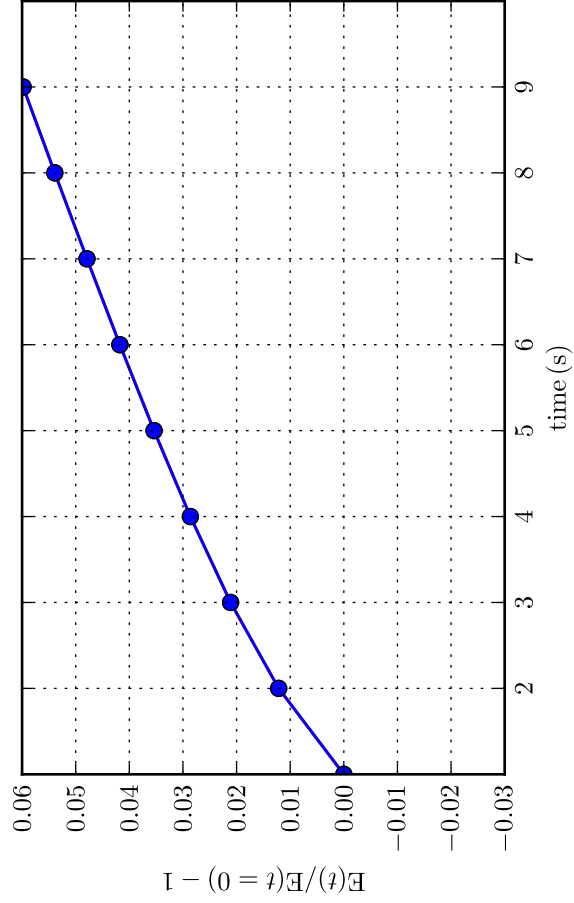
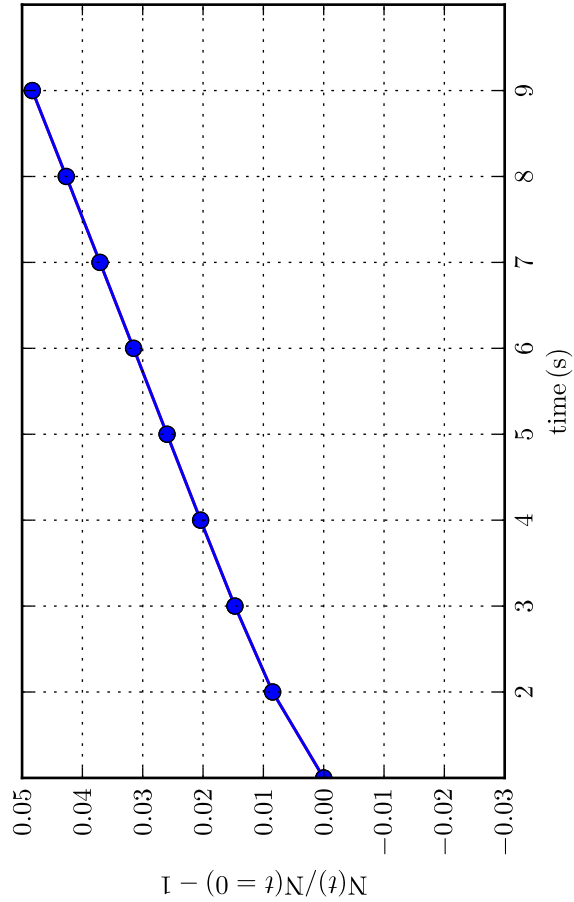
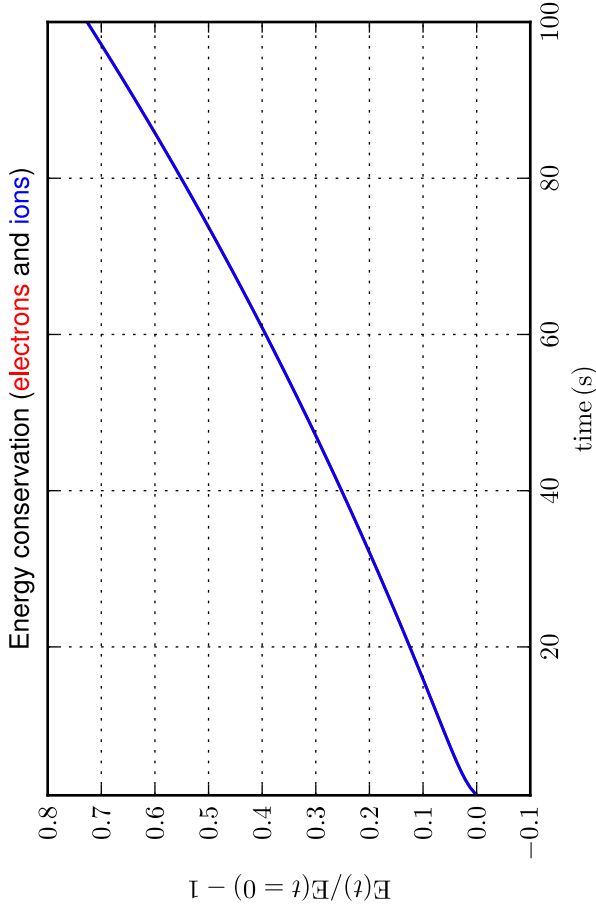
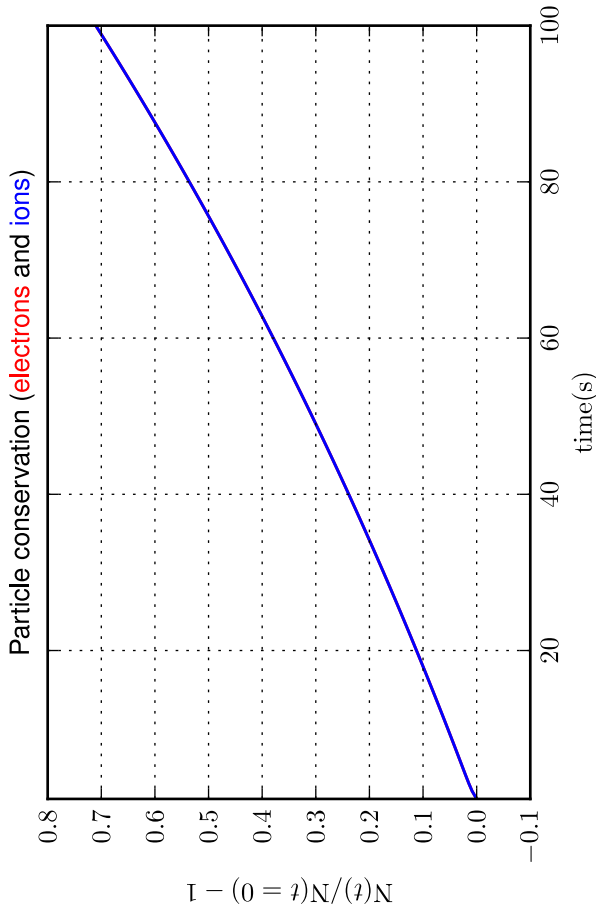


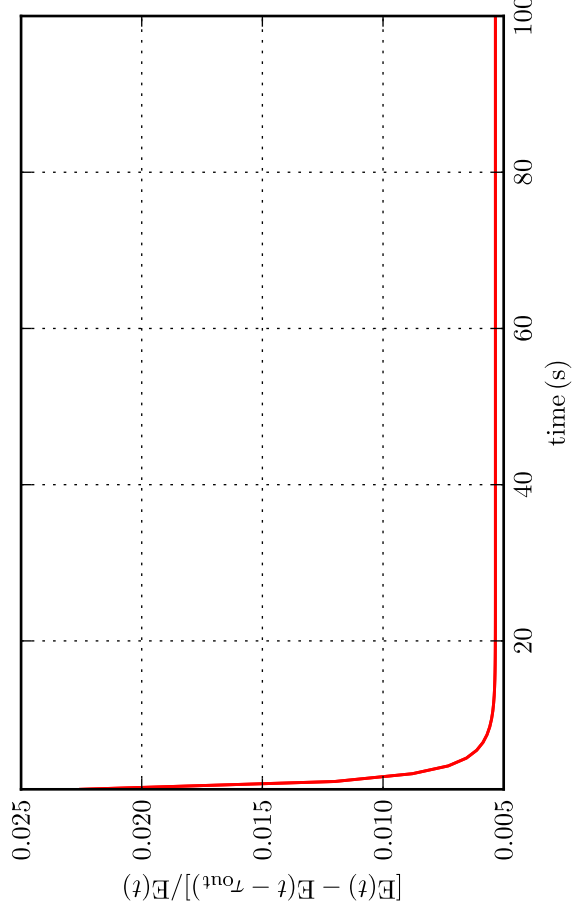
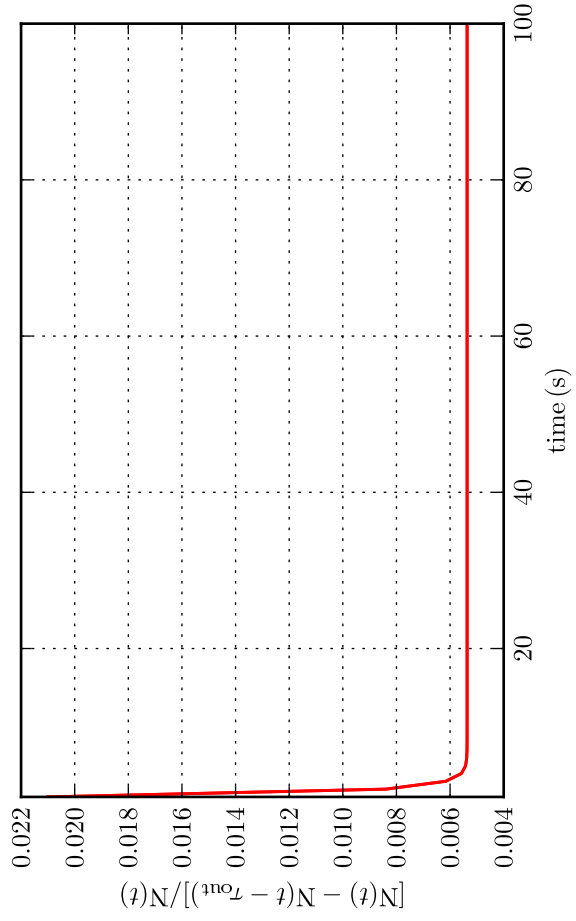
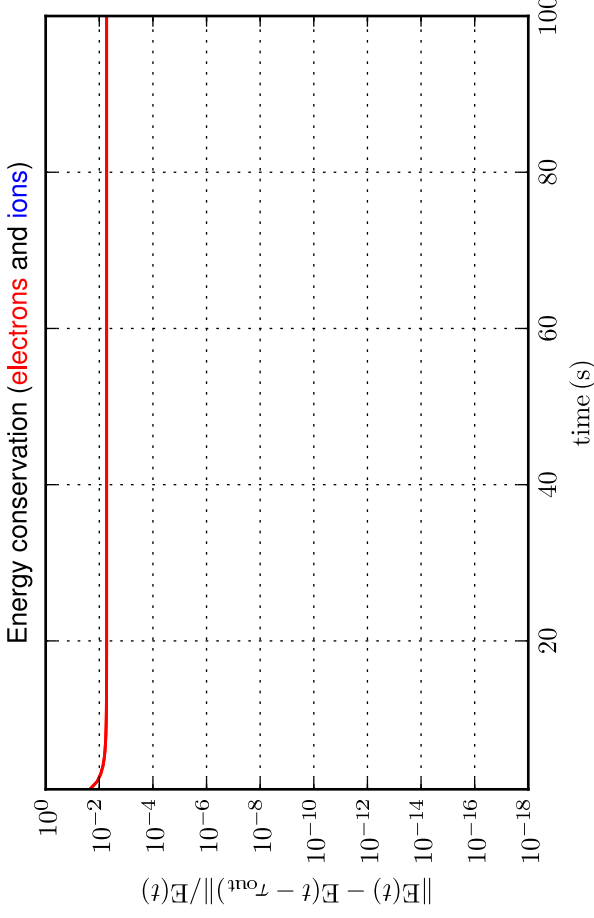
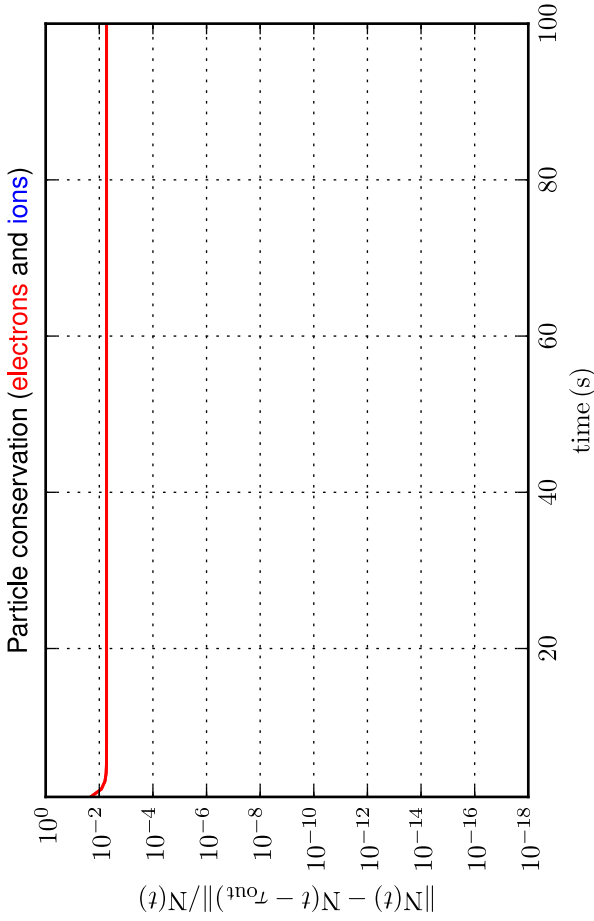
Part. & Energy conservation [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with initial solution - log scale; total time and zoom over time



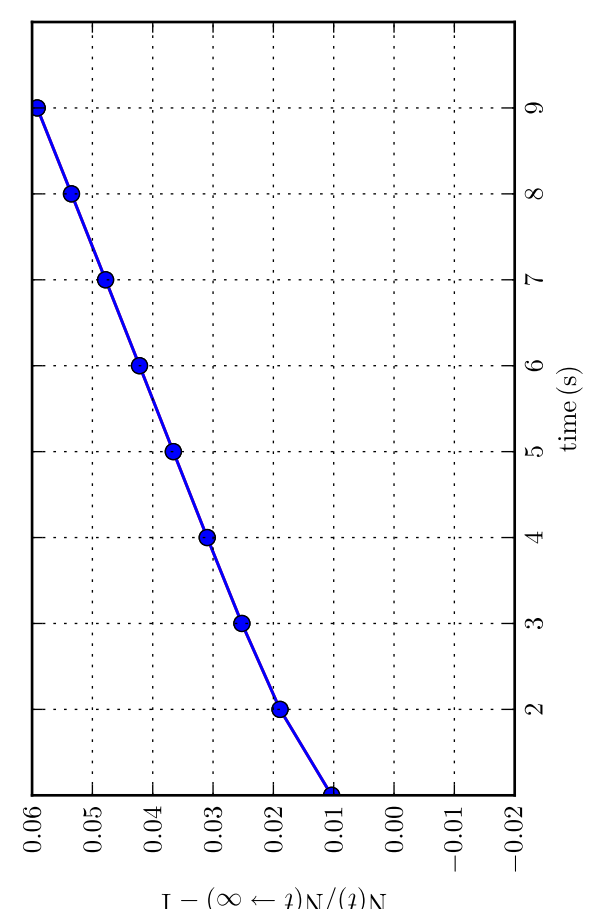
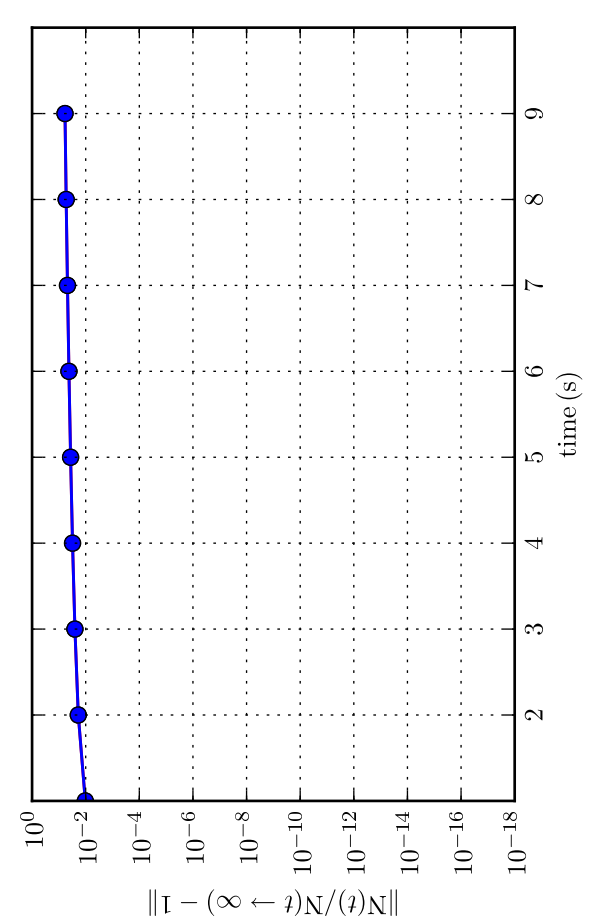
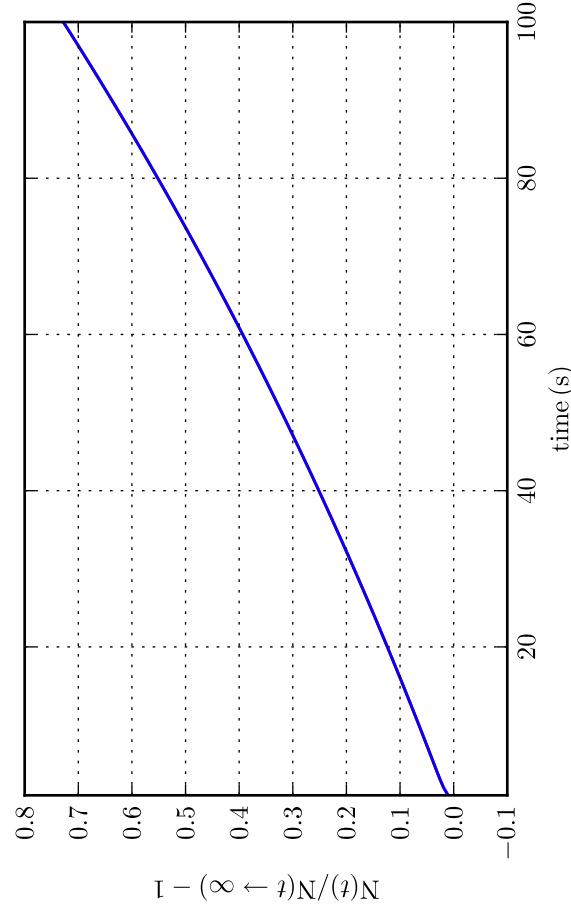
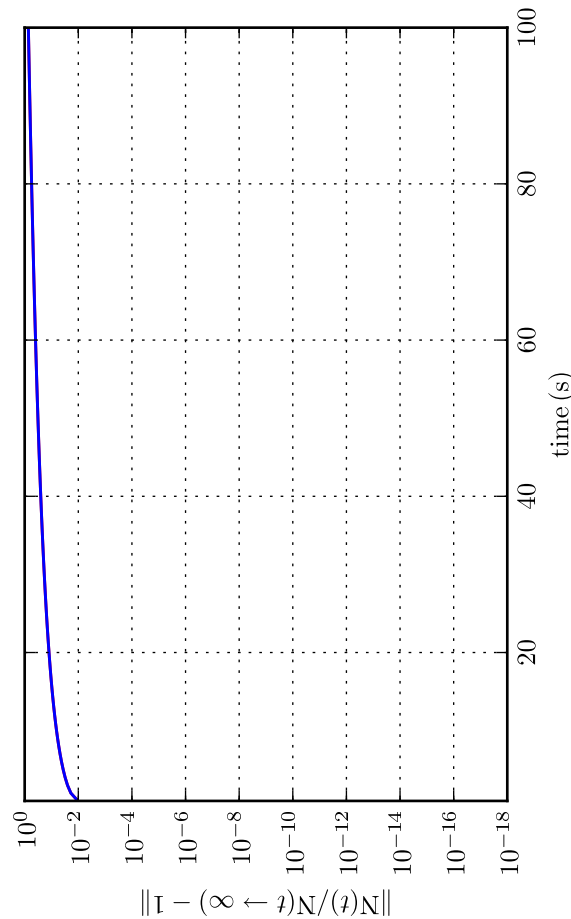
Part. & Energy conservation [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
Comparison with previous time-sampled (τ_{out}) solution - log and linear scales

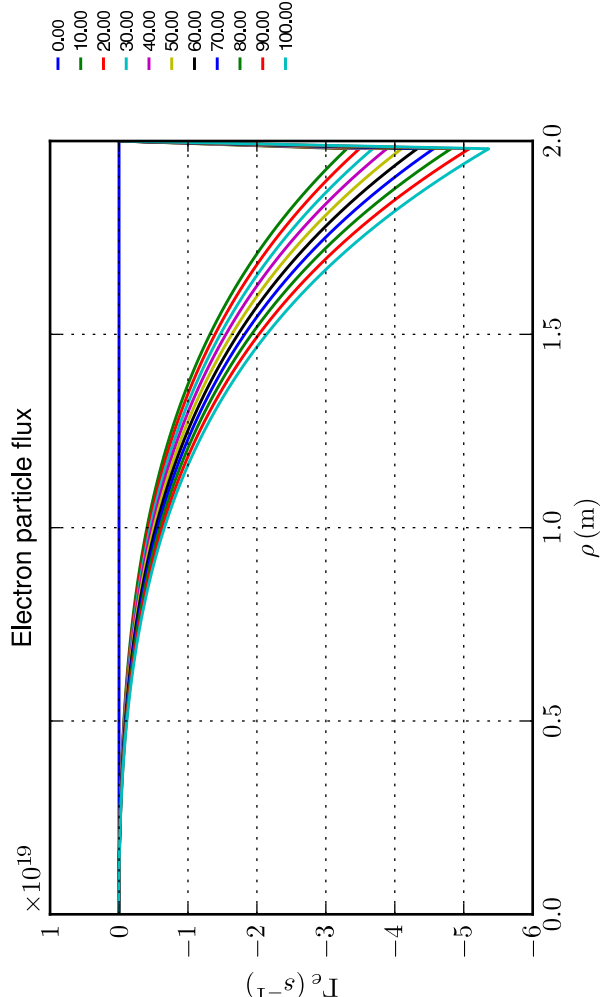
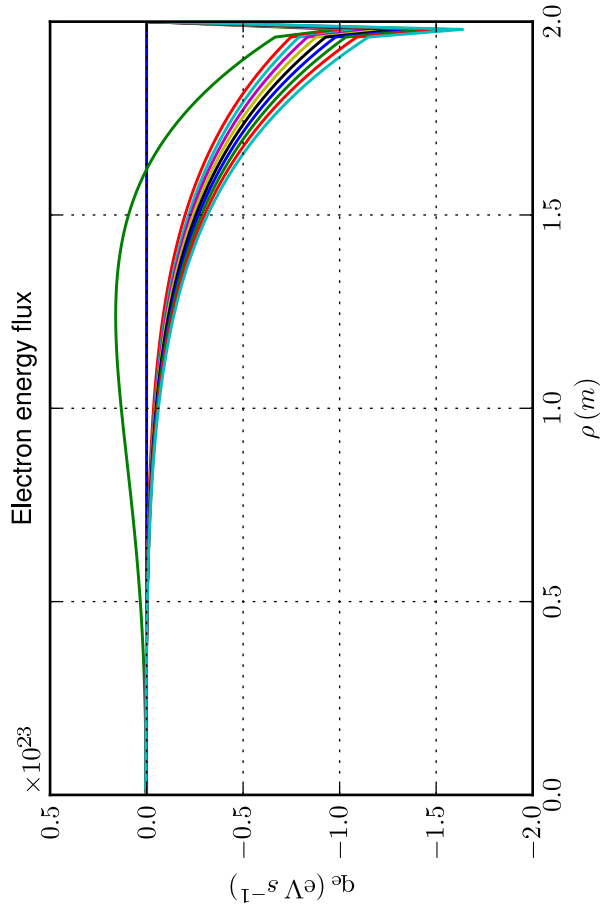
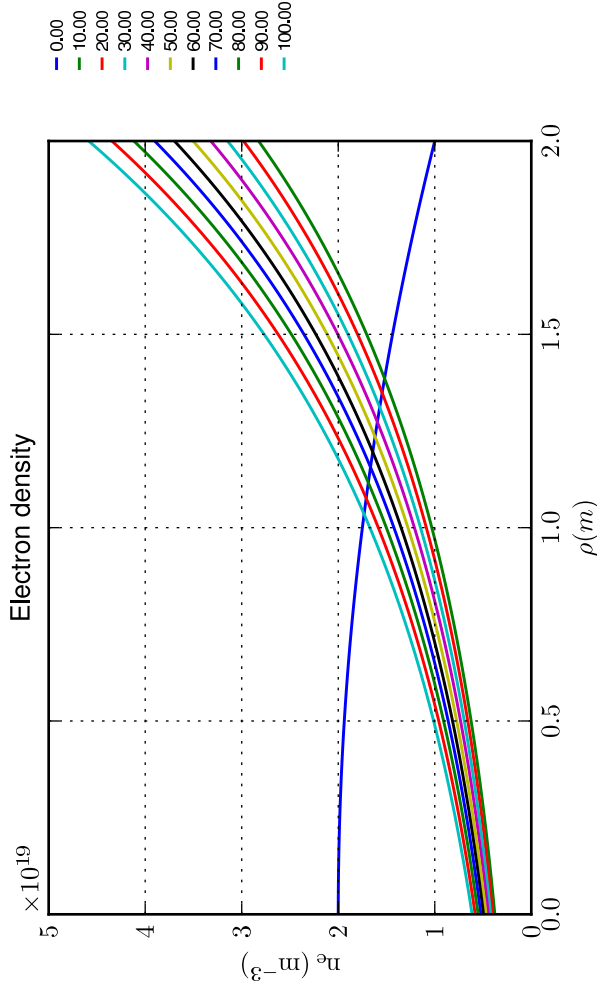
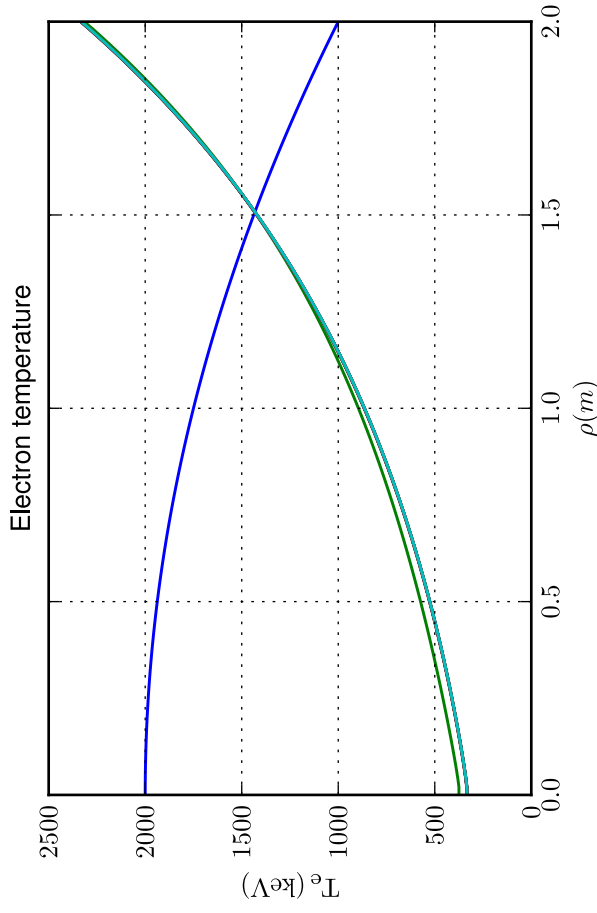


Particle conservation [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with asymptotic solution (electrons and ions); total time and zoom over time



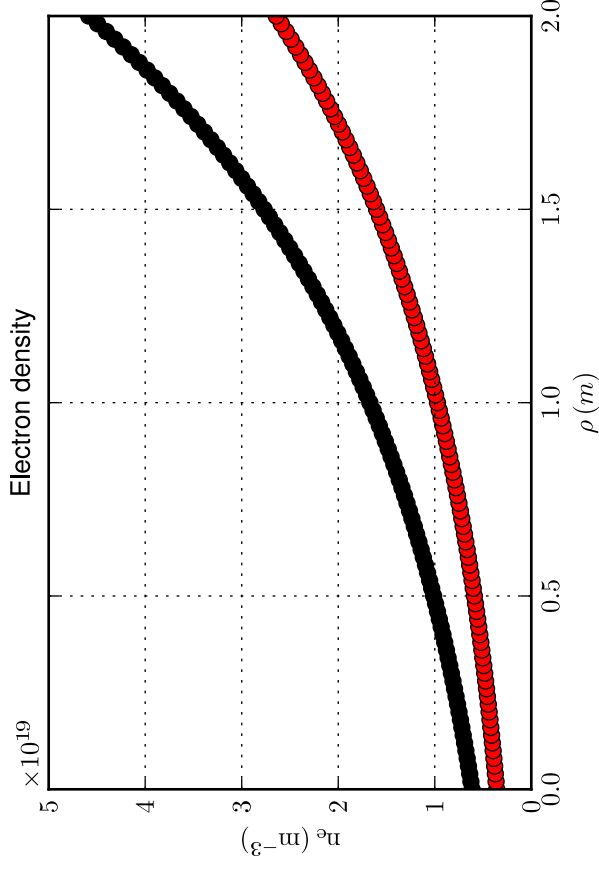
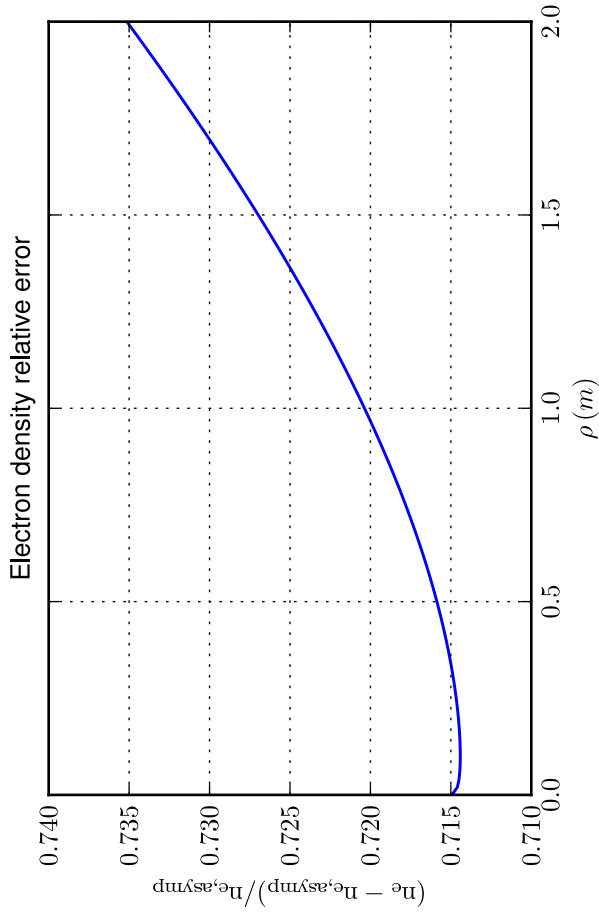
Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]

Time sampling: total simulation time/10

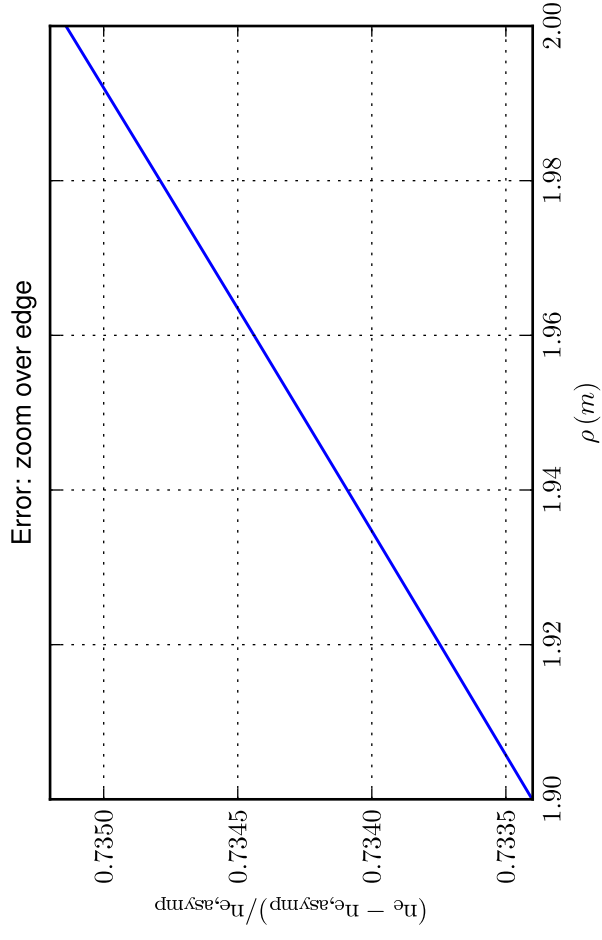
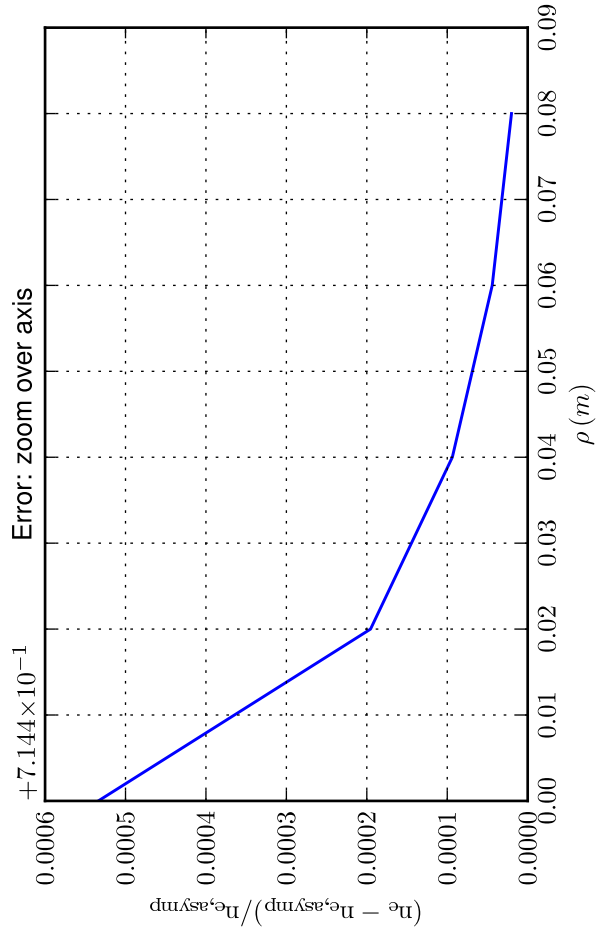


Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]

Comparison with asymptotic solution

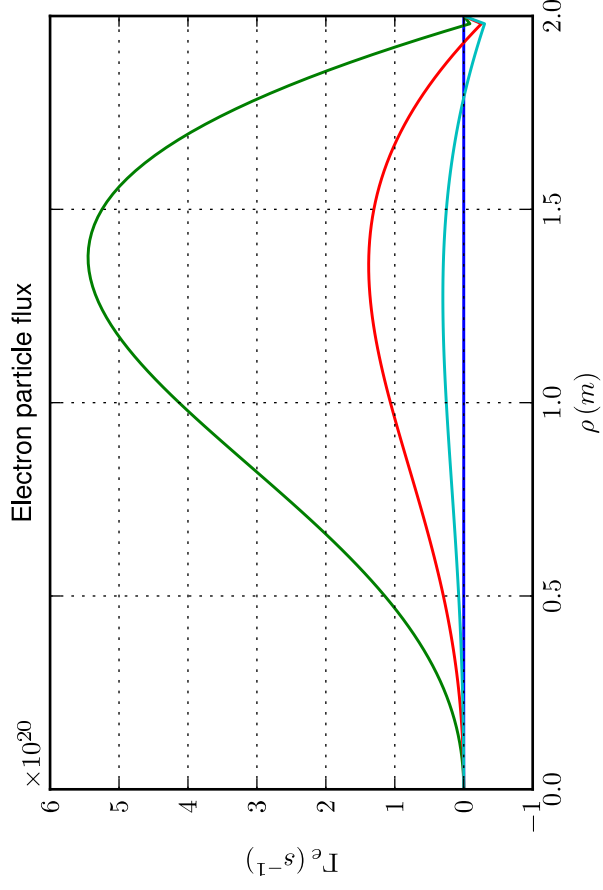
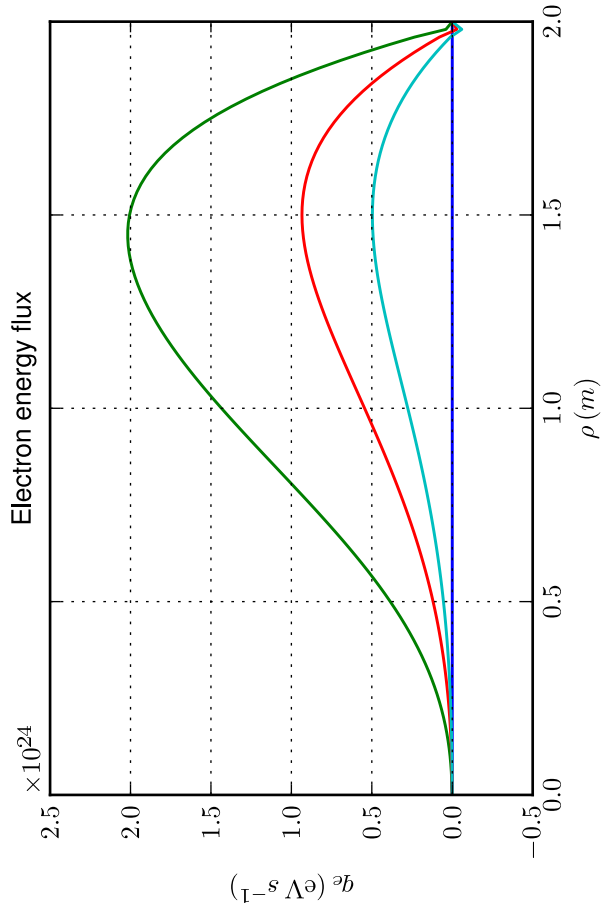
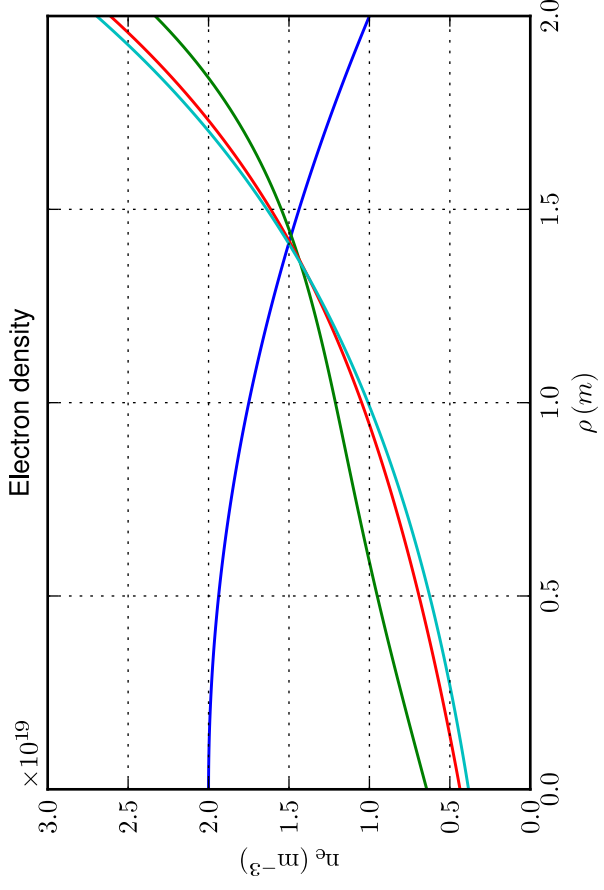
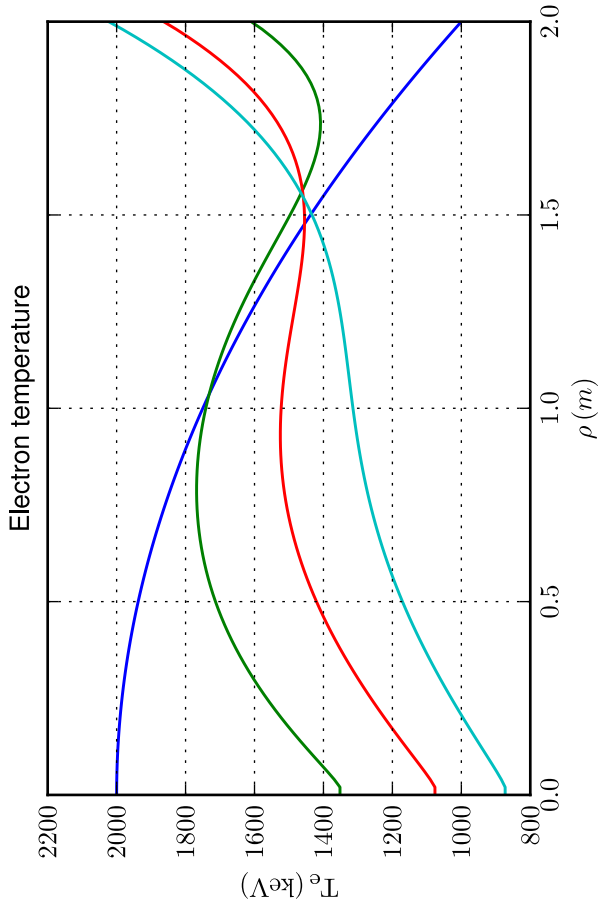


● final calculation
● asymptotic



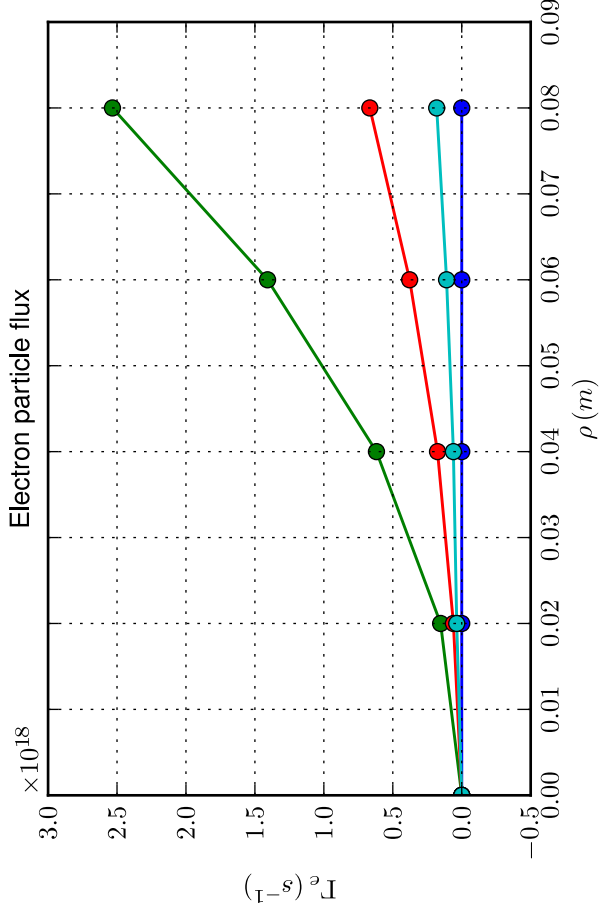
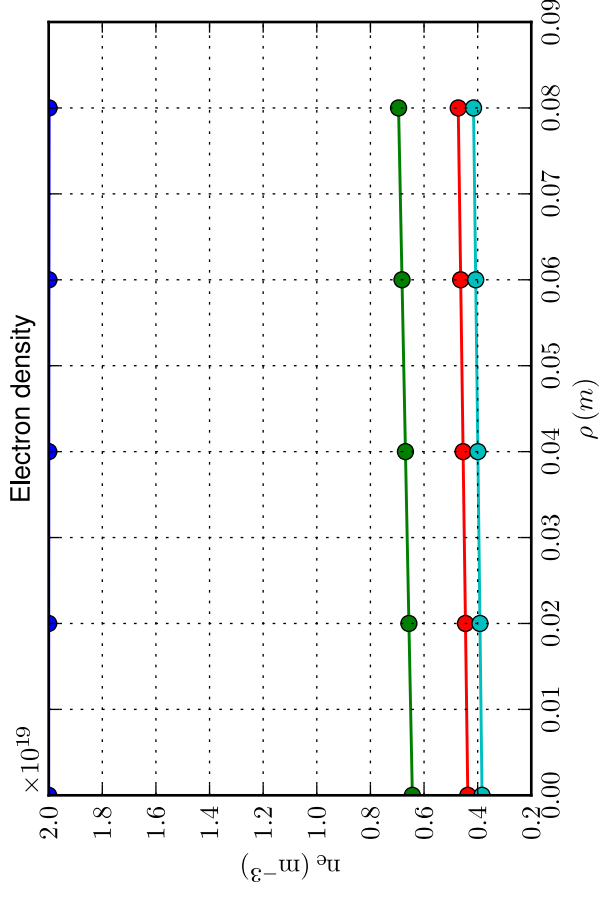
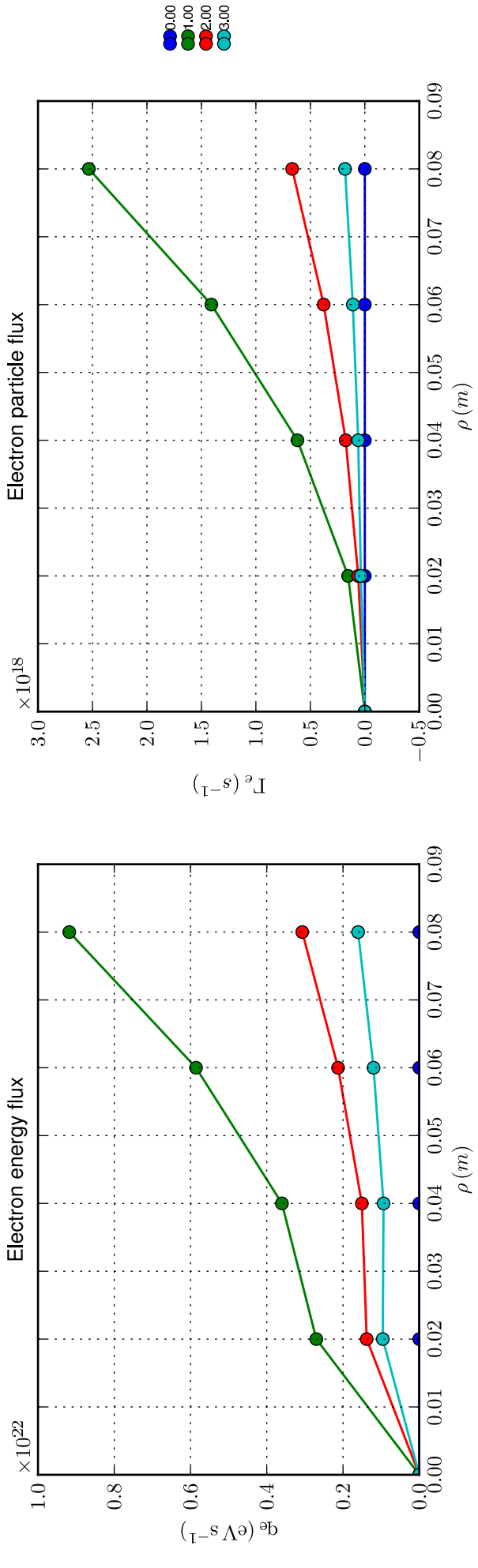
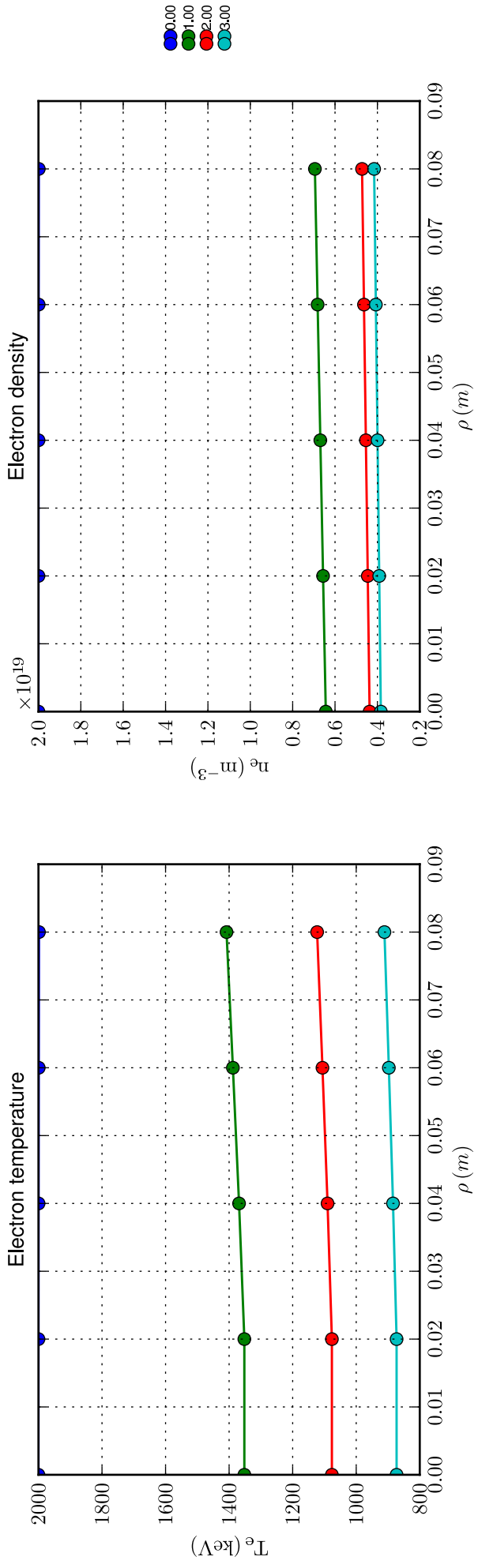
Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]

Time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$

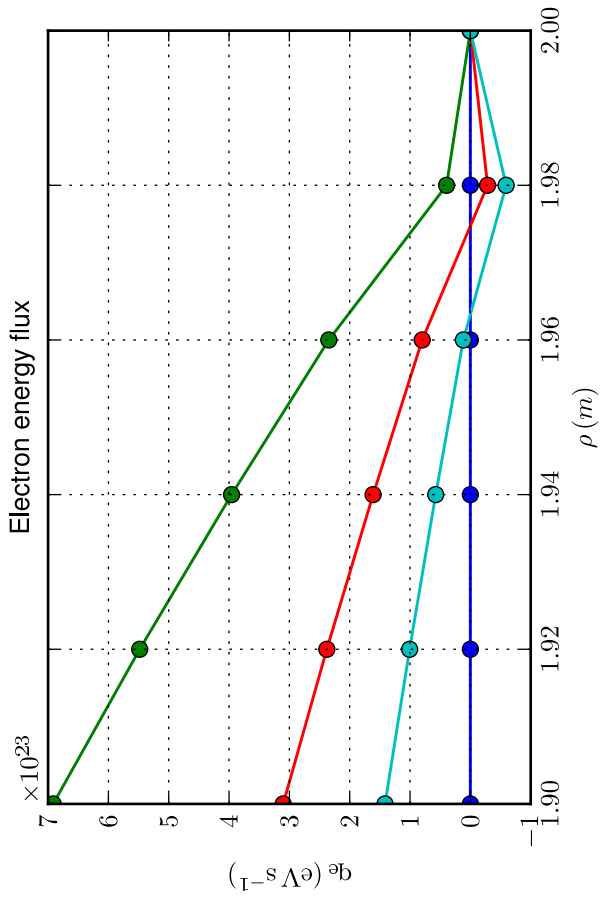
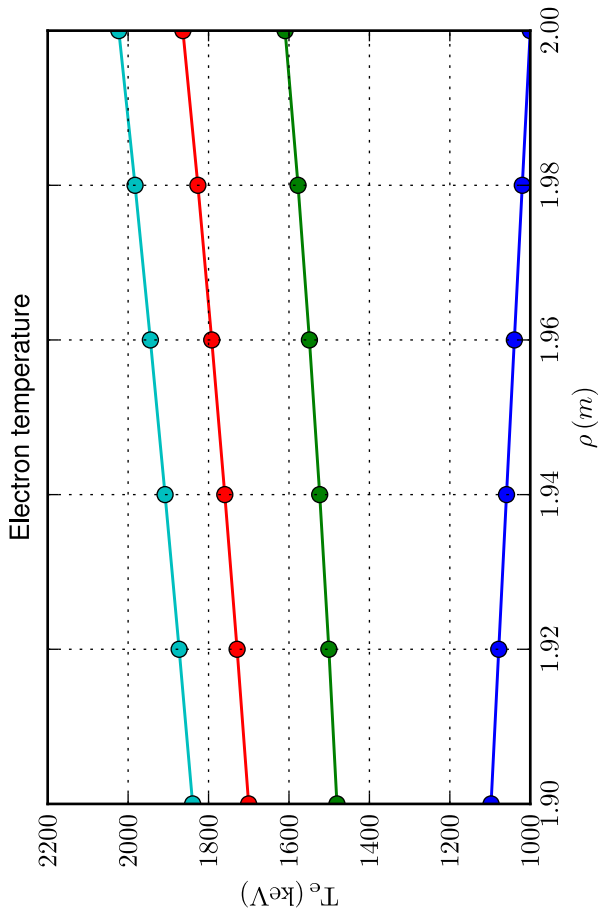
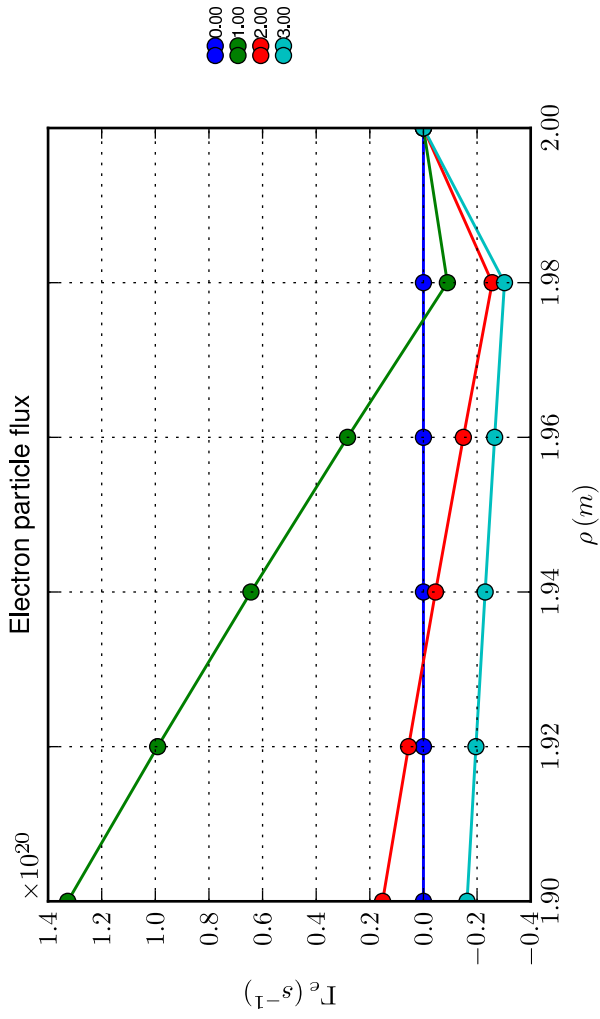
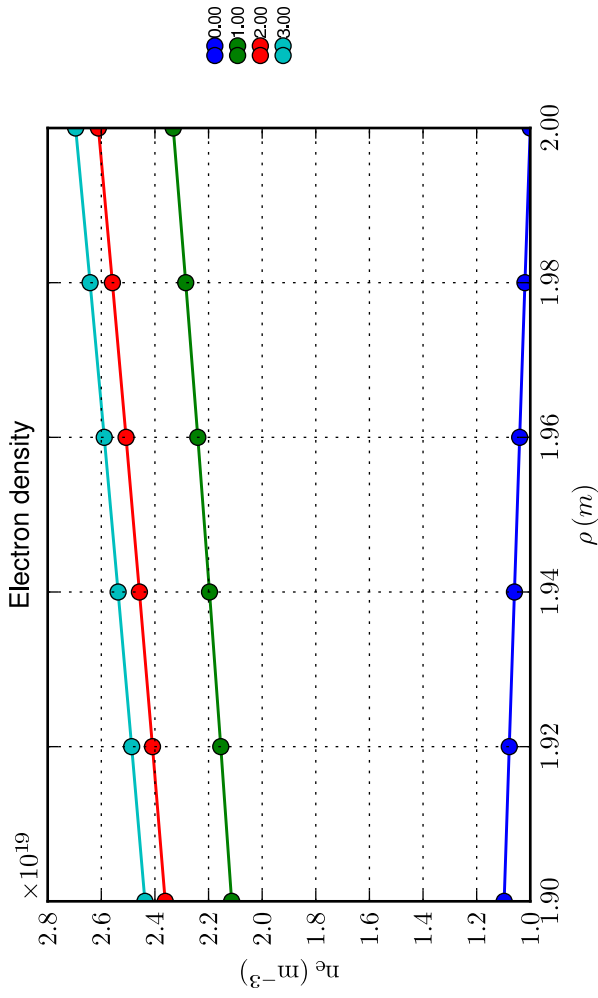


— 0.00
— 1.00
— 2.00
— 3.00

Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]
 Spatial zoom over magnetic axis; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$

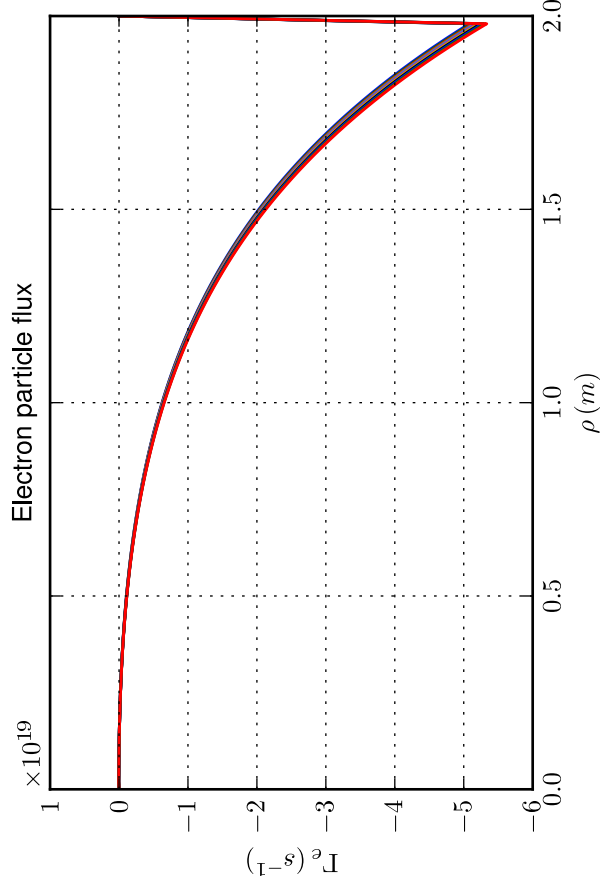
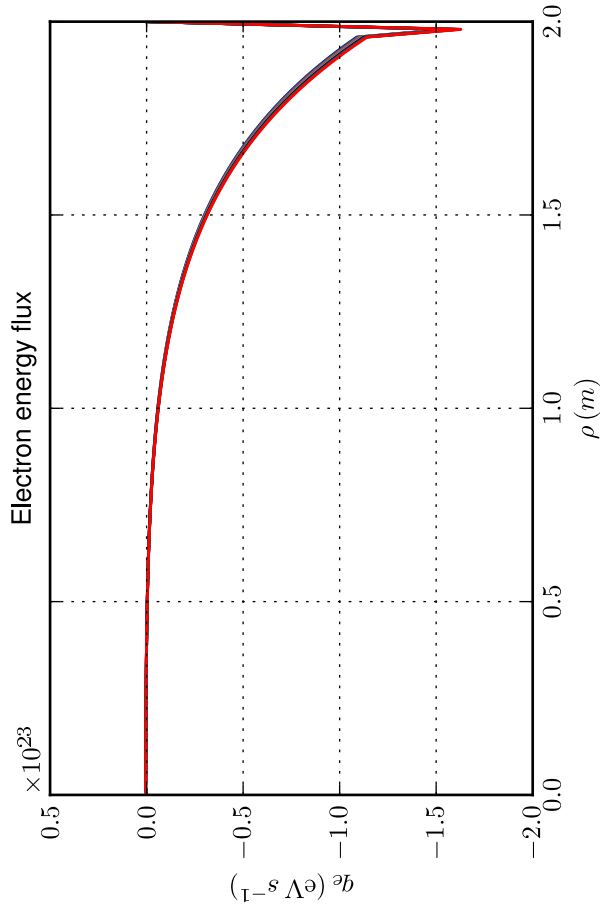
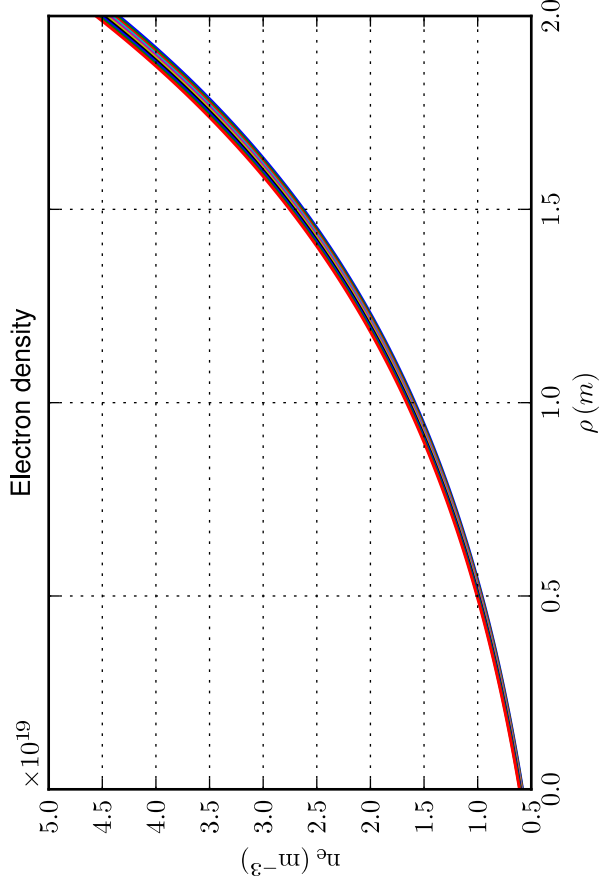
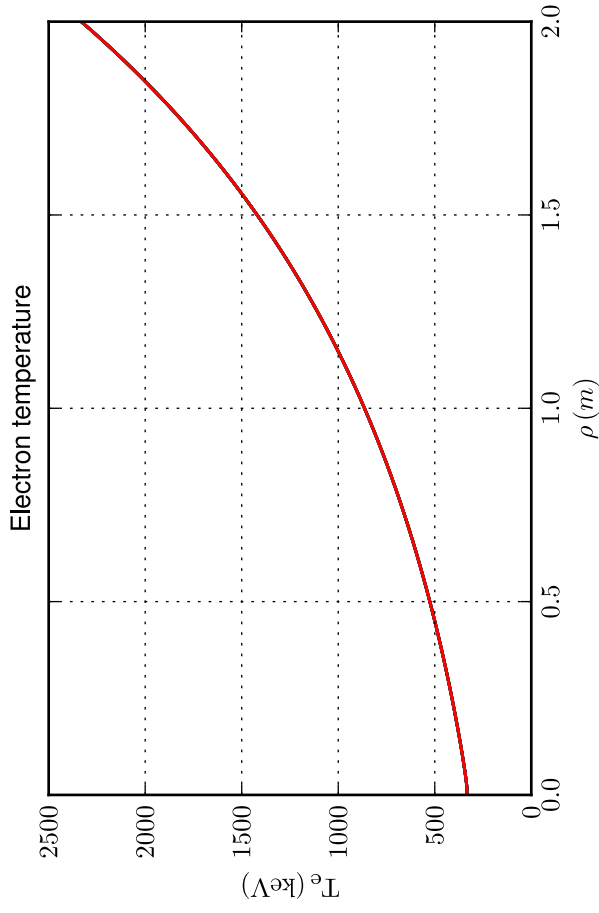


Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]
 Spatial zoom over edge; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$



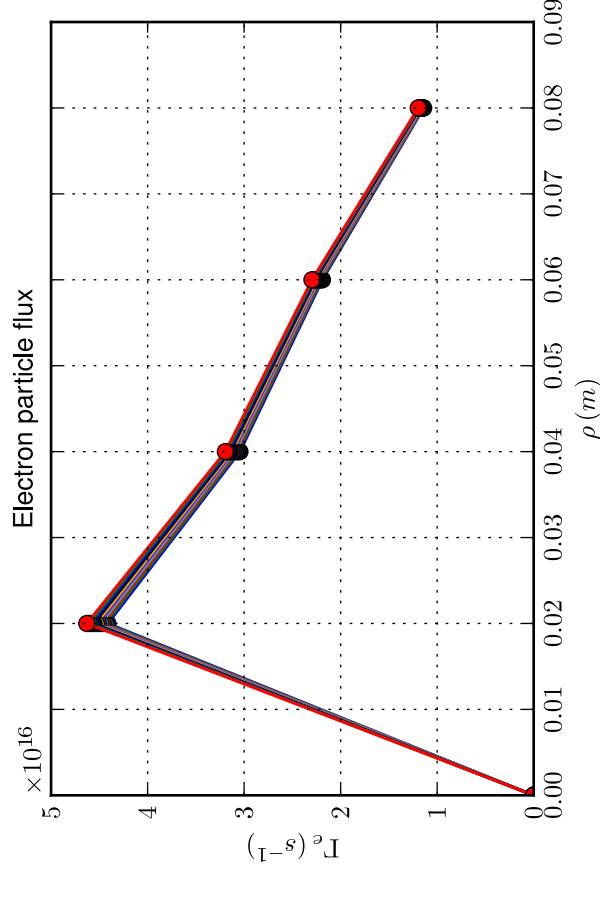
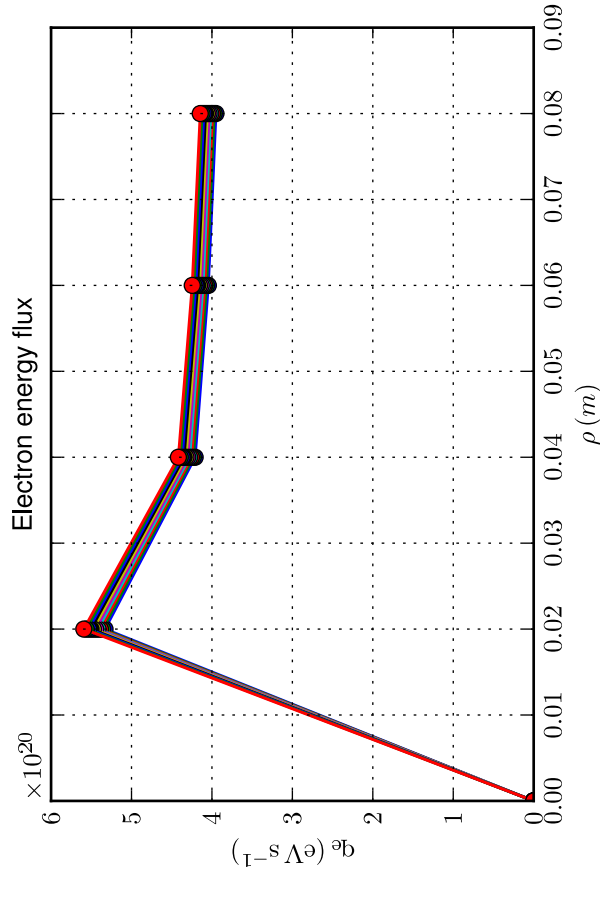
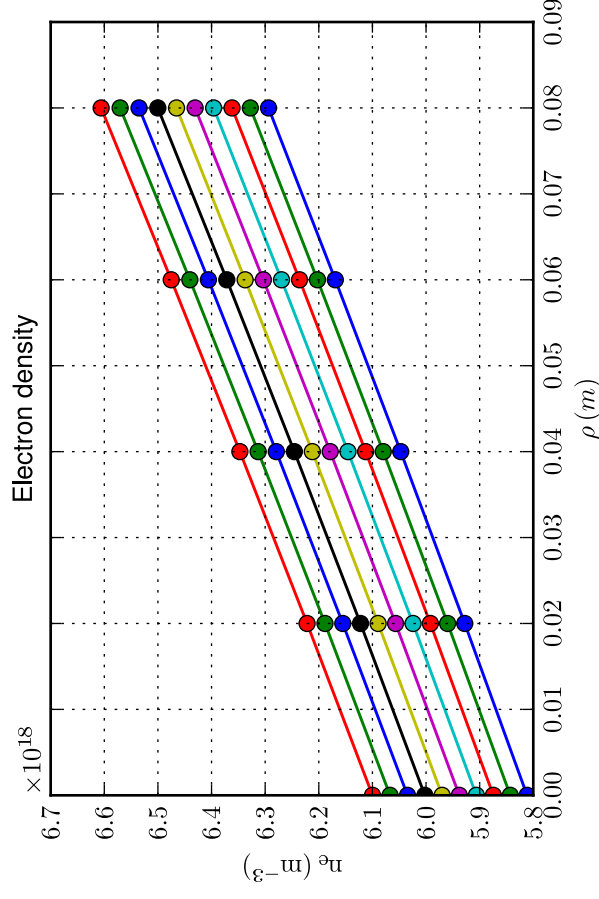
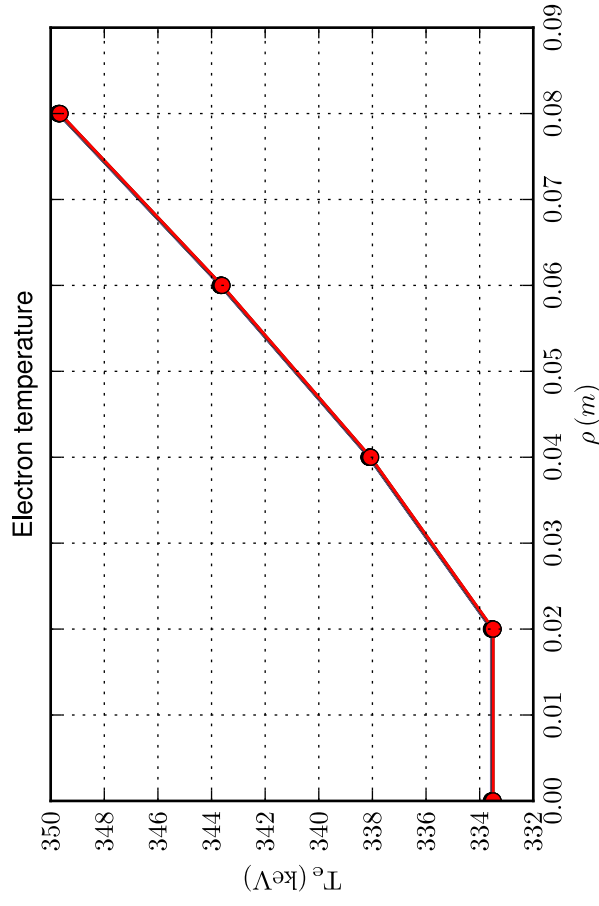
Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]

Time sampling: last 10 time slices



90.00
91.00
92.00
93.00
94.00
95.00
96.00
97.00
98.00
99.00

Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Spatial zoom over magnetic axis; time sampling: last 10 time slices



Profiles [Case: I.1.5.a, Solver: 3, $D = 0.1 \text{ m}^2/\text{s}$, $v = 0.10 \text{ m/s}$, $\Delta t = 100.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]
 Spatial zoom over edge; time sampling: last 10 time slices

