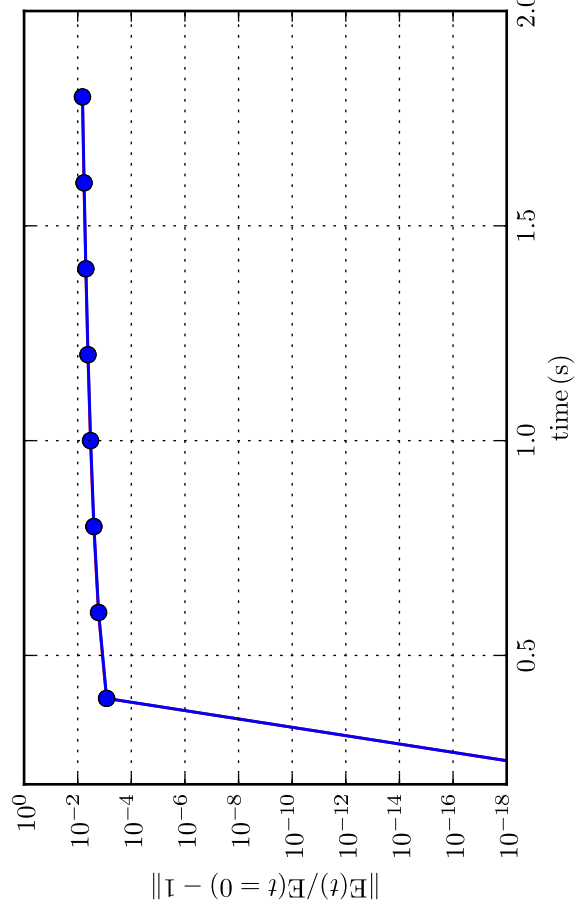
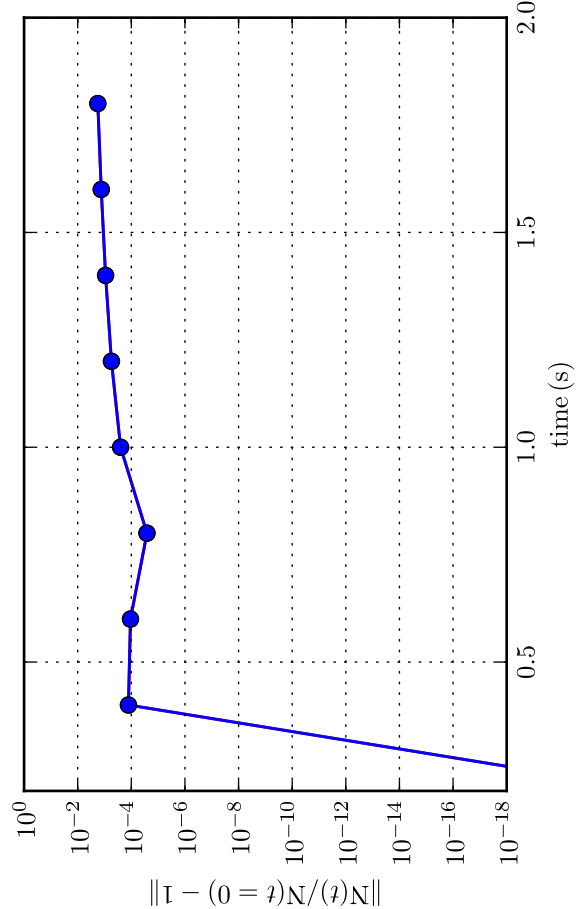
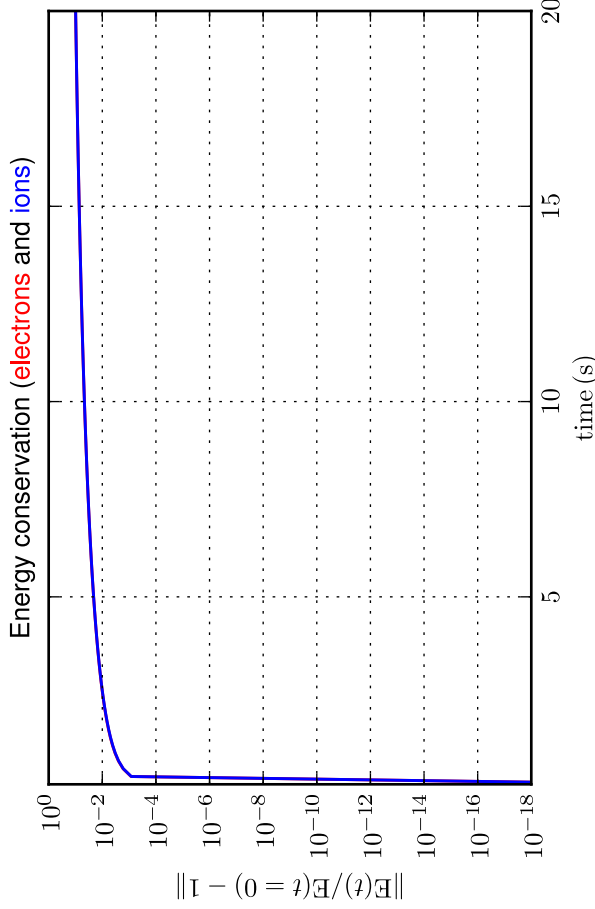
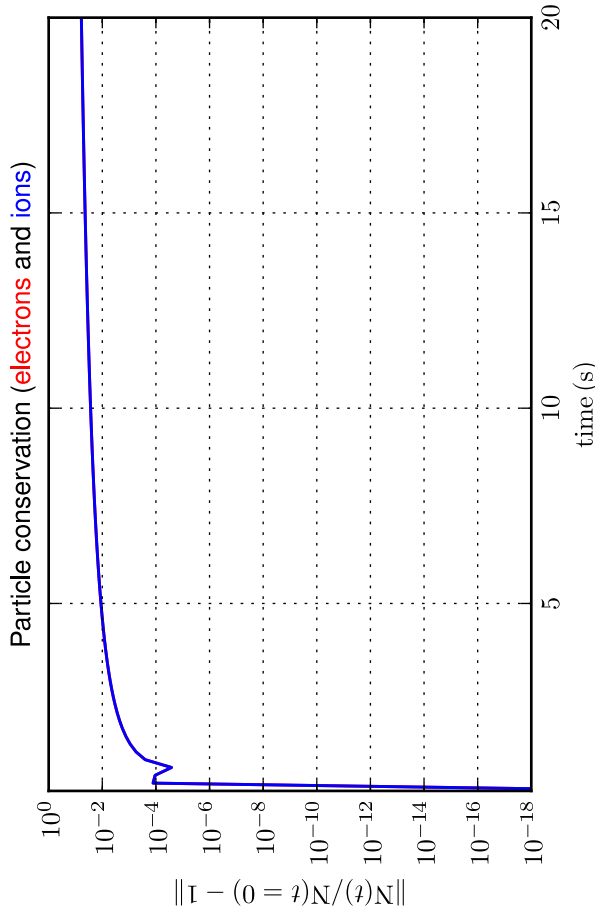
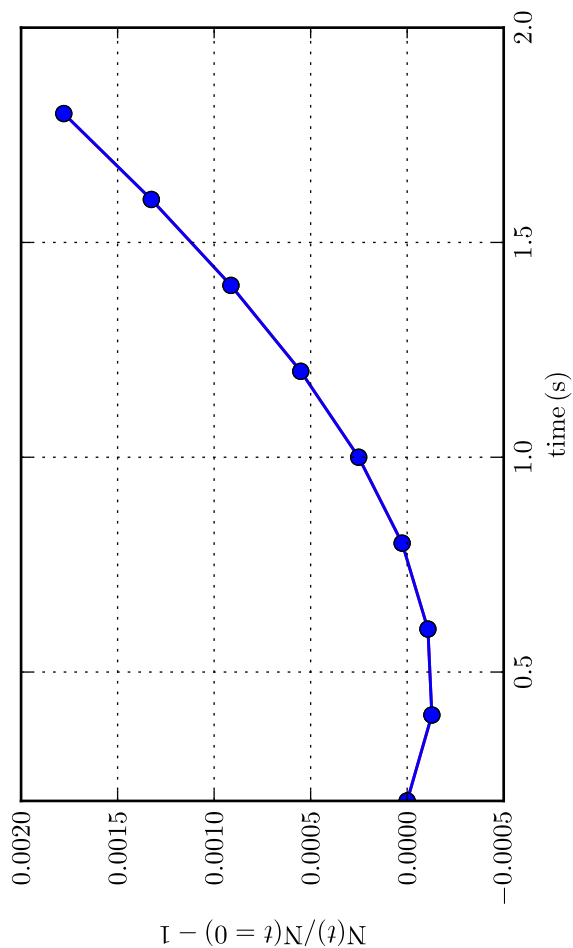
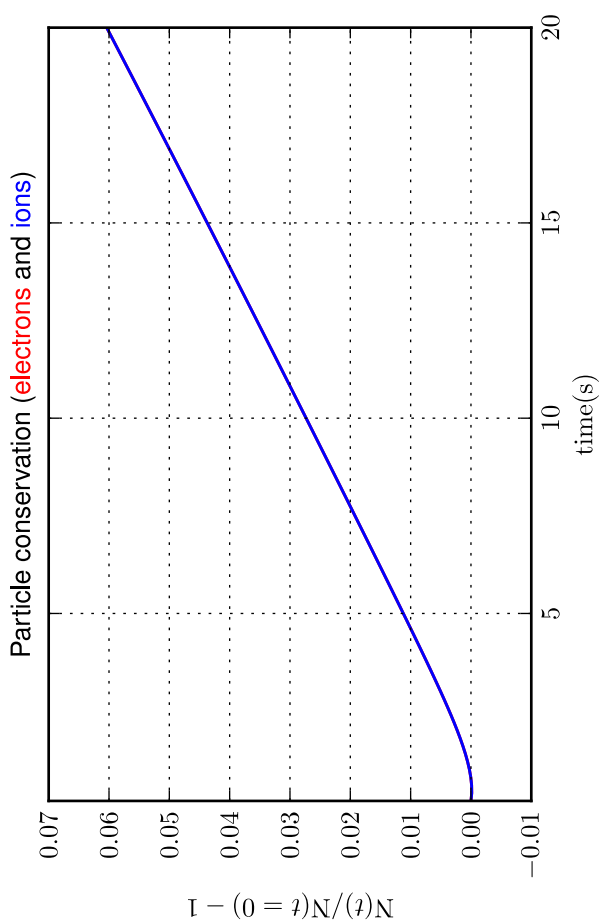
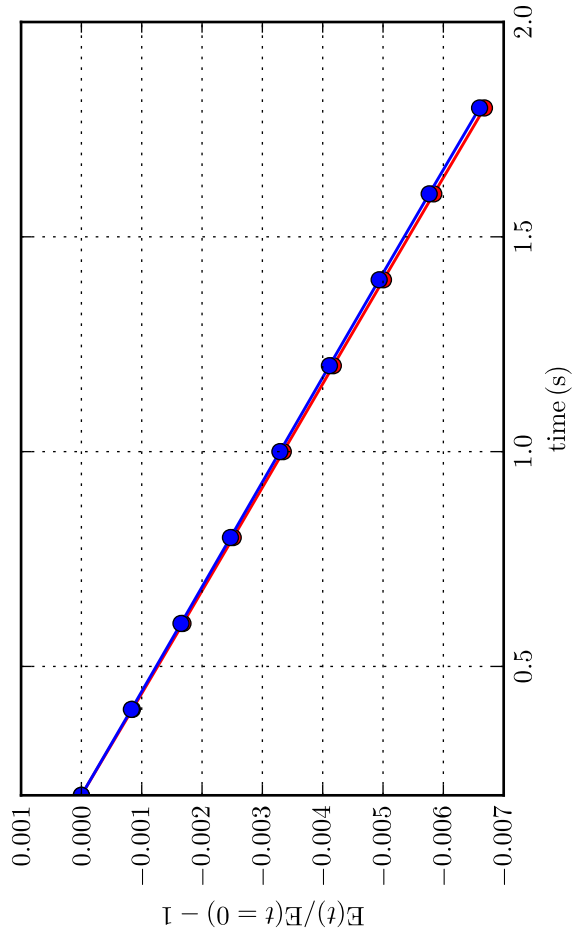
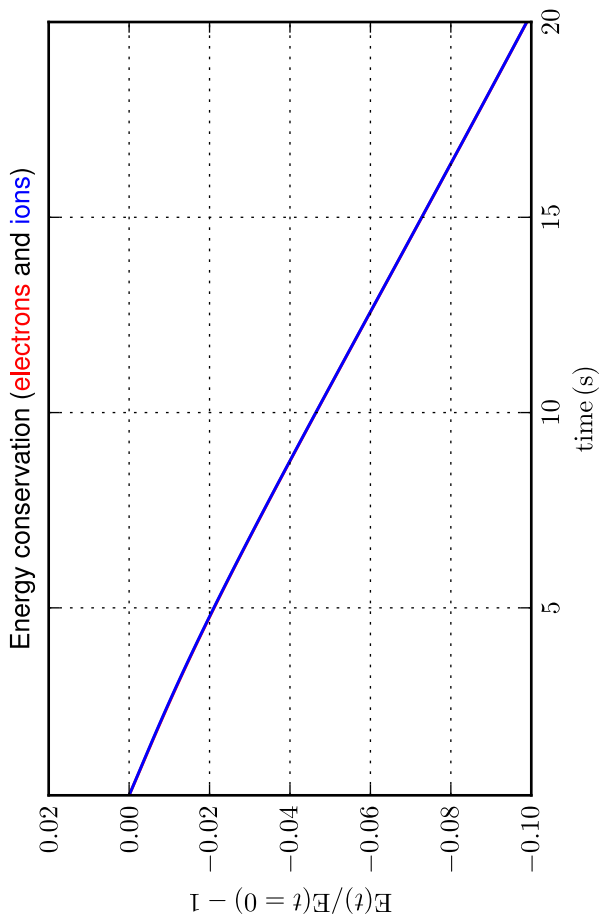


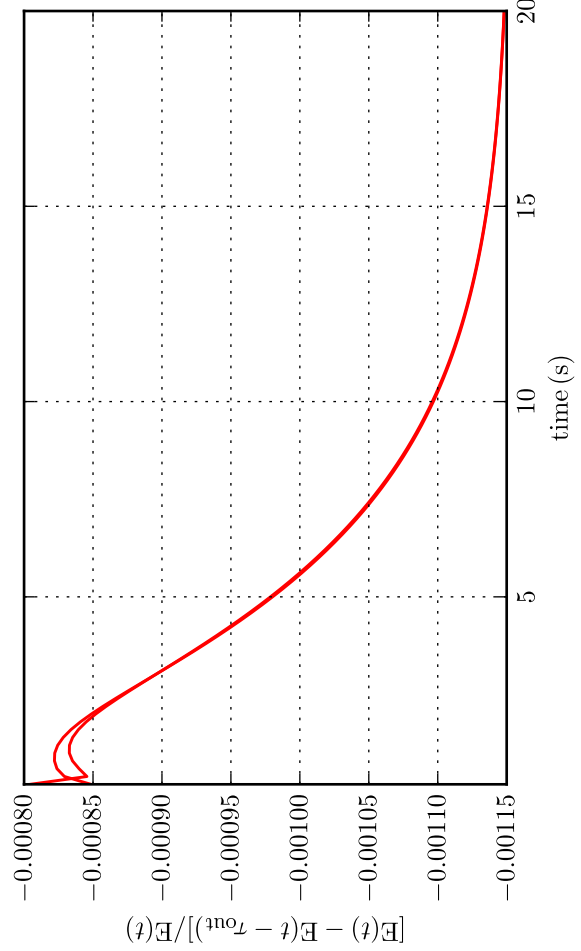
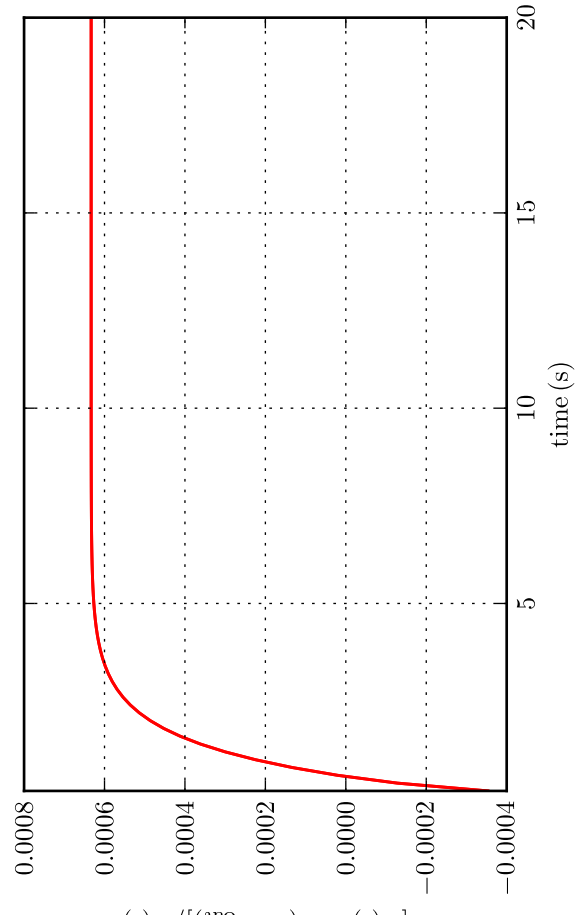
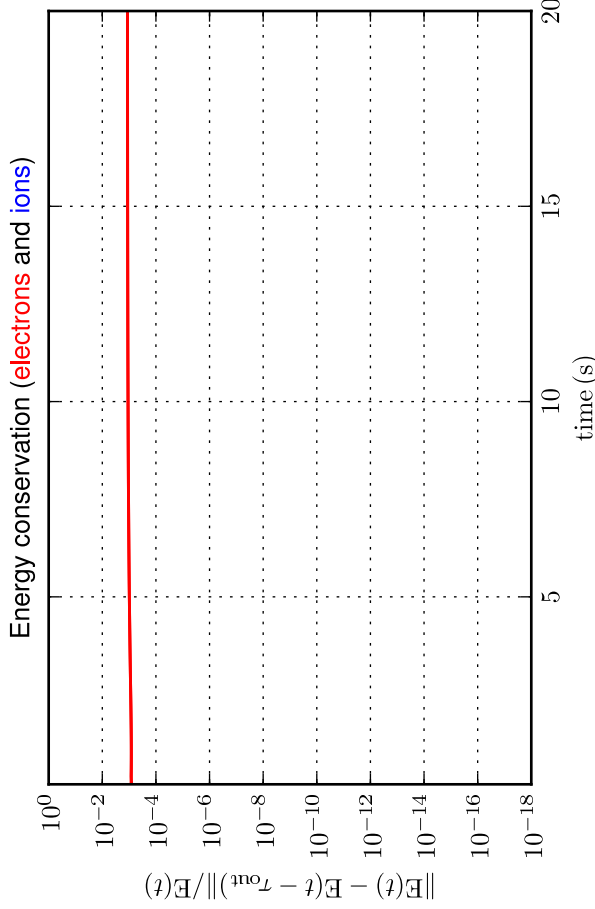
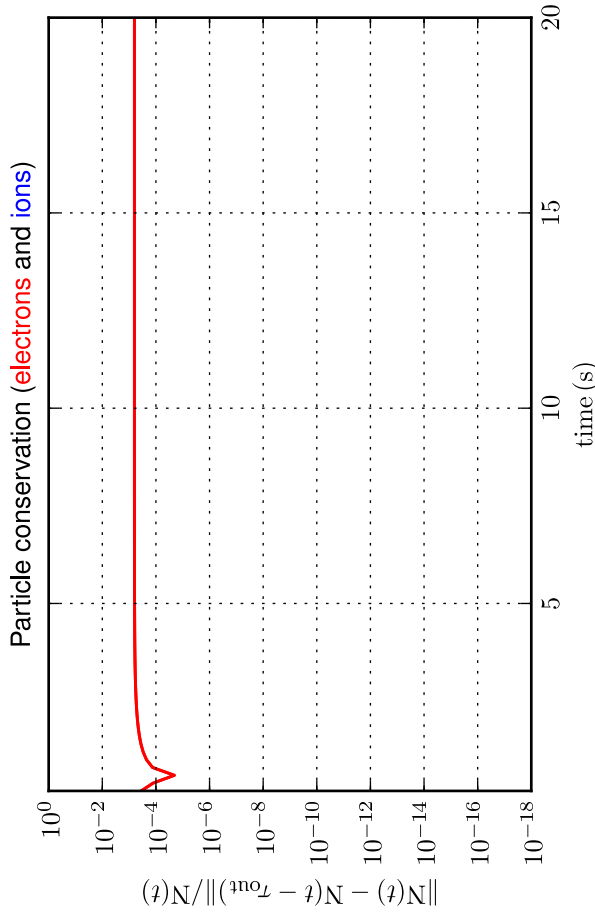
Part. & Energy conservation [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with initial solution - log scale; total time and zoom over time



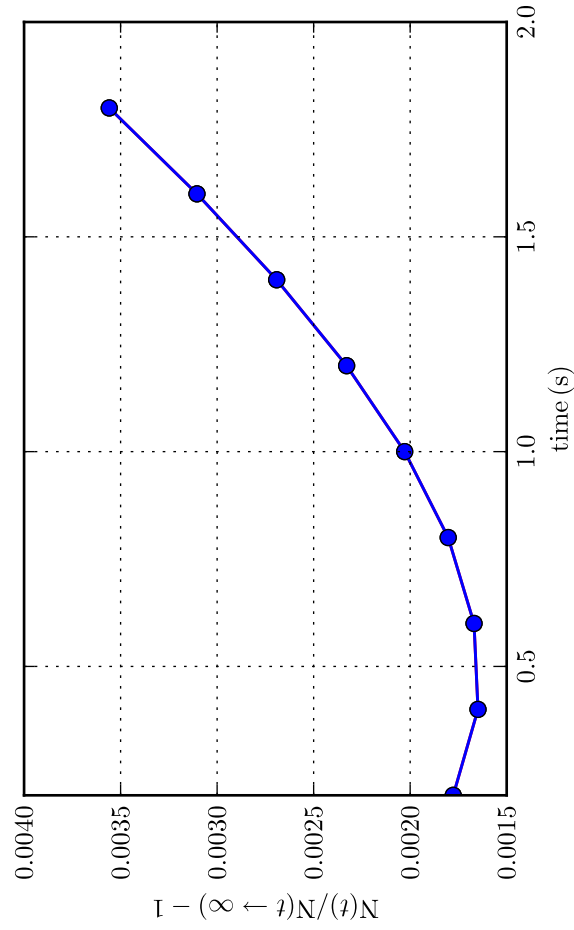
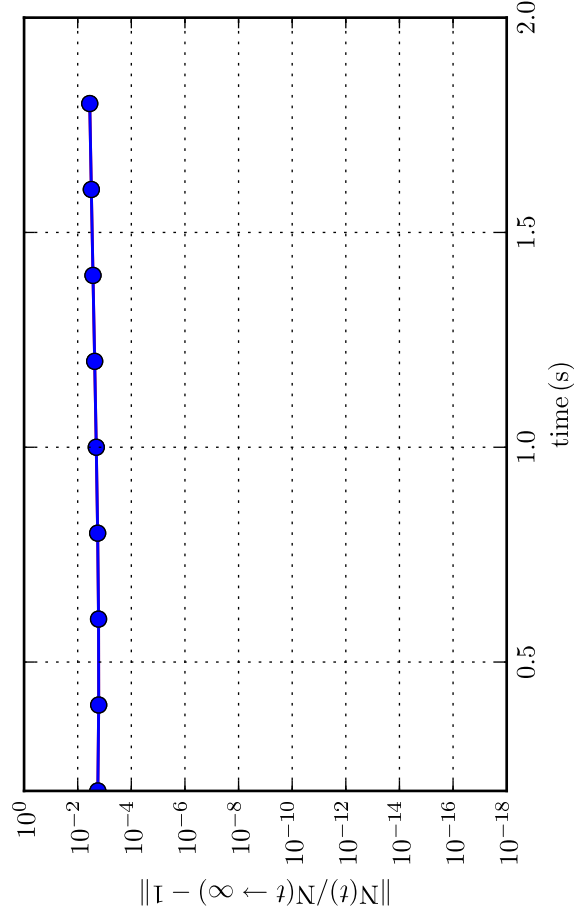
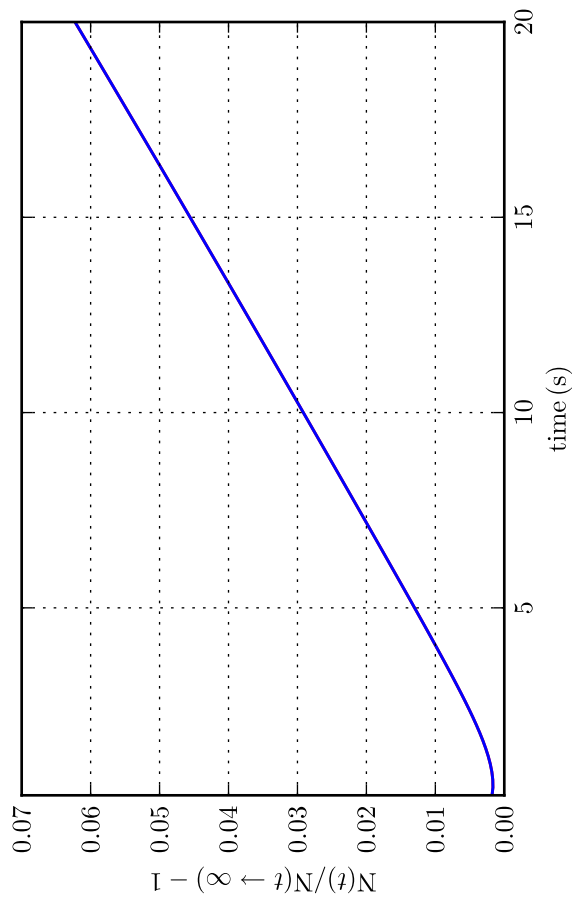
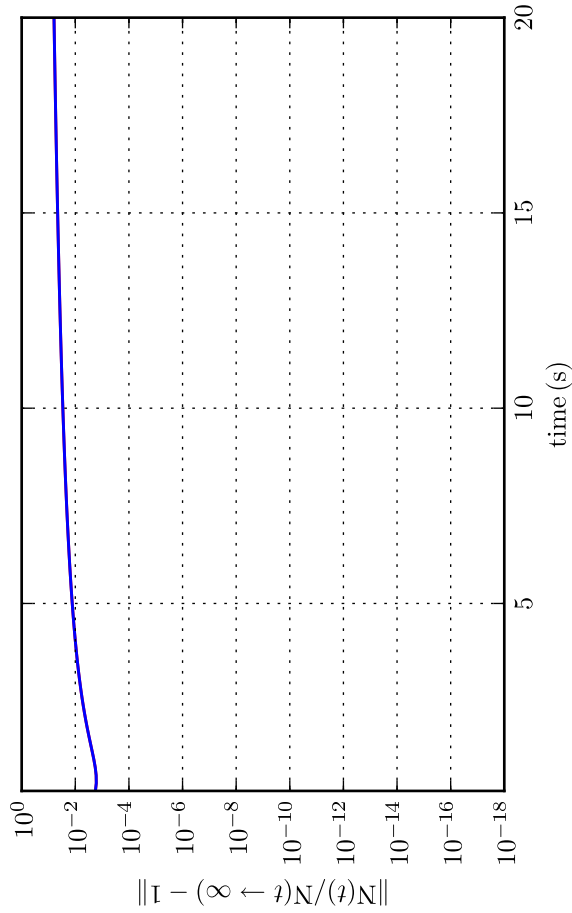
Part. & Energy conservation [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation [Case: I.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with previous time-sampled (τ_{out}) solution - log and linear scales

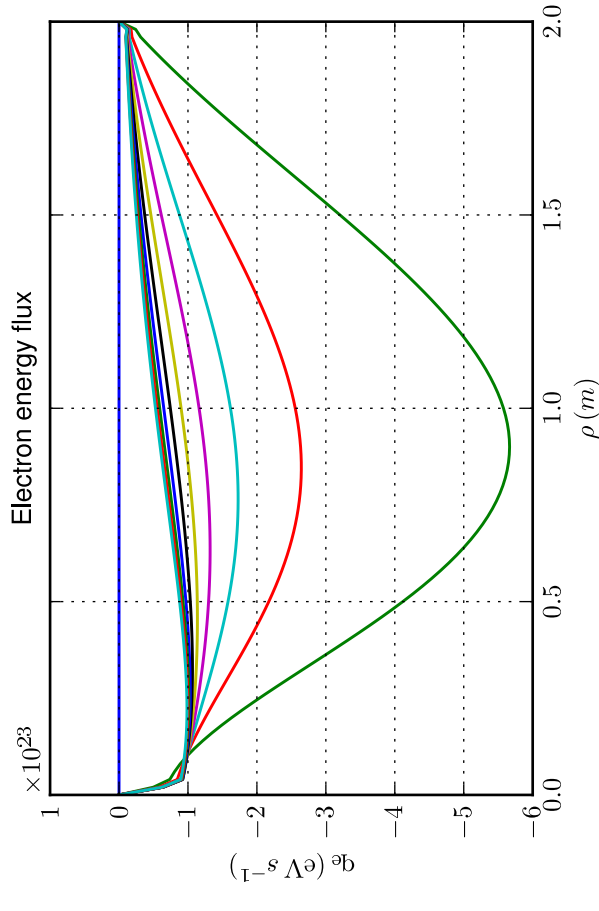
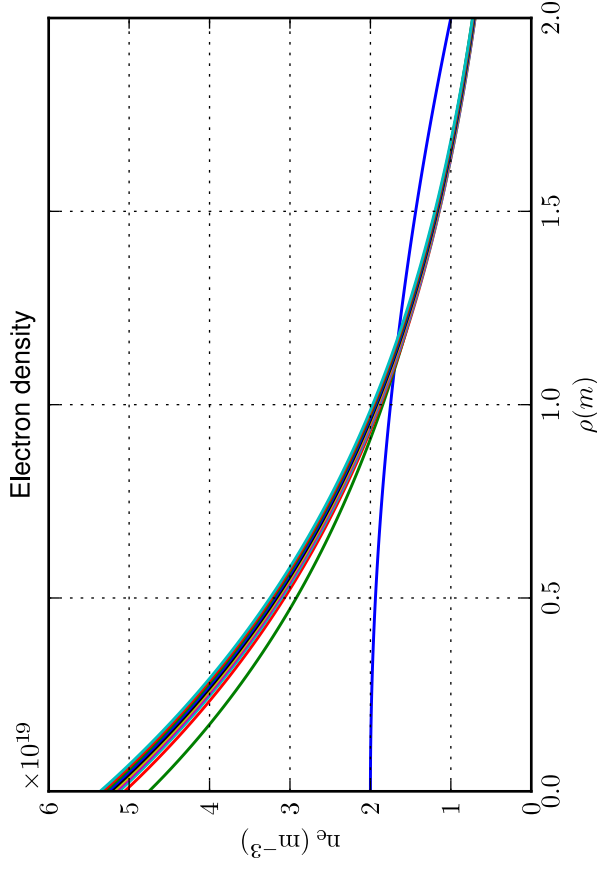
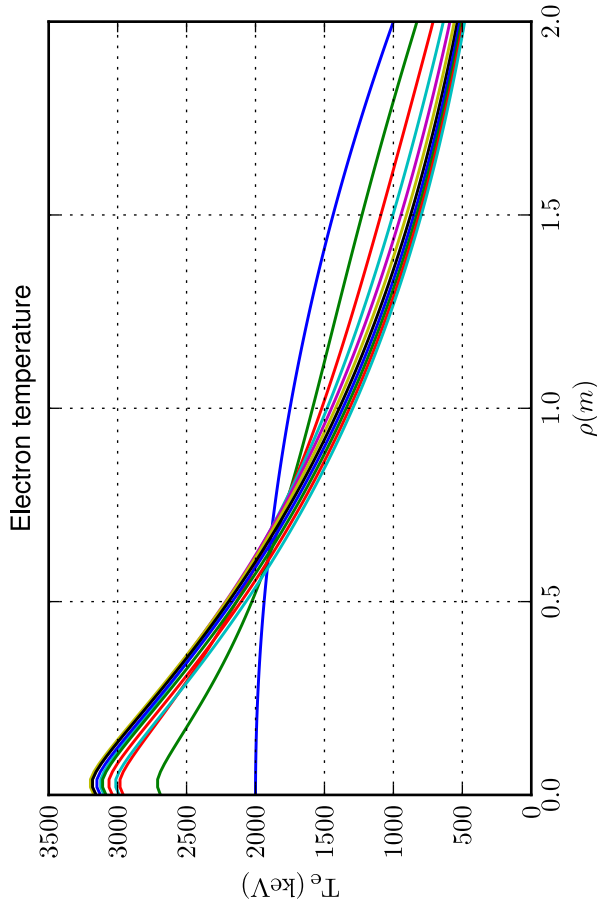


Particle conservation [Case: I.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Comparison with asymptotic solution (electrons and ions); total time and zoom over time



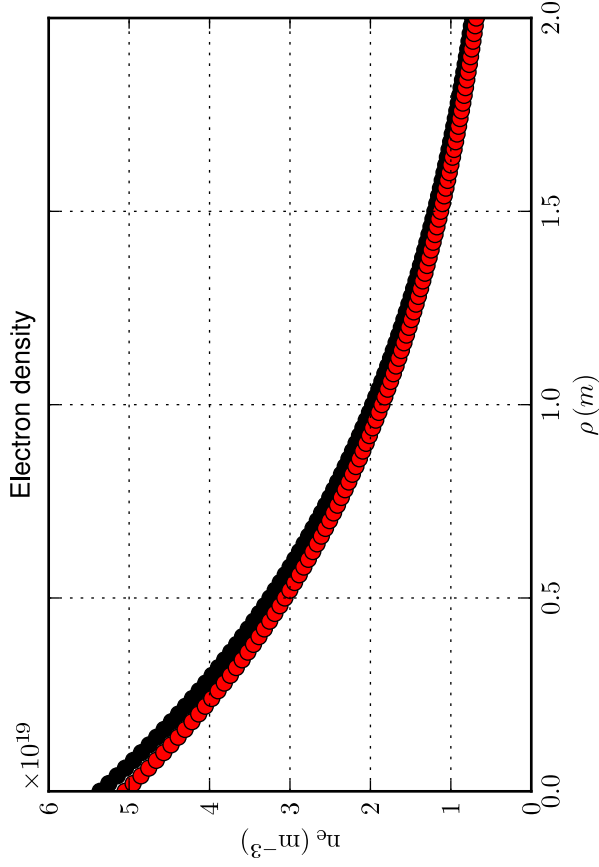
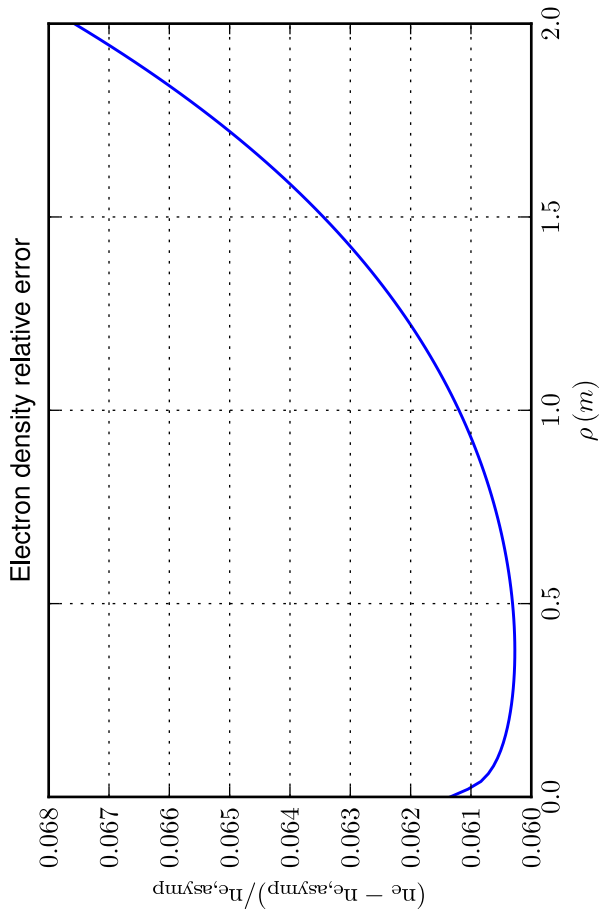
Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]

Time sampling: total simulation time/10

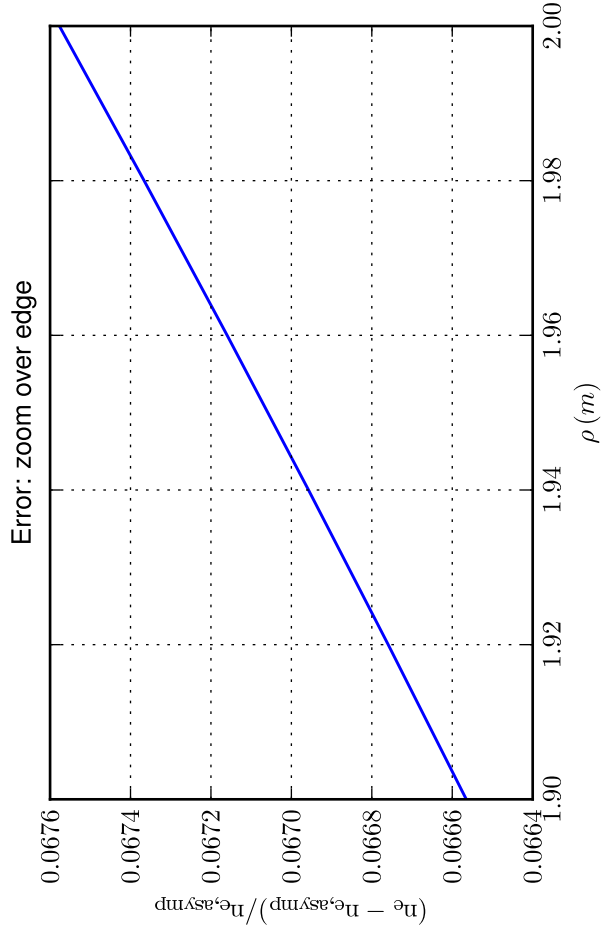
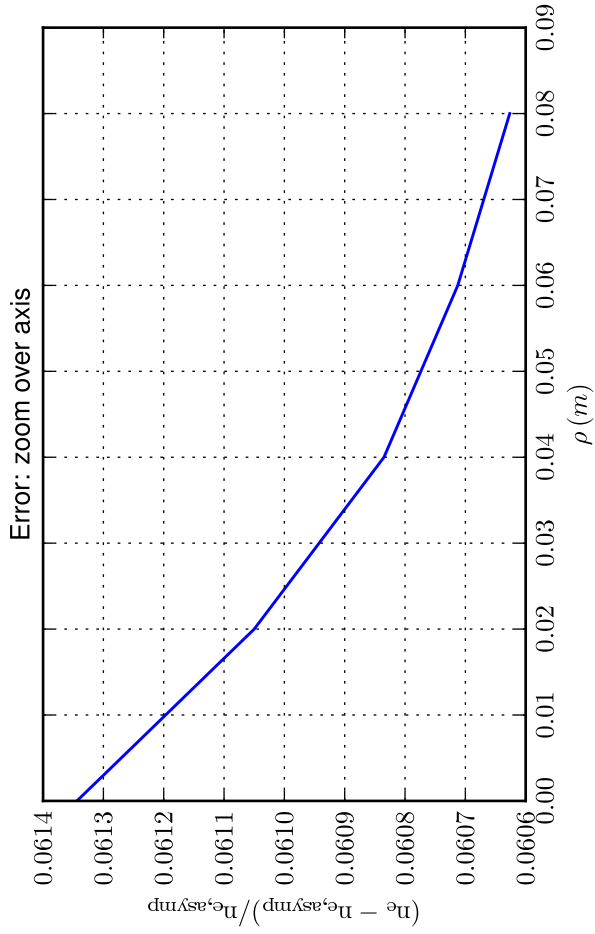


Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]

Comparison with asymptotic solution

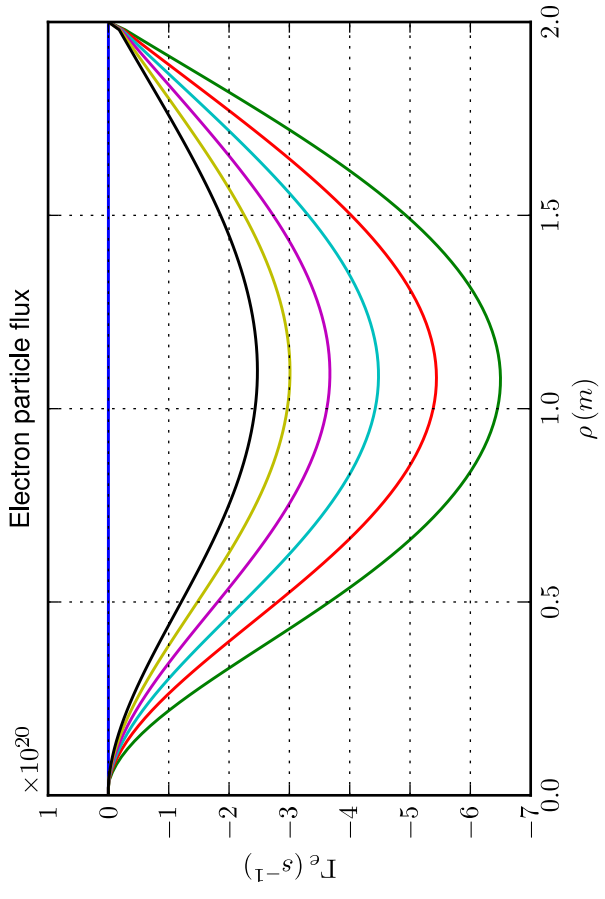
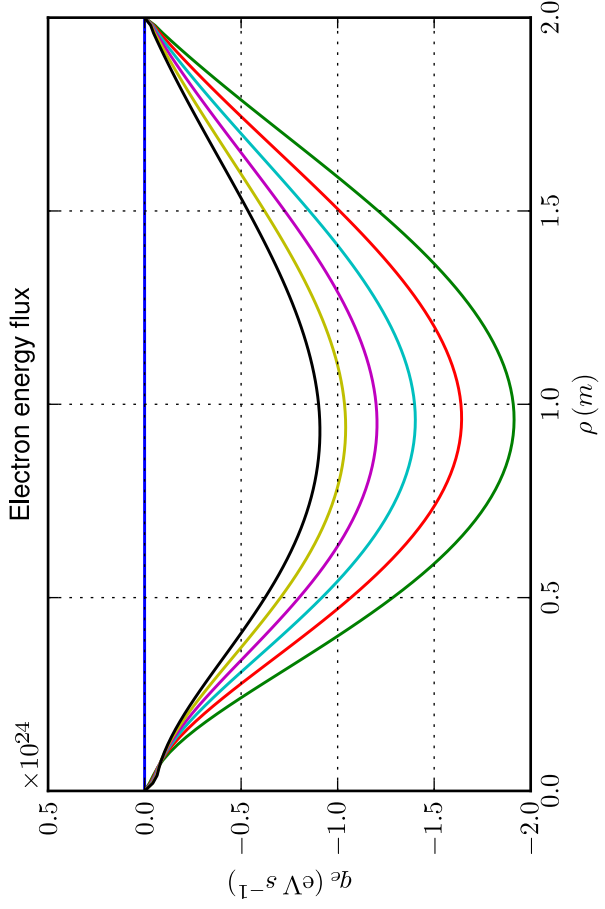
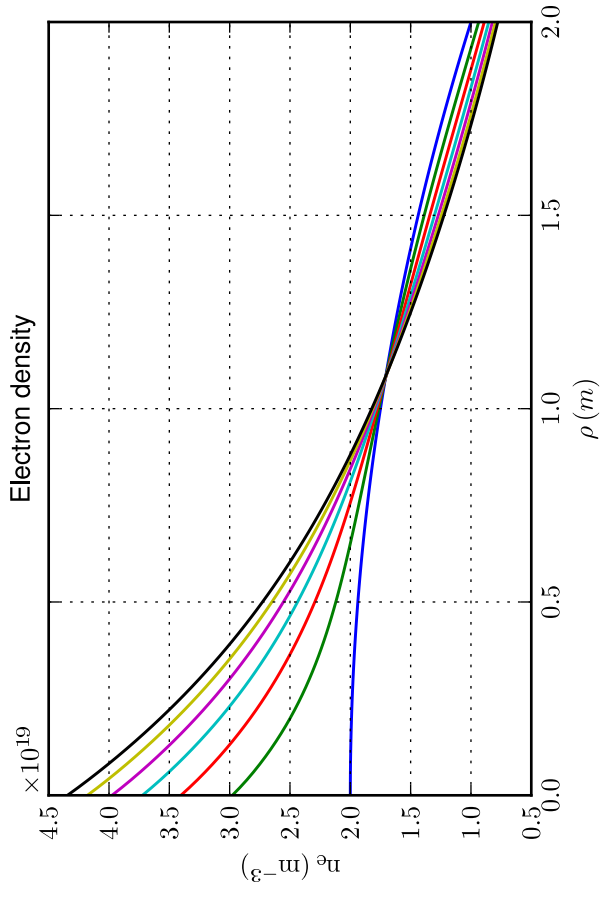
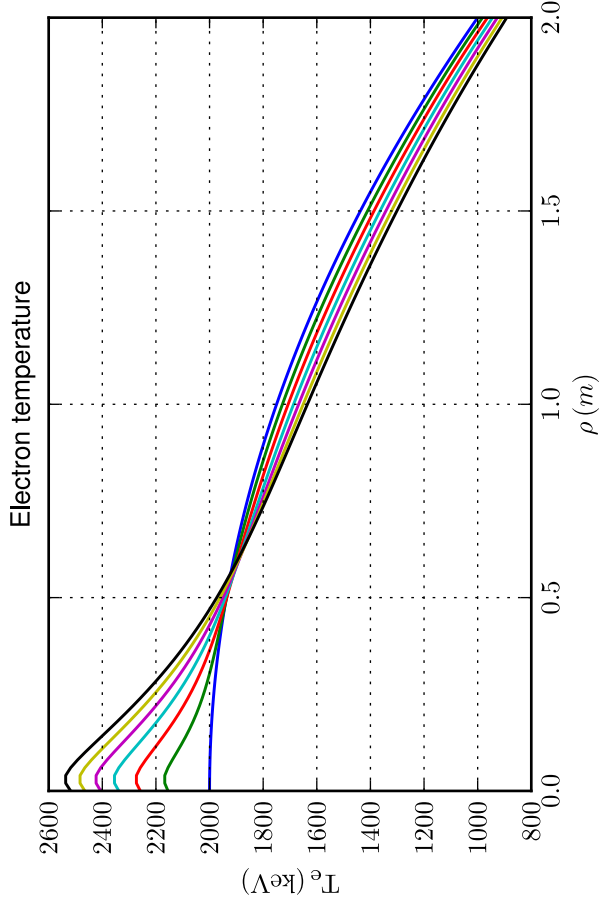


● final calculation
● asymptotic



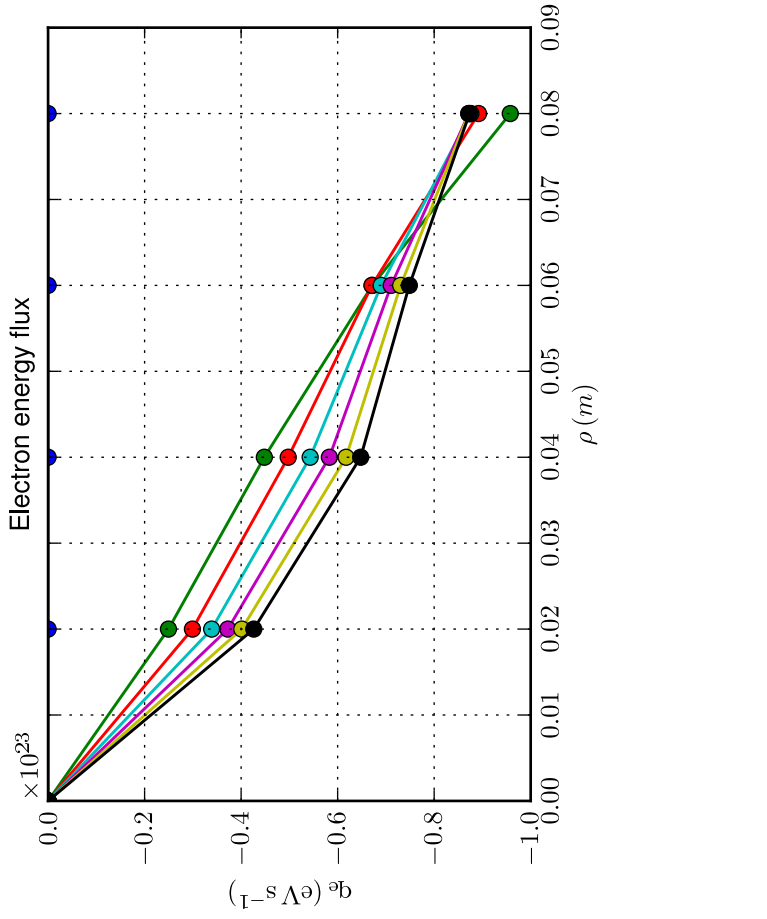
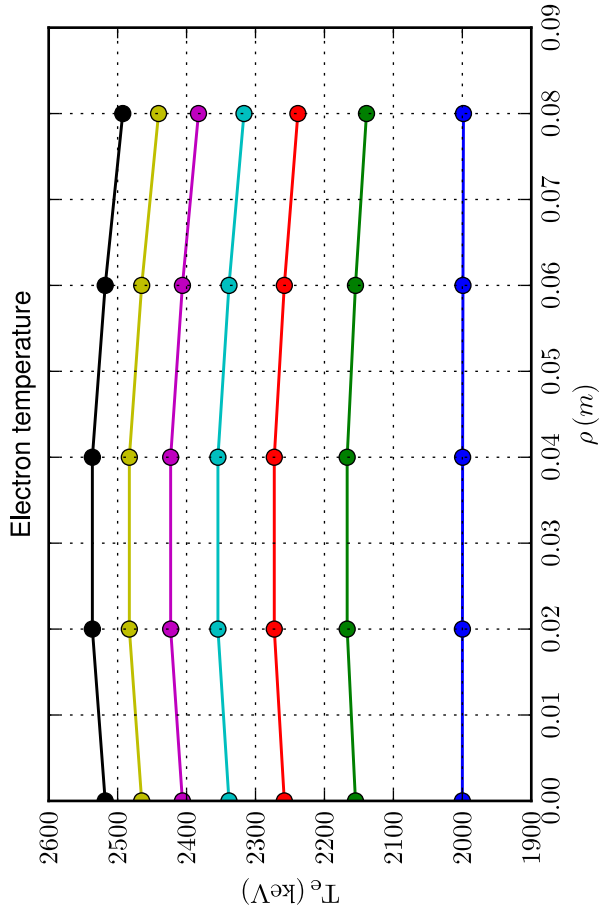
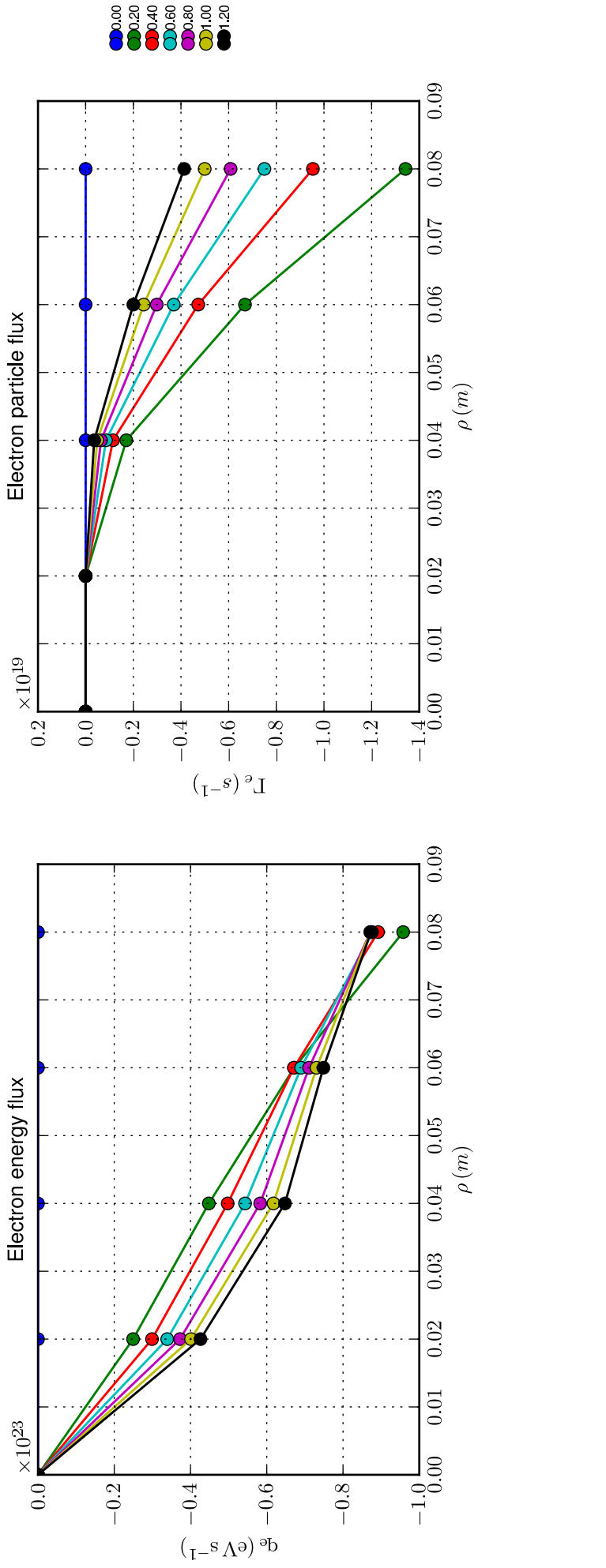
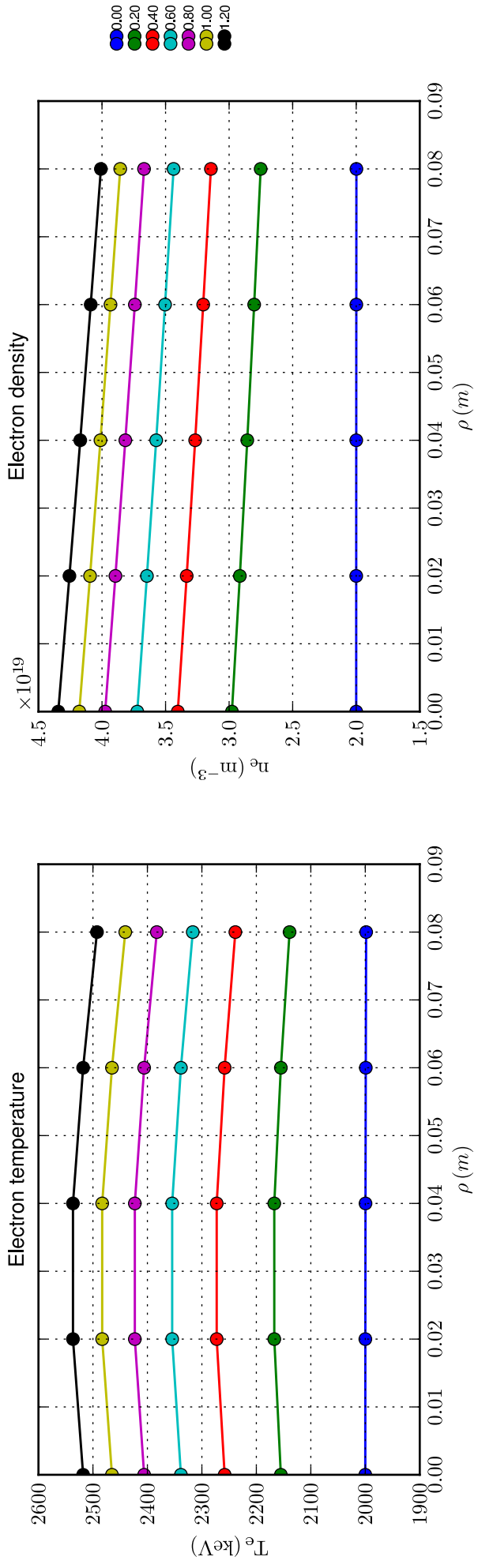
Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]

Time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 1.33 \text{ s}$

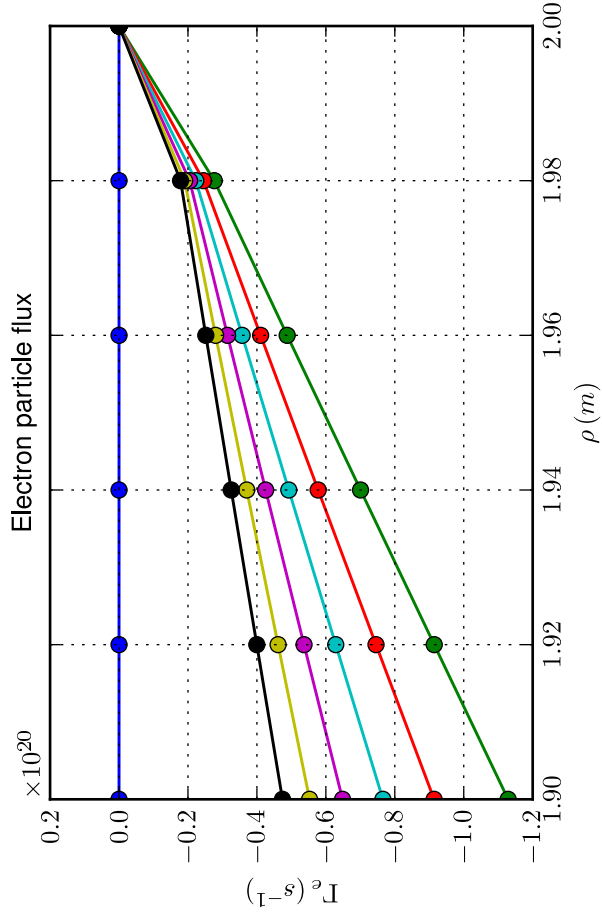
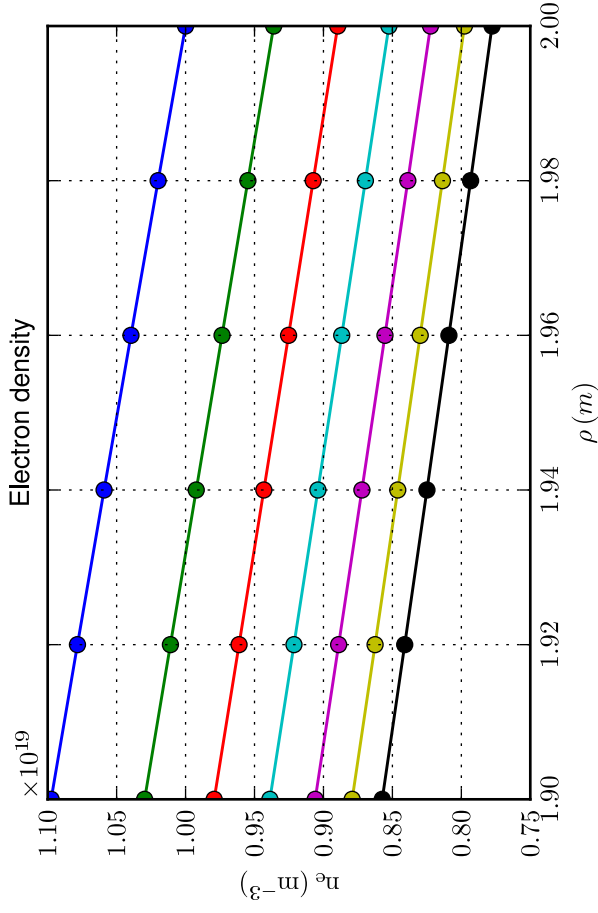
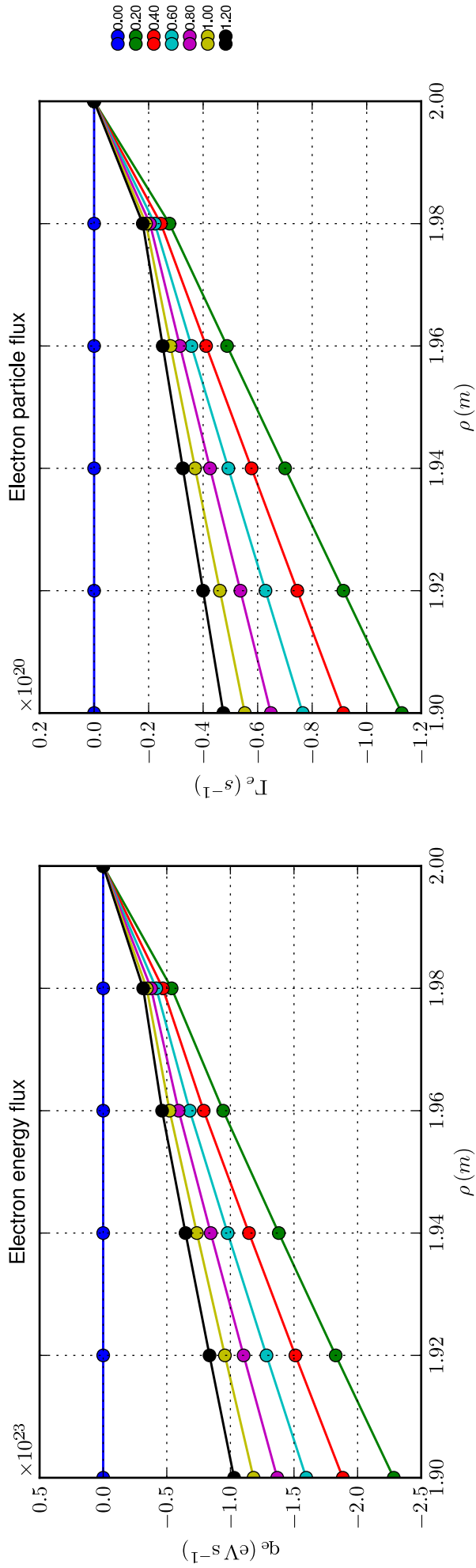
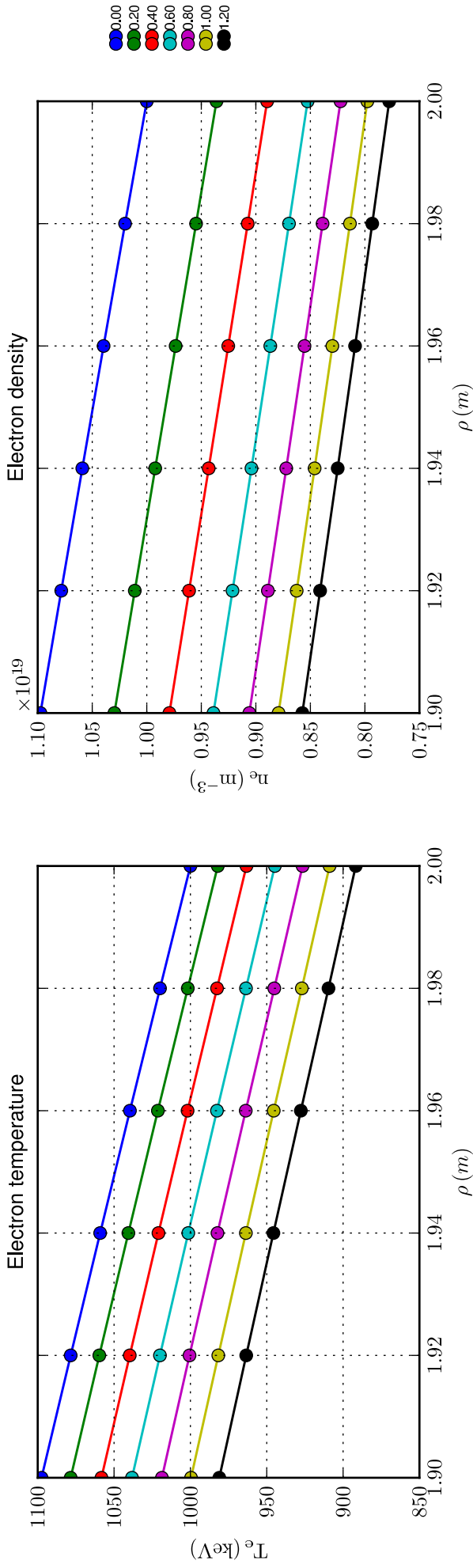


- 0.00
- 0.20
- 0.40
- 0.60
- 0.80
- 1.00
- 1.20

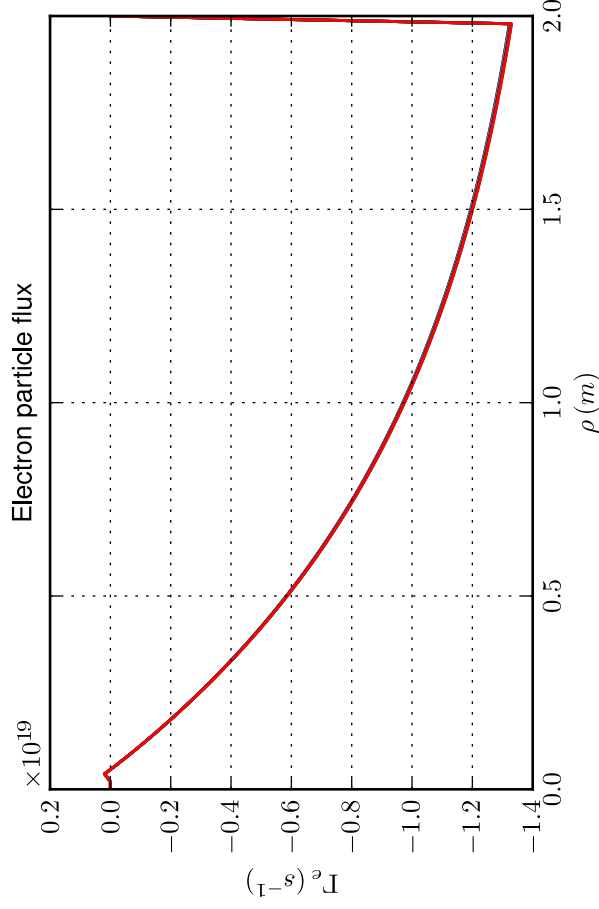
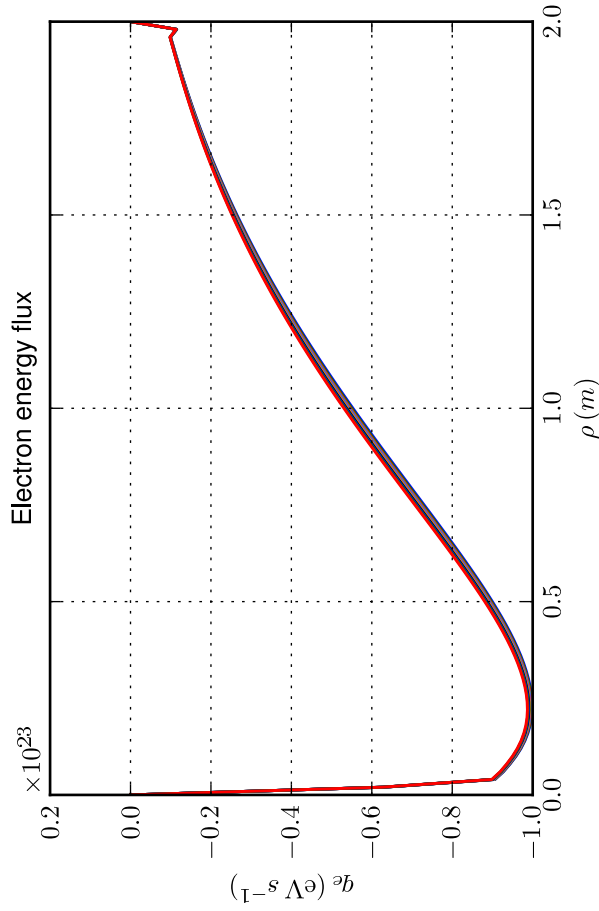
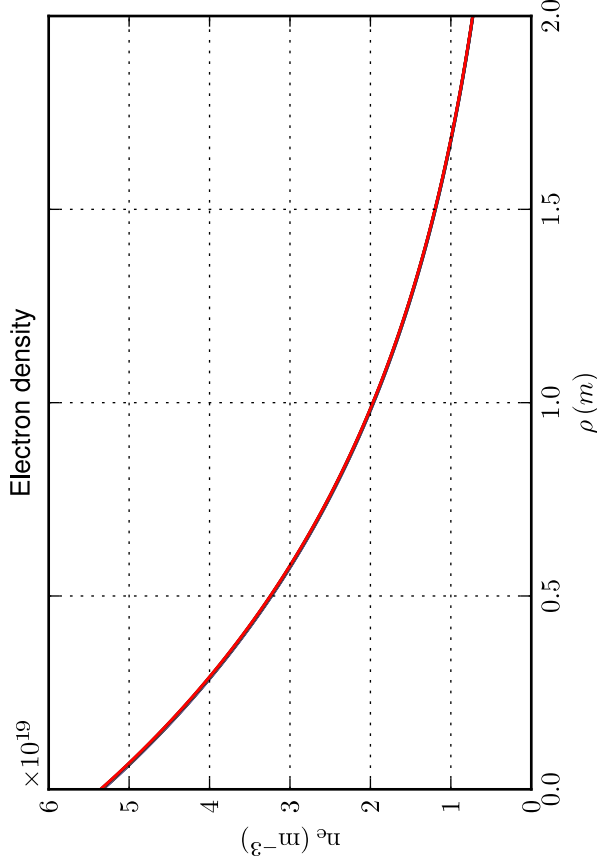
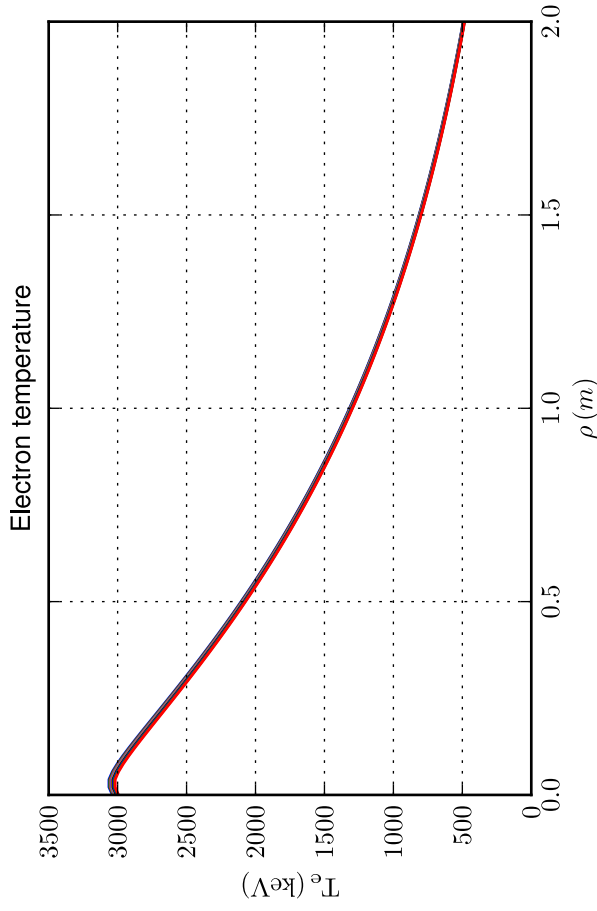
Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]
 Spatial zoom over magnetic axis; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 1.33 \text{ s}$



Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_\rho = 101$]
 Spatial zoom over edge; time sampling: first 10 time slices or zoom over time $0.1 \times (a^2/D)/|1 - (Va/D)| = 1.33 \text{ s}$

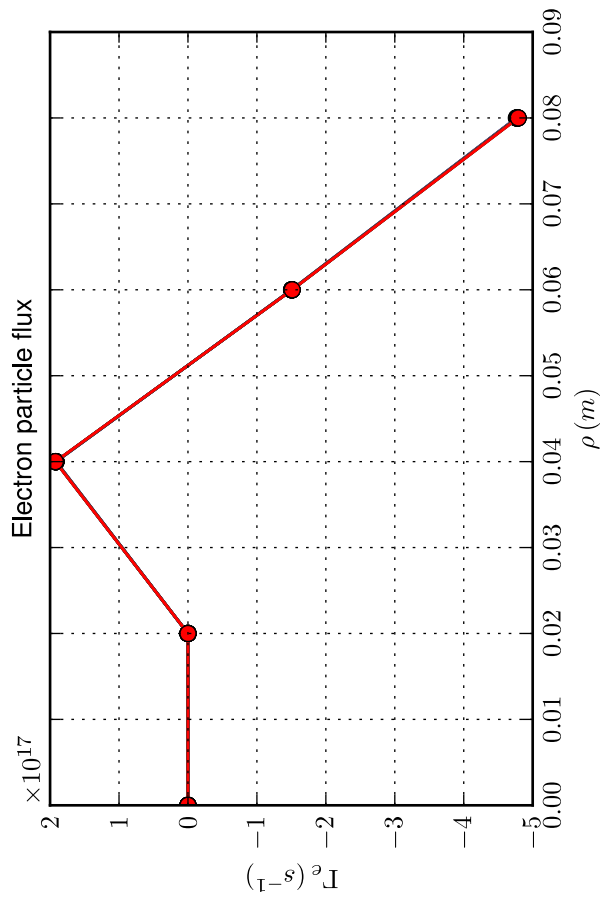
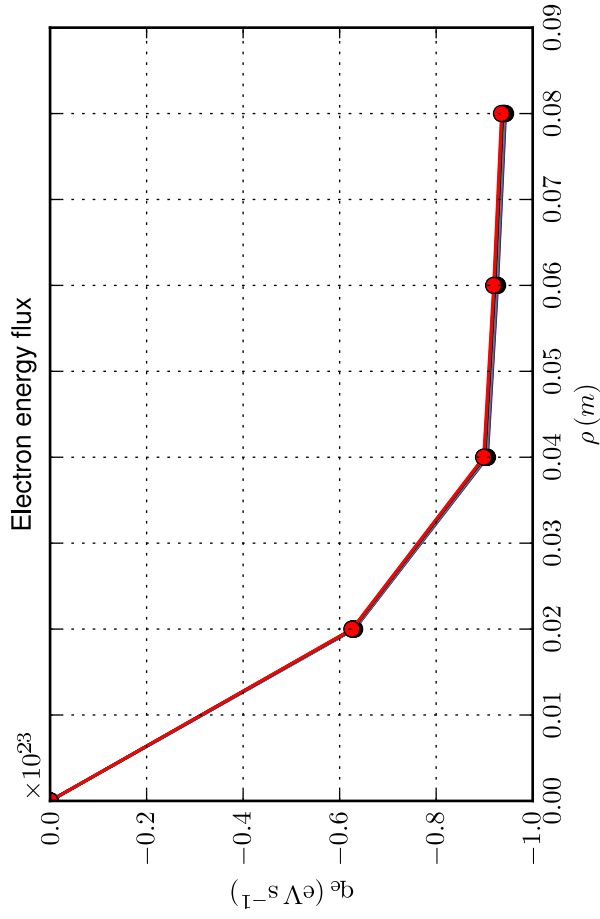
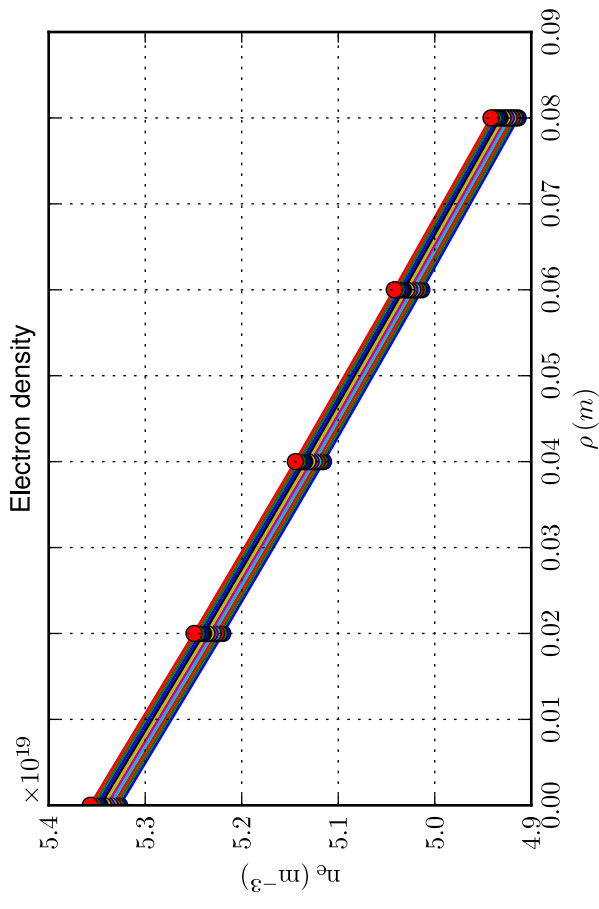
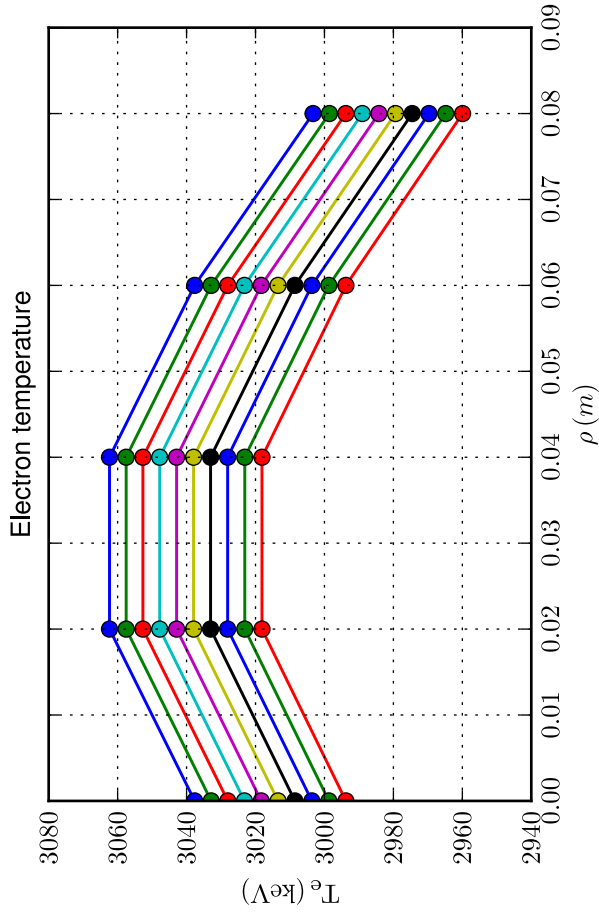


Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Time sampling: last 10 time slices



18.00
 18.20
 18.40
 18.60
 18.80
 19.00
 19.20
 19.40
 19.60
 19.80

Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Spatial zoom over magnetic axis; time sampling: last 10 time slices



18.00
18.20
18.40
18.60
18.80
19.00
19.20
19.40
19.60
19.80

18.00
18.20
18.40
18.60
18.80
19.00
19.20
19.40
19.60
19.80

Profiles [Case: 1.1.5.h, Solver: 7, $D = 0.1 \text{ m}^2/\text{s}$, $v = -0.10 \text{ m/s}$, $\Delta t = 20.01$, $\tau = 1.0 \times 10^{-2} \text{ s}$, $N_p = 101$]
 Spatial zoom over edge; time sampling: last 10 time slices

