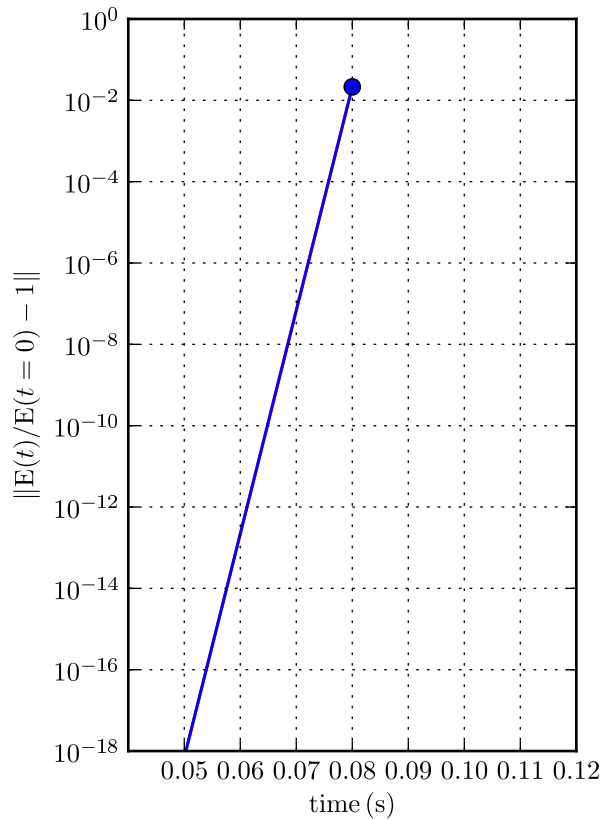
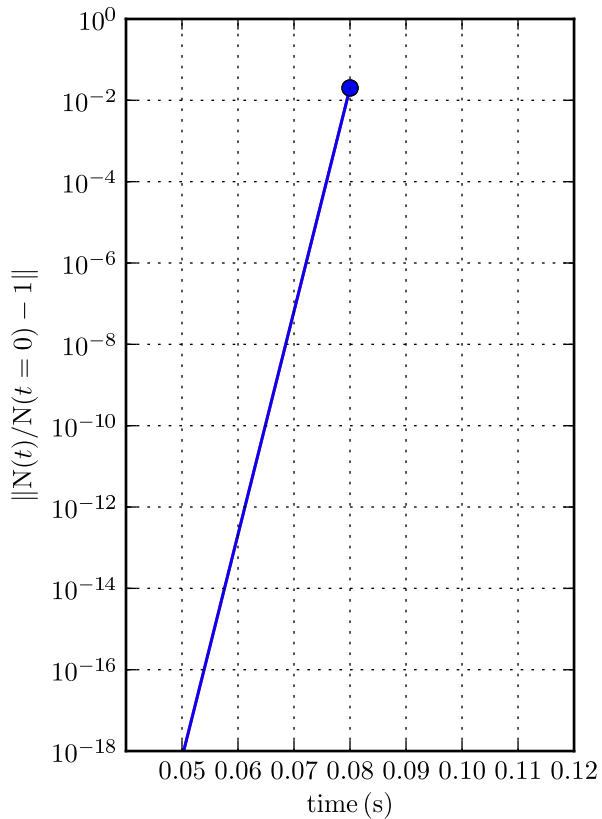
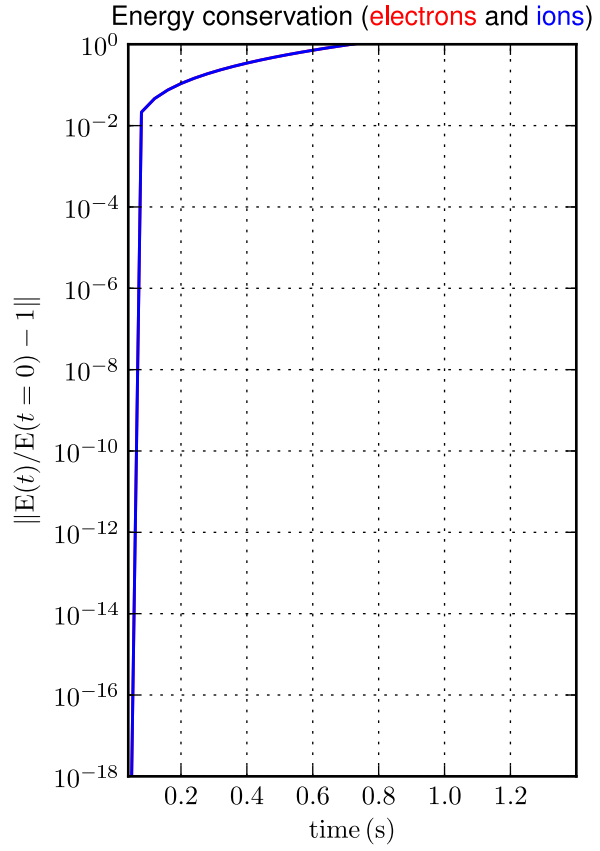
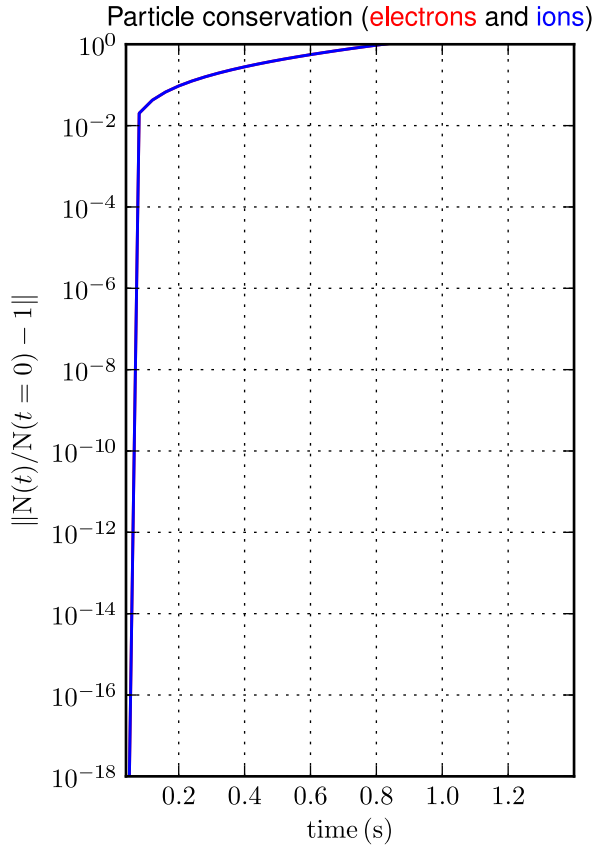


Part. & Energy conservation

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

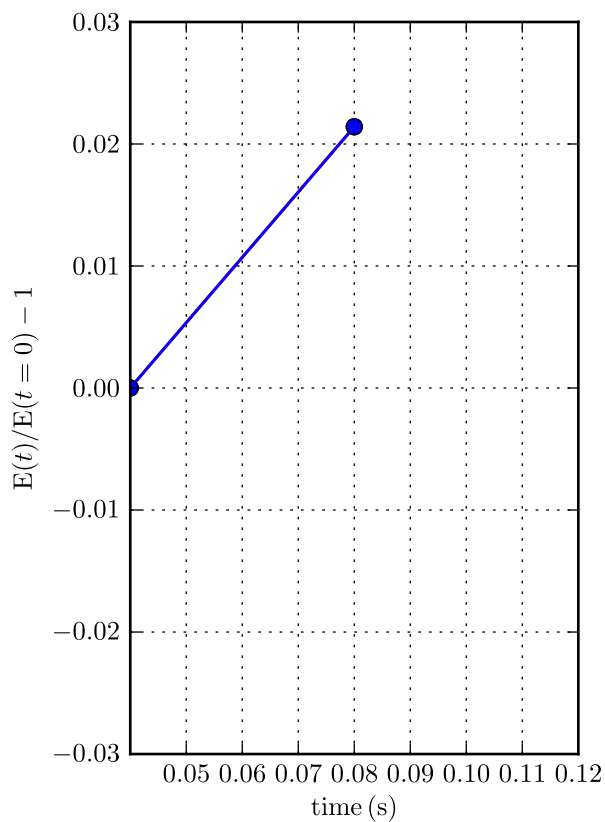
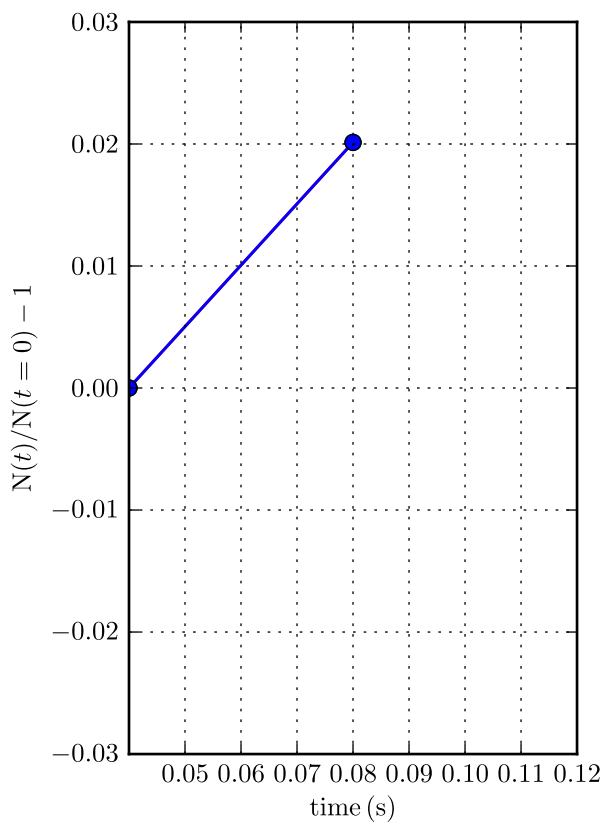
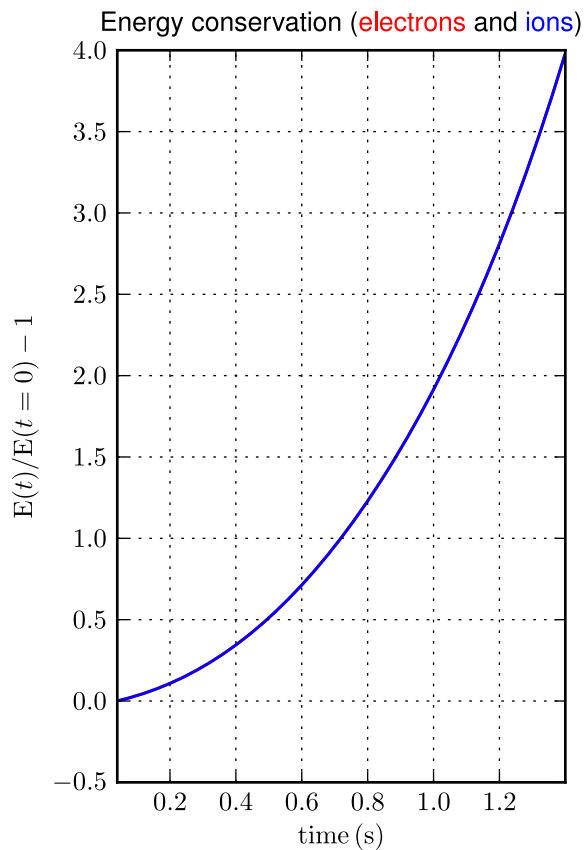
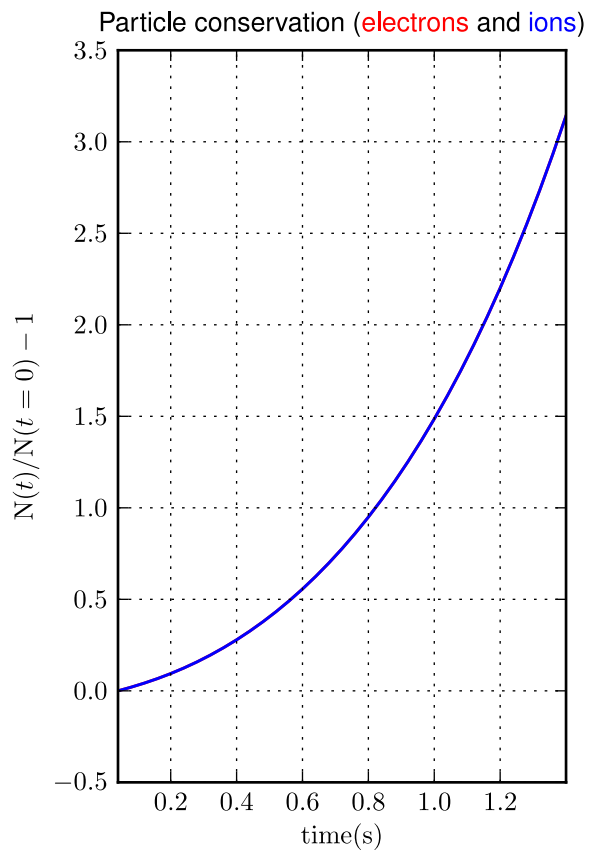
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

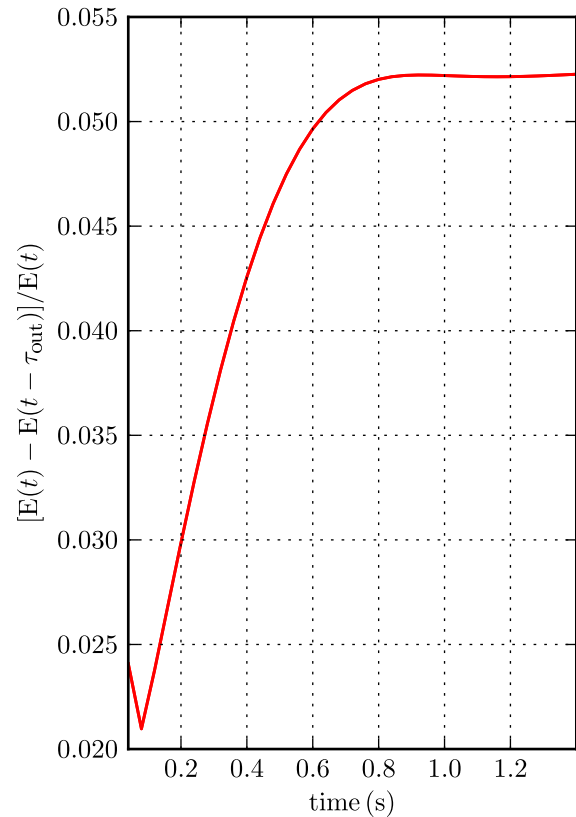
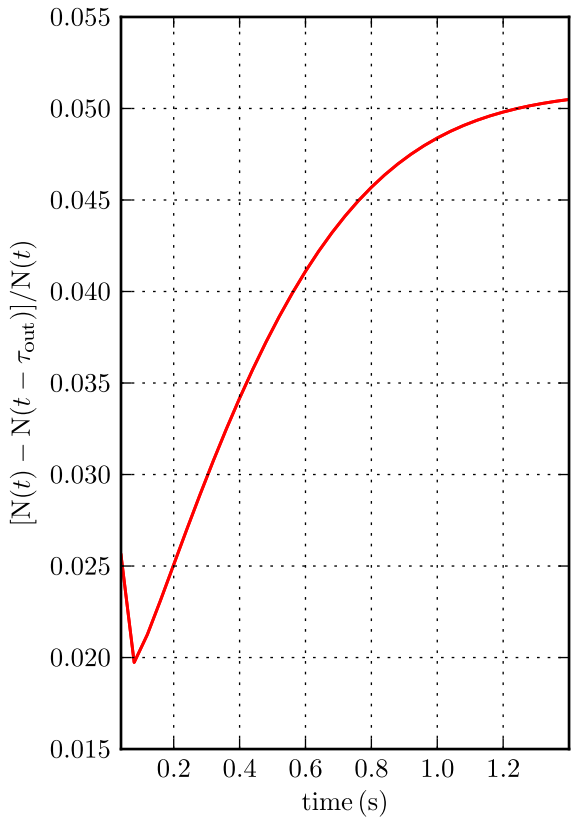
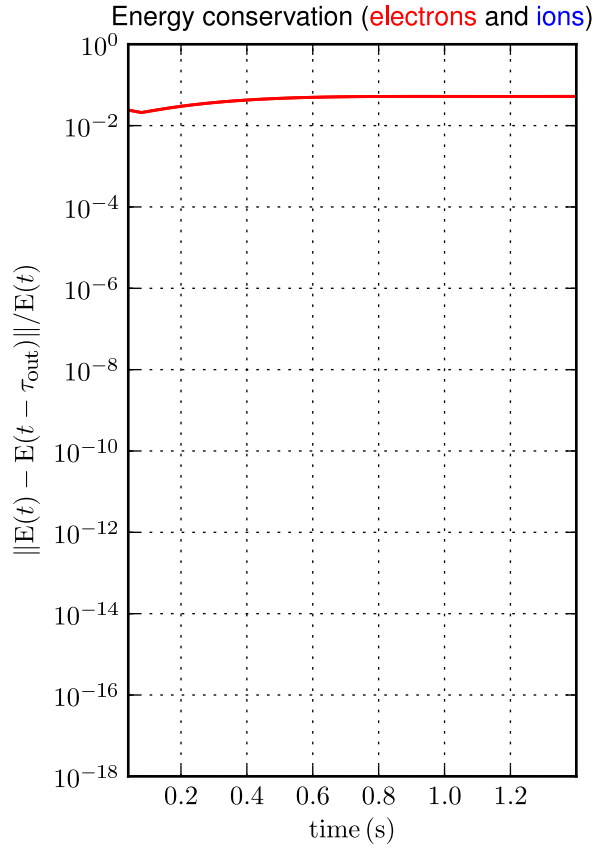
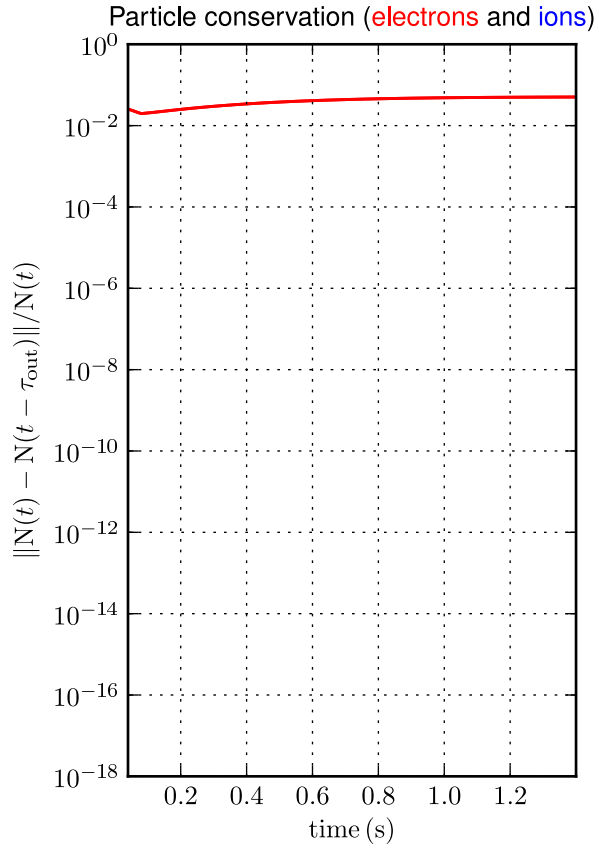
Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

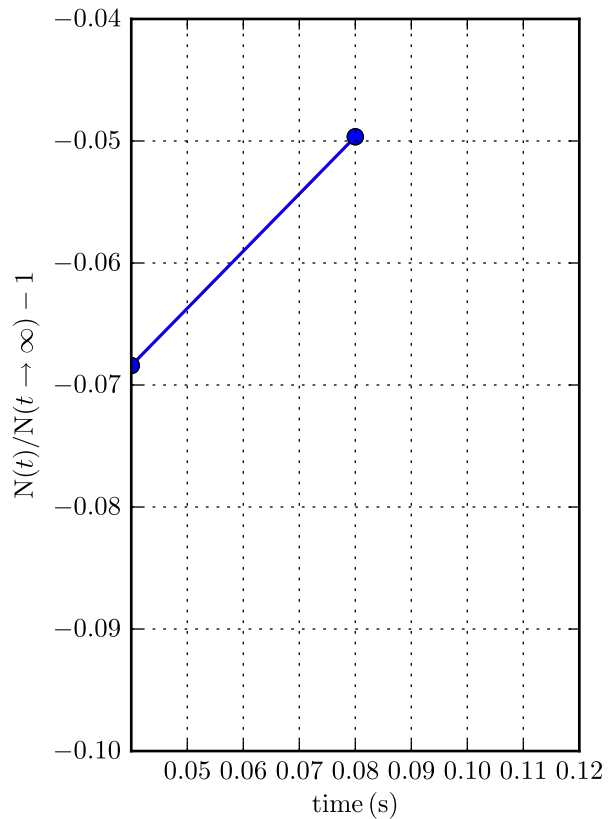
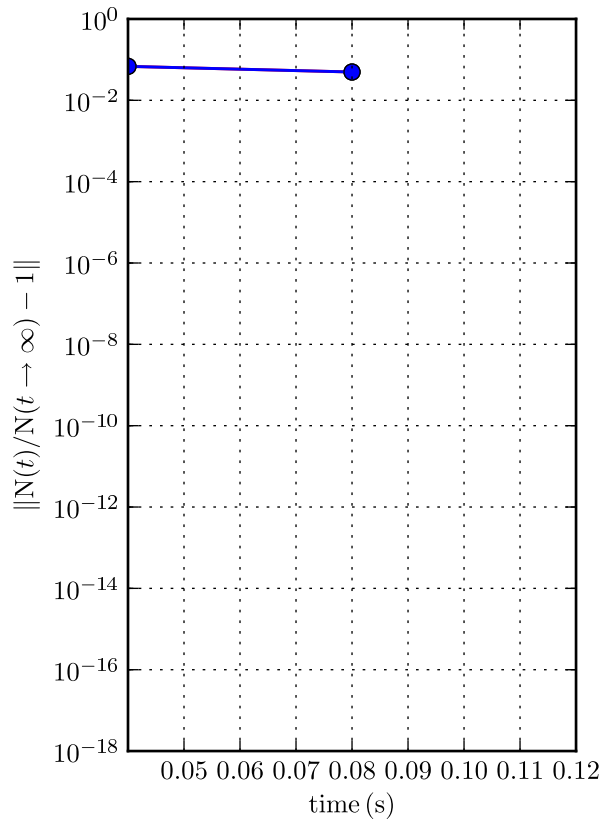
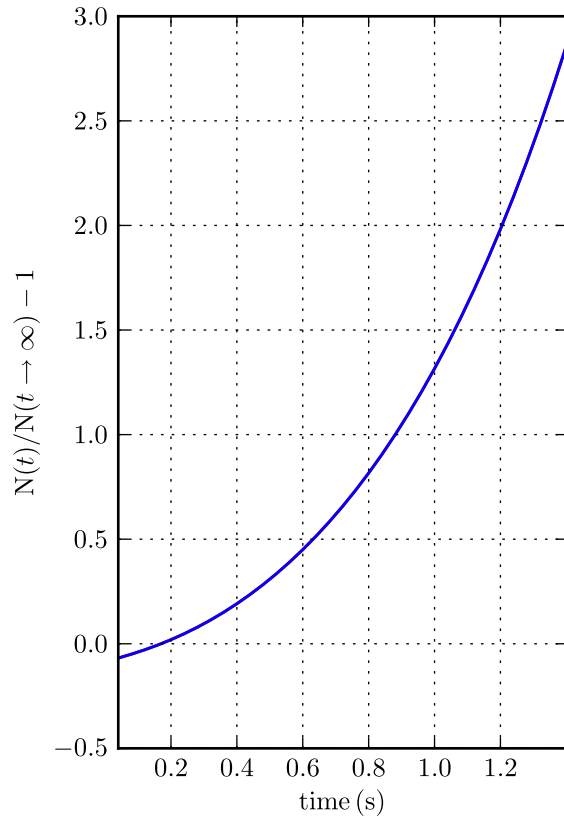
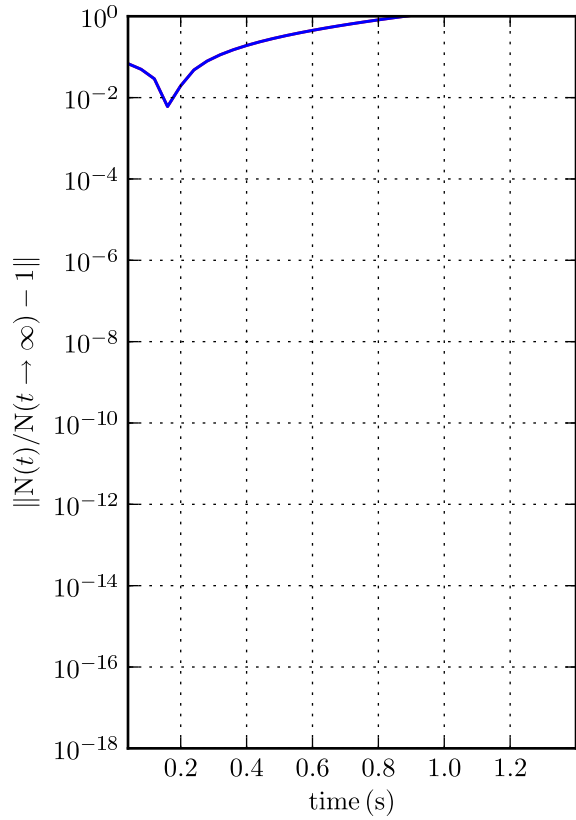
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

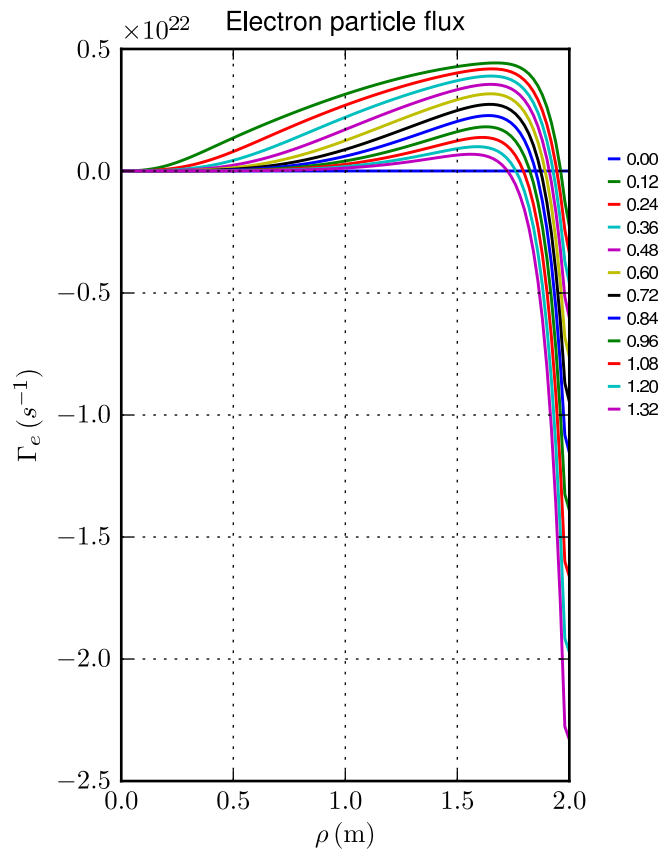
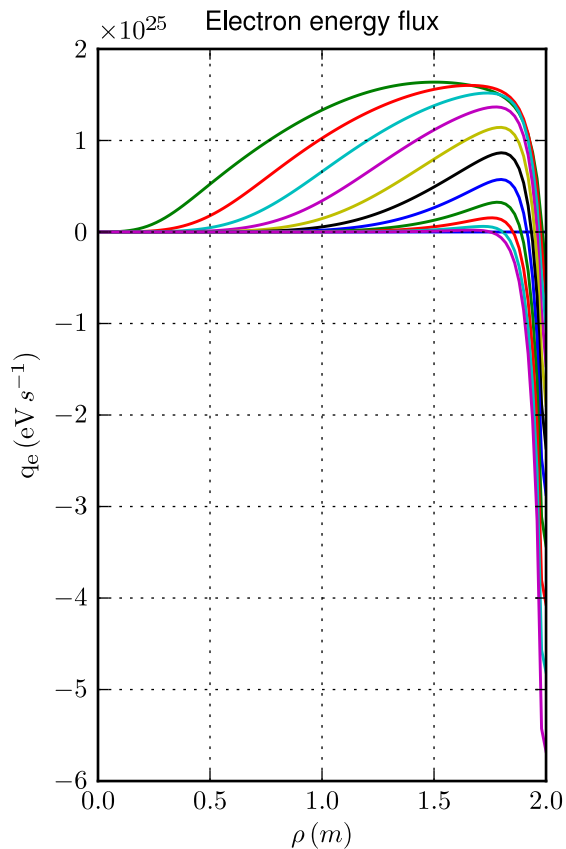
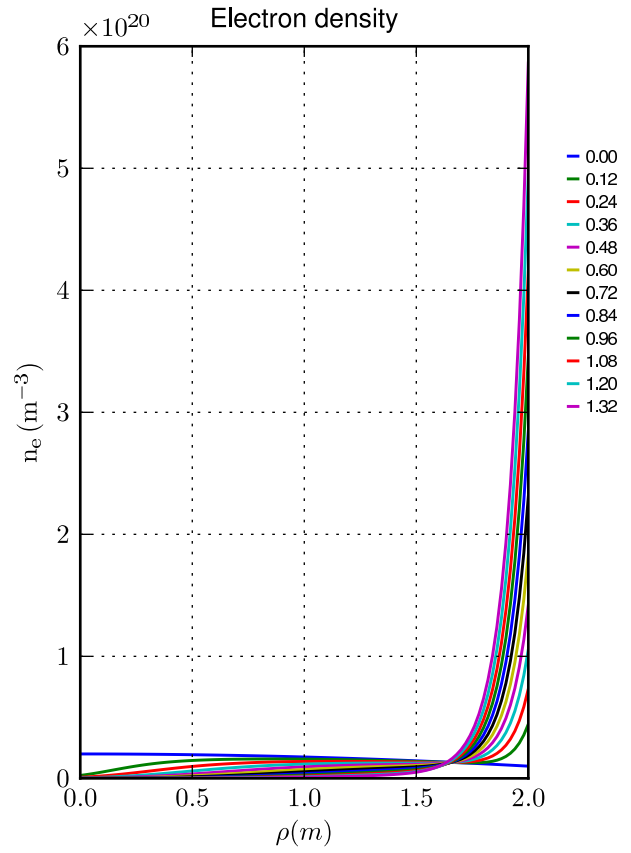
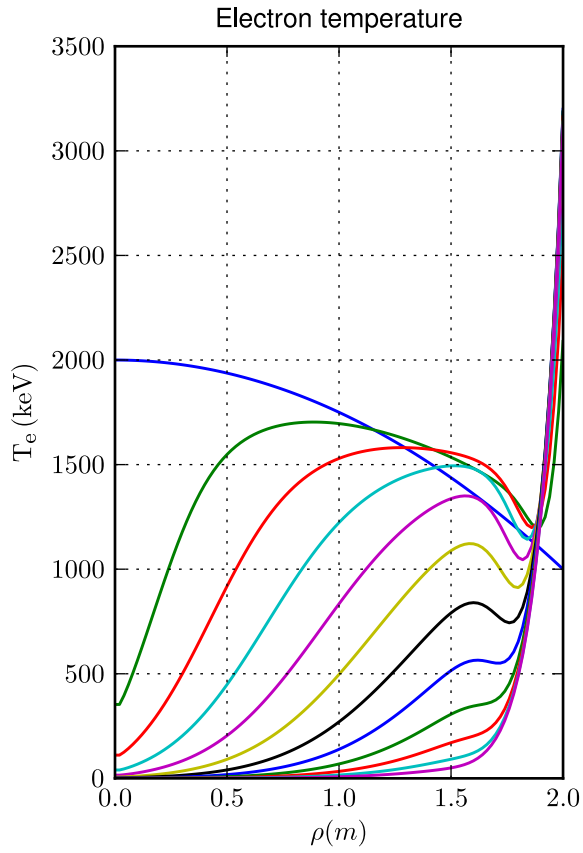
Comparison with asymptotic solution (electrons and ions); total time and zoom over time



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

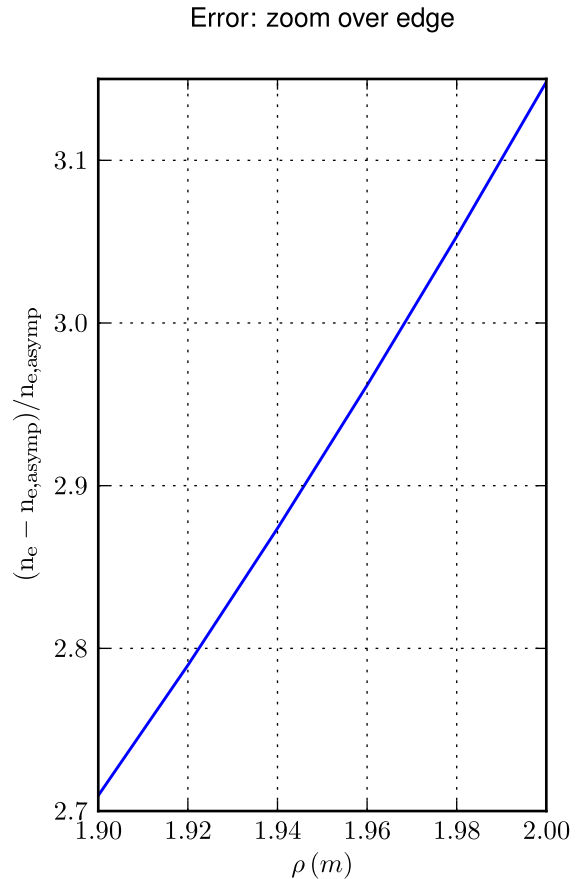
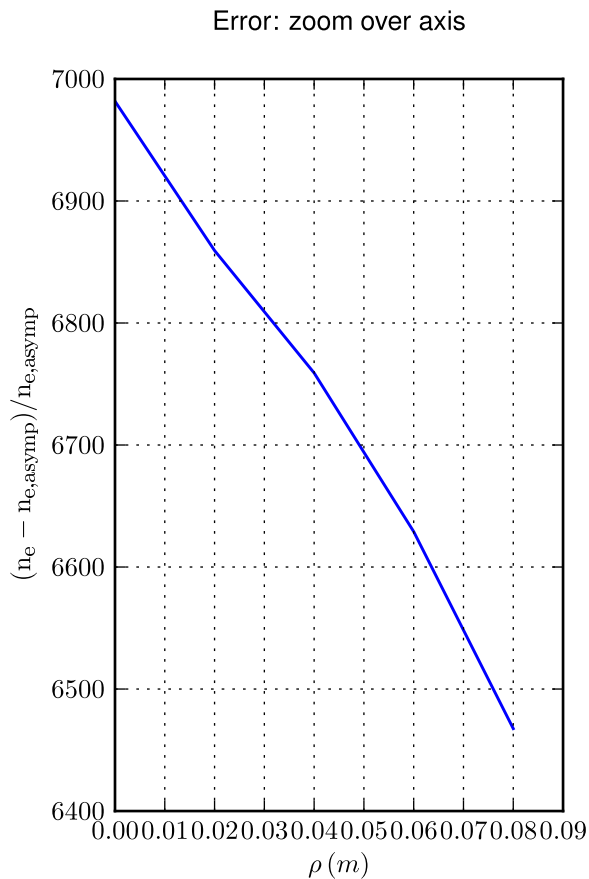
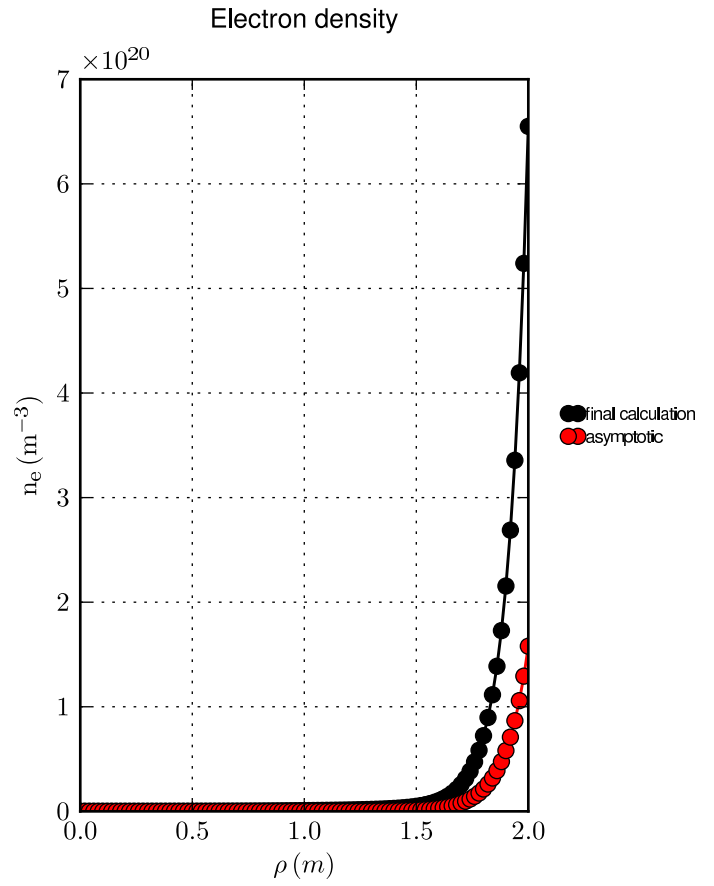
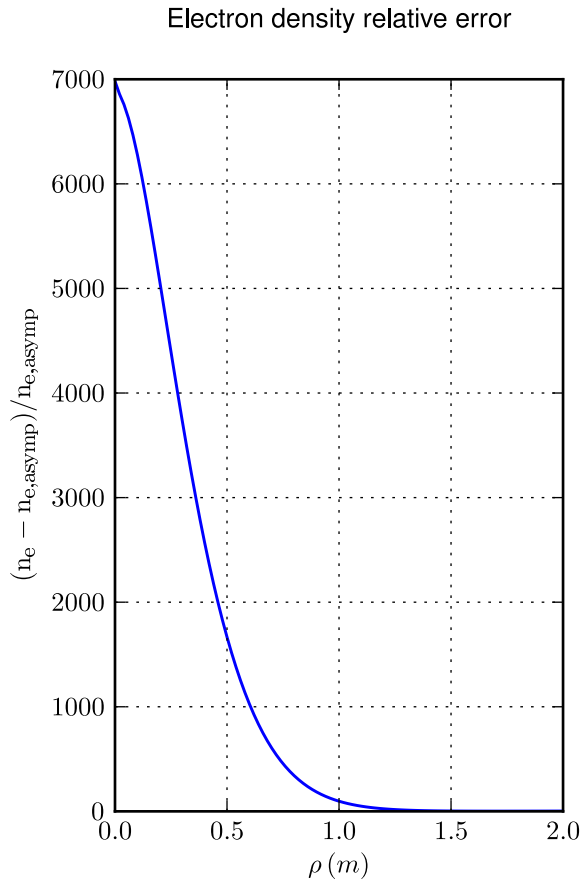
Time sampling: total simulation time/10



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

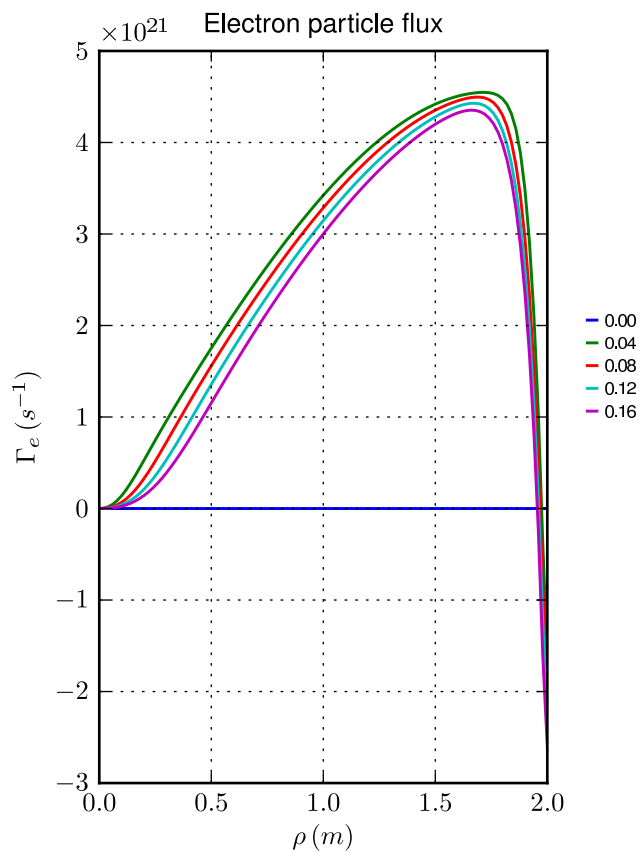
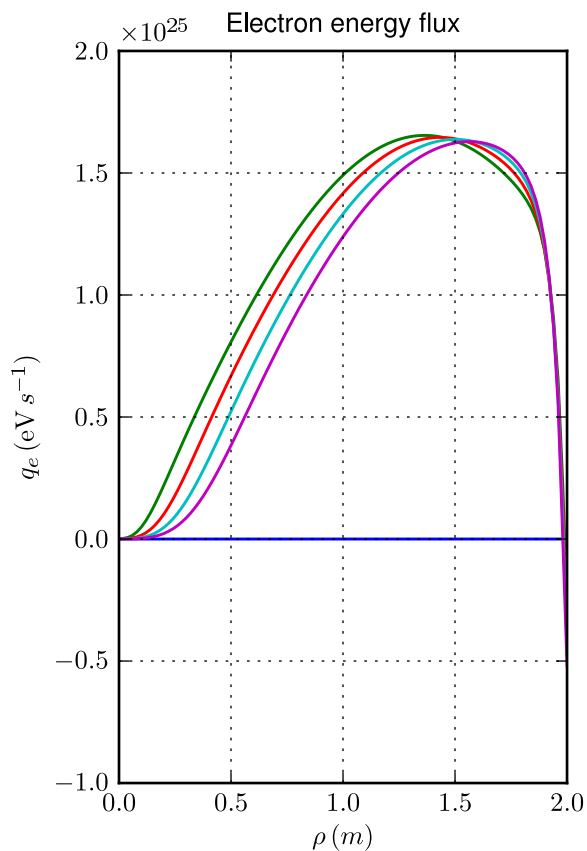
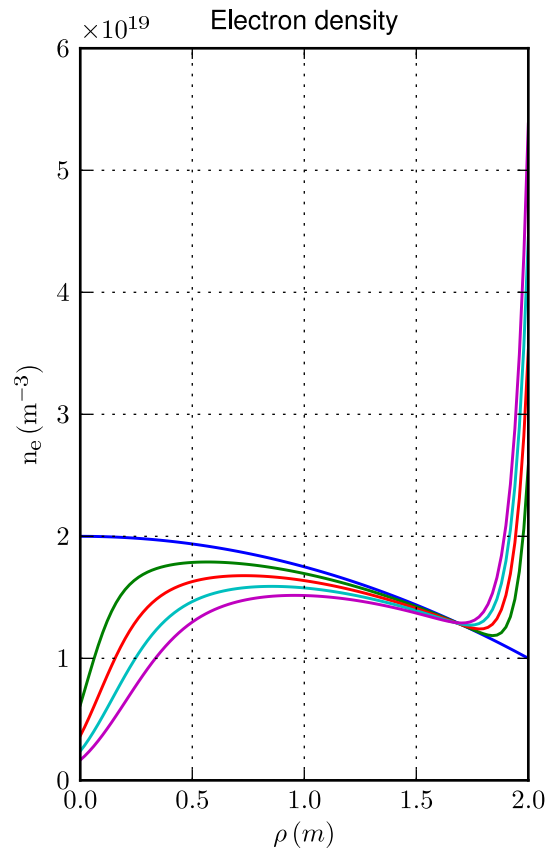
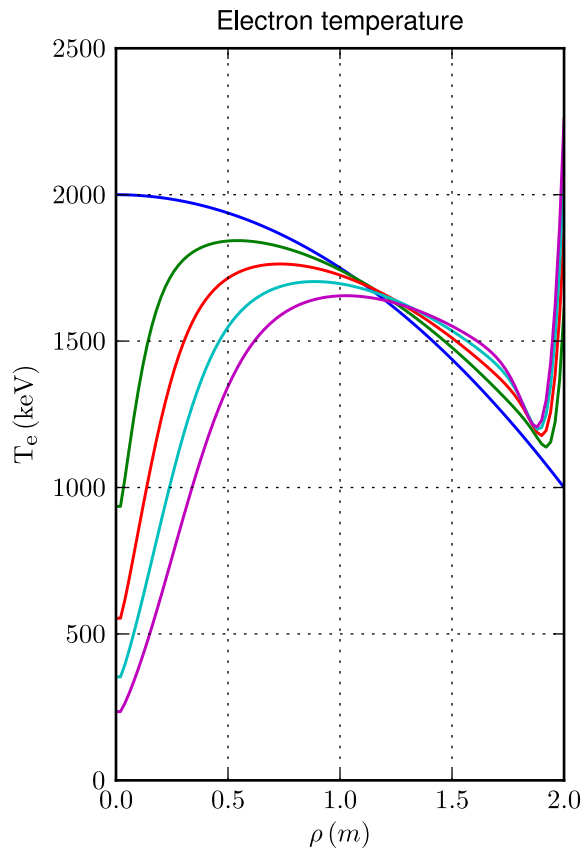
### Comparison with asymptotic solution



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$

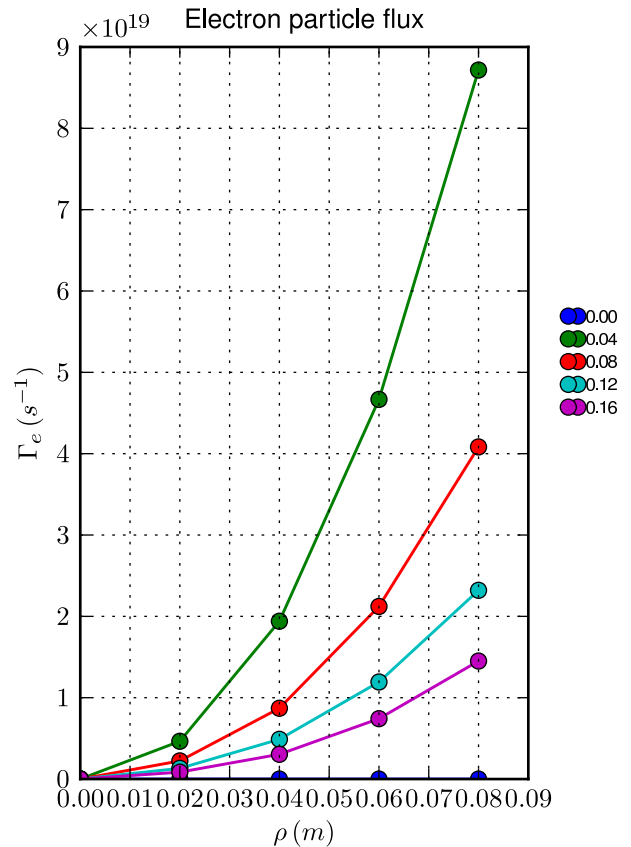
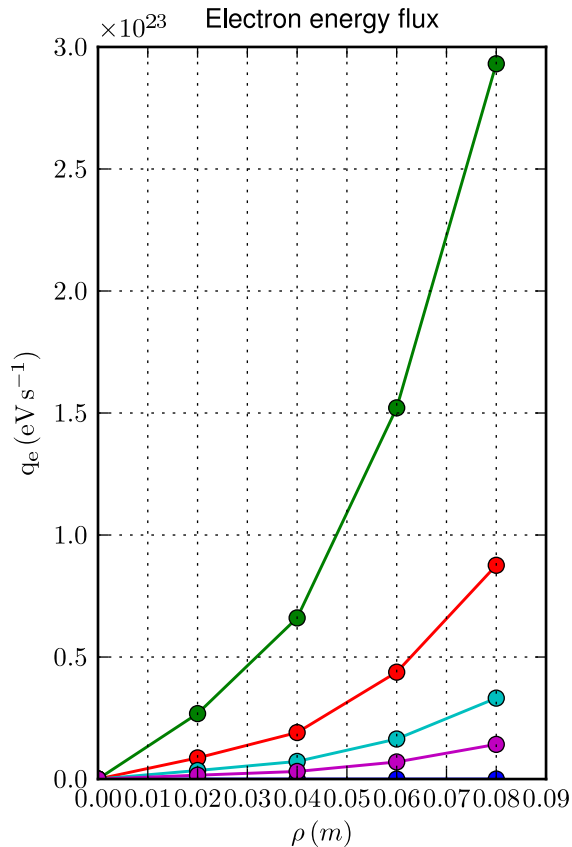
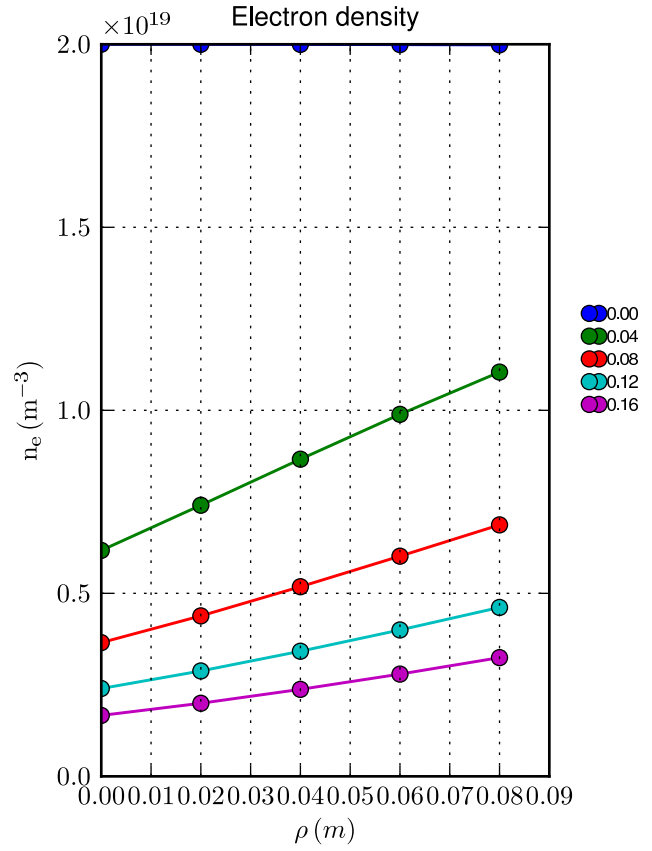
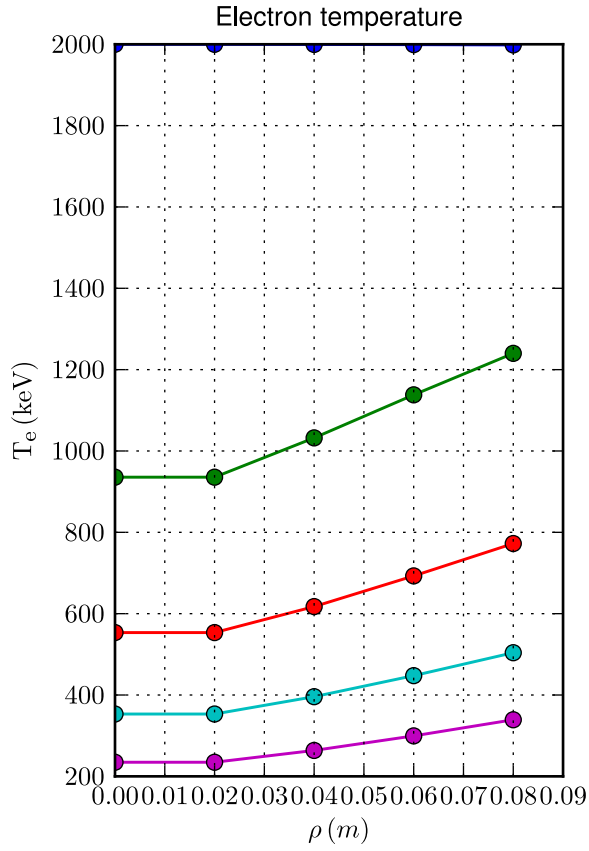


## Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over magnetic axis

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



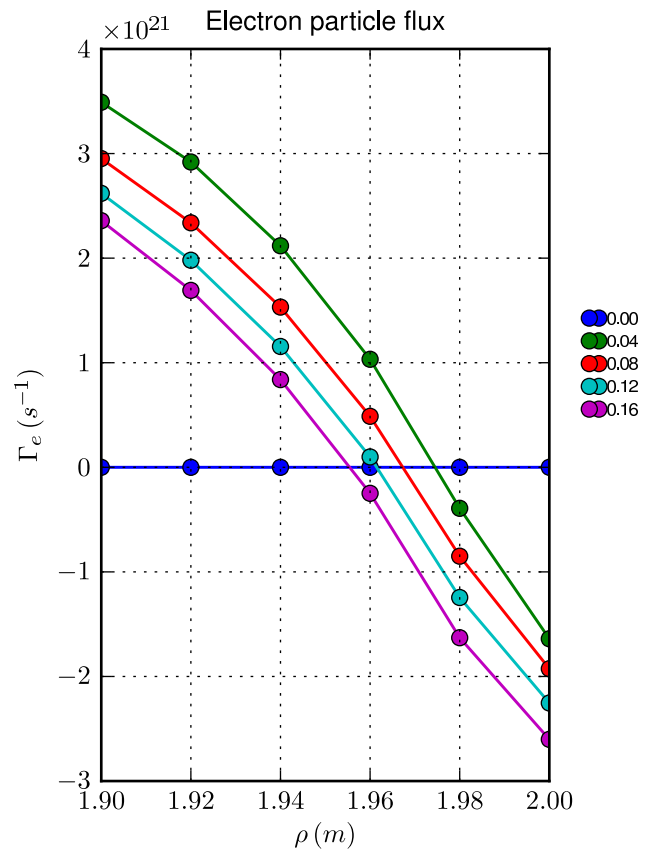
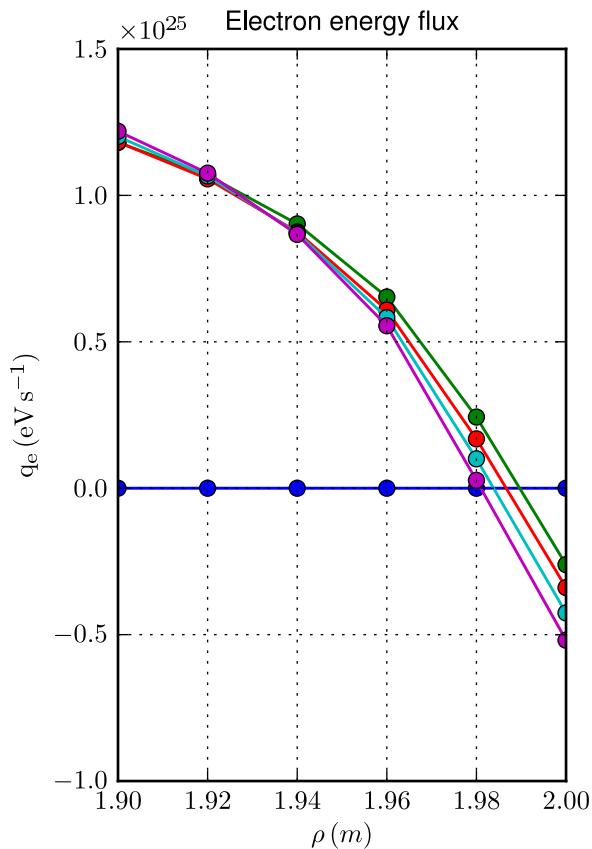
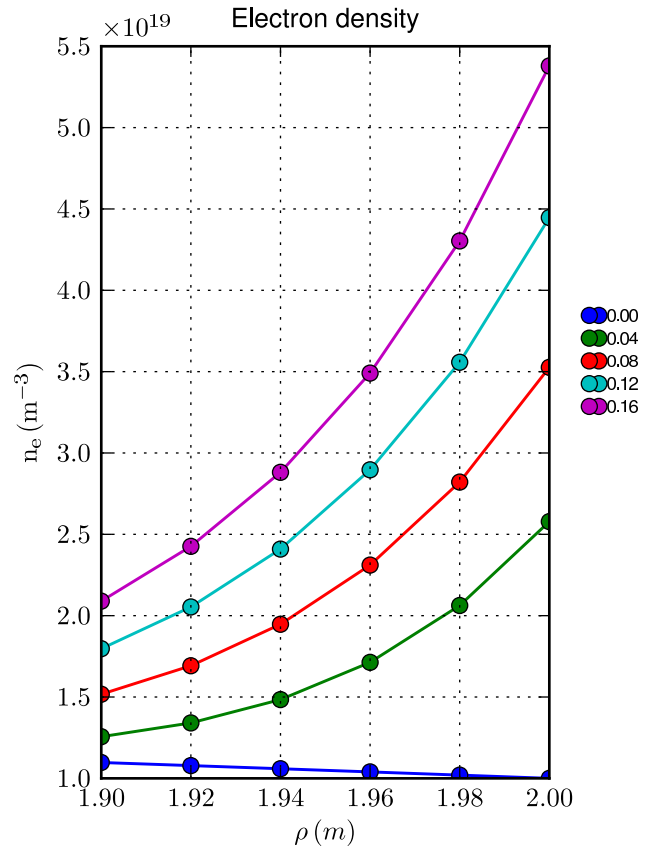
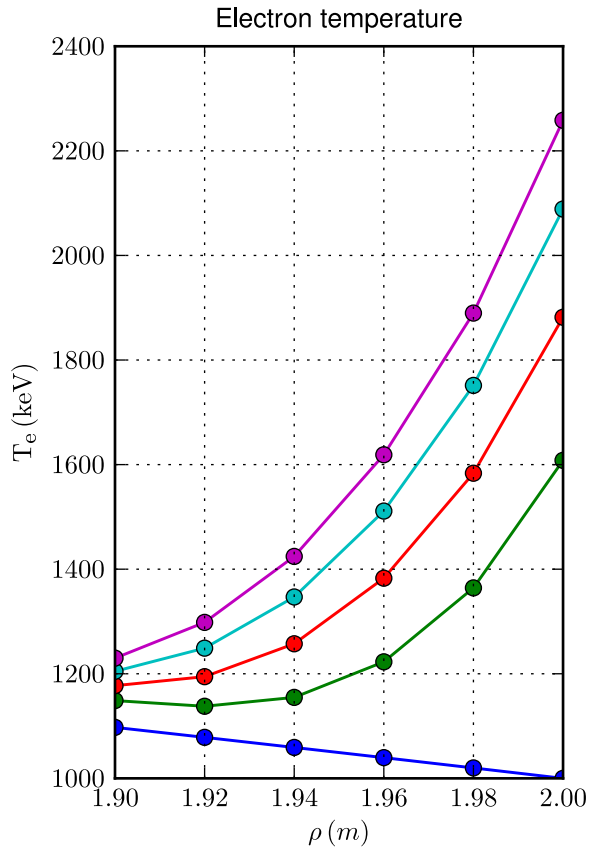


### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge

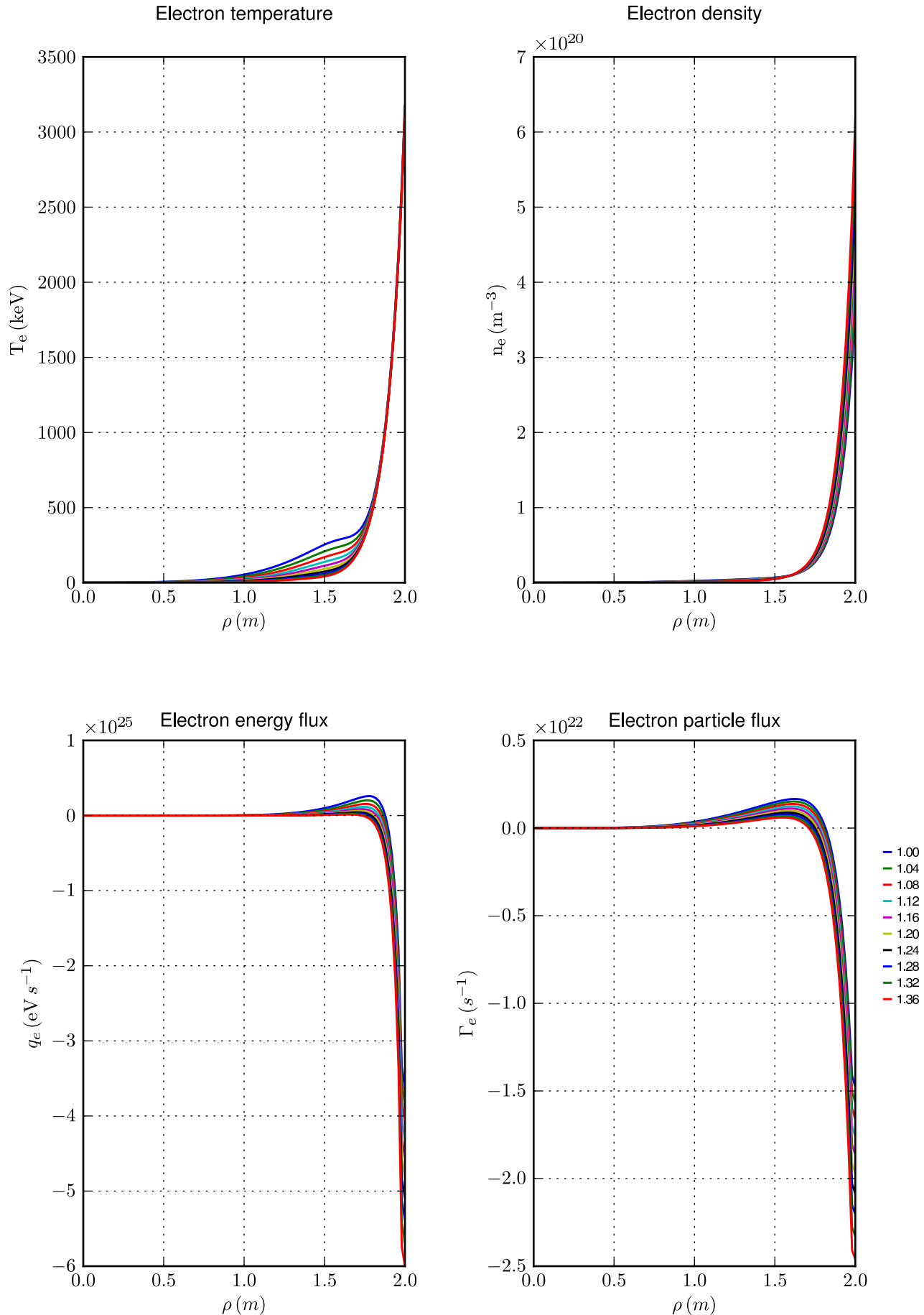
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

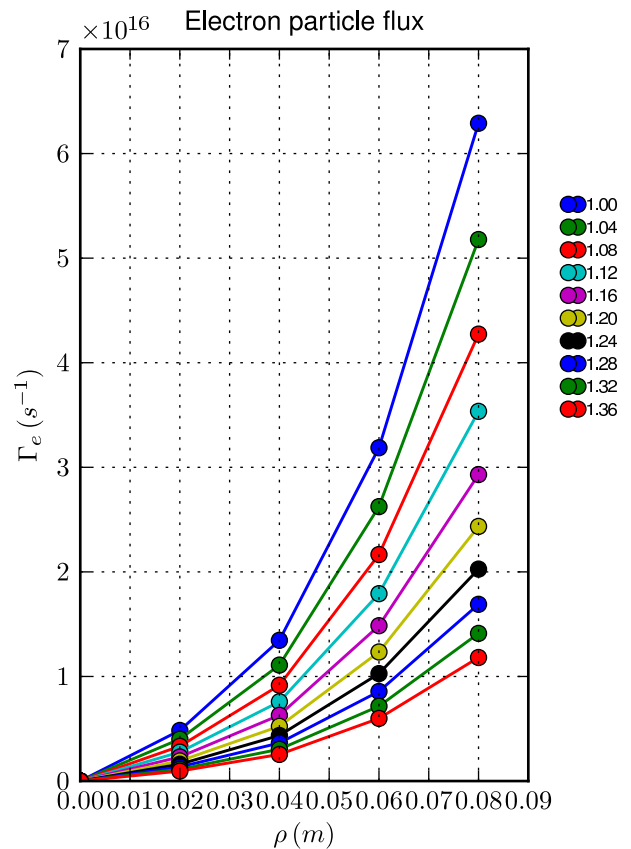
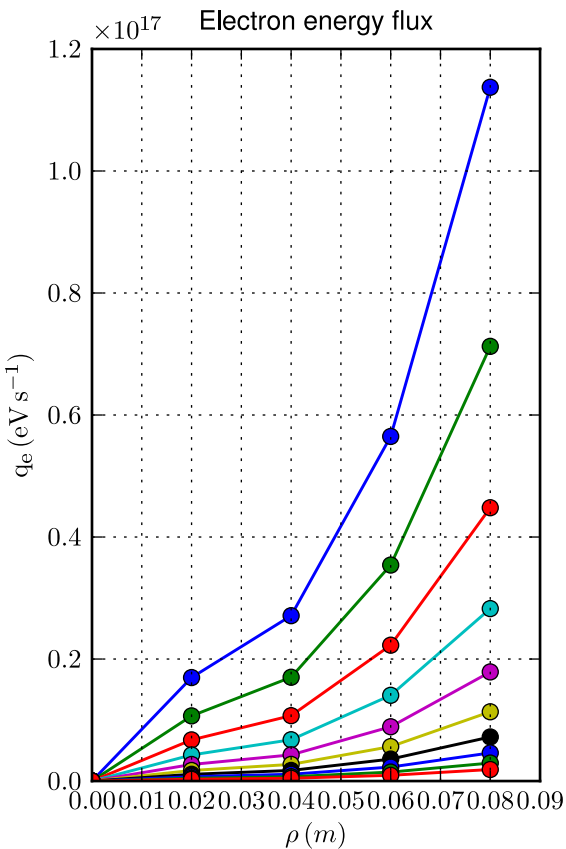
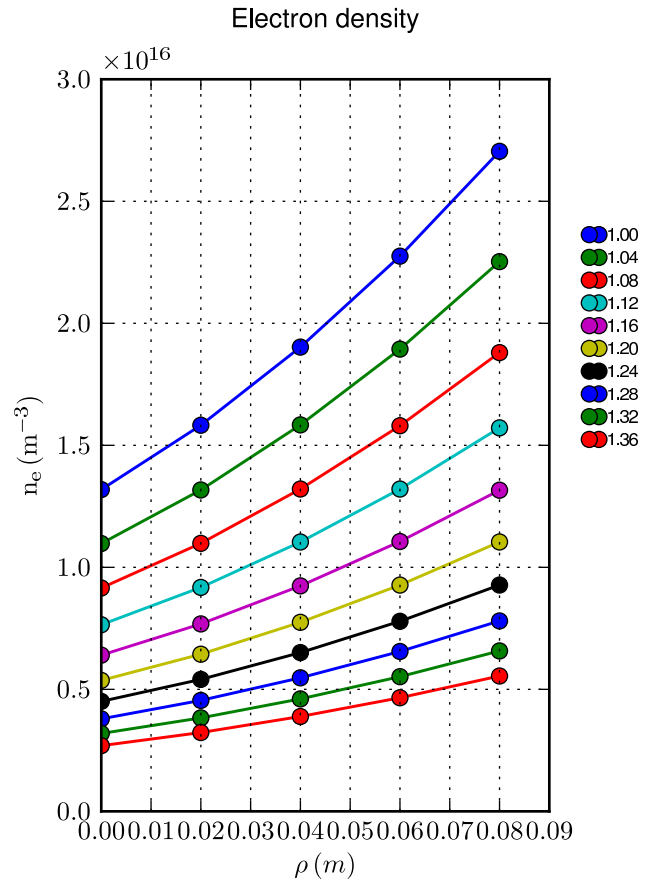
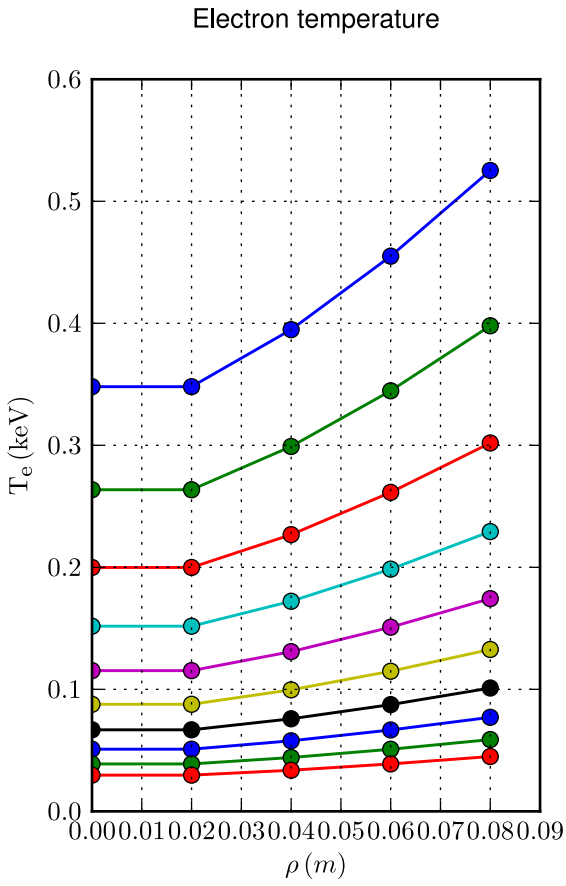
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

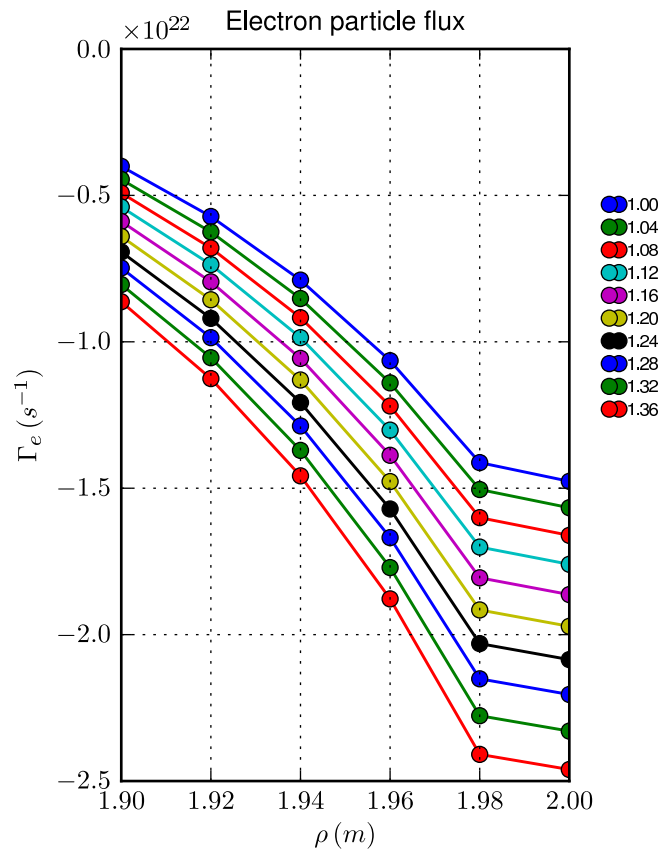
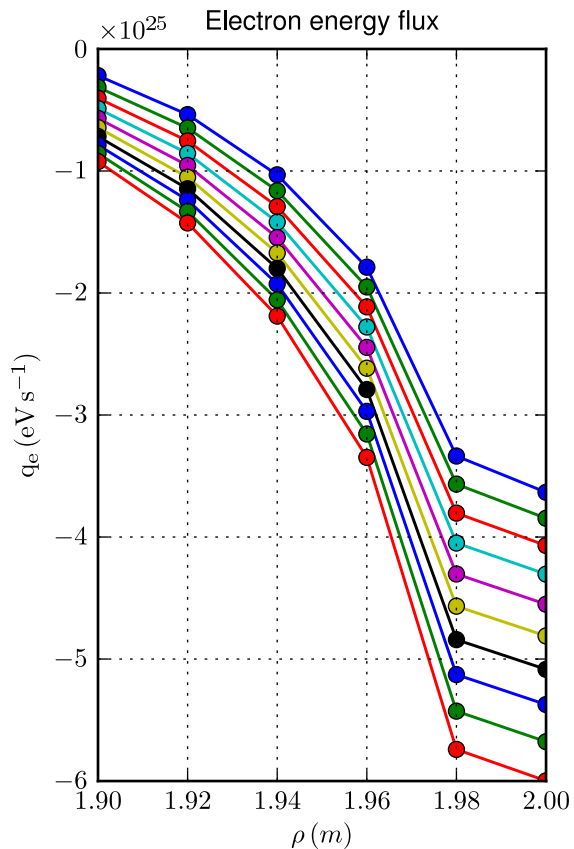
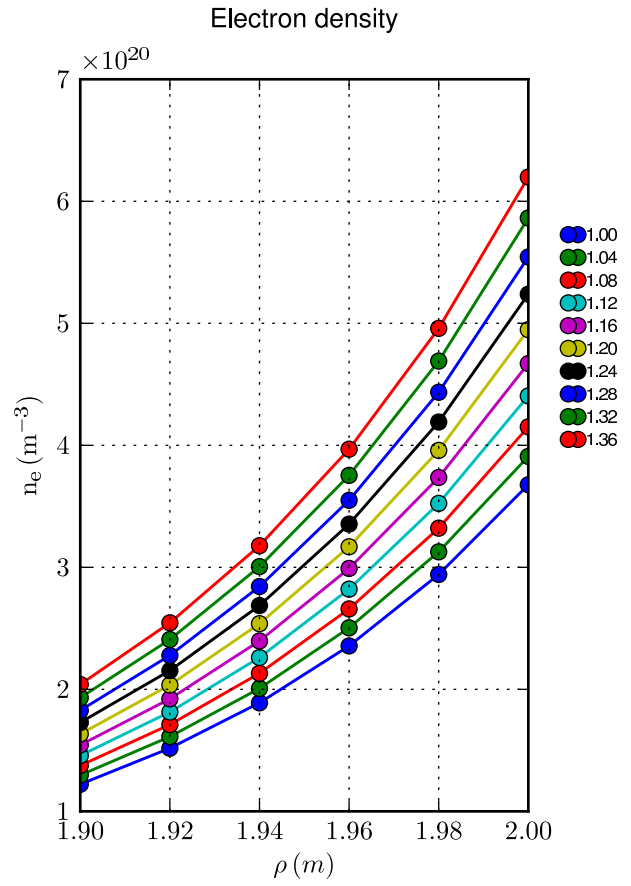
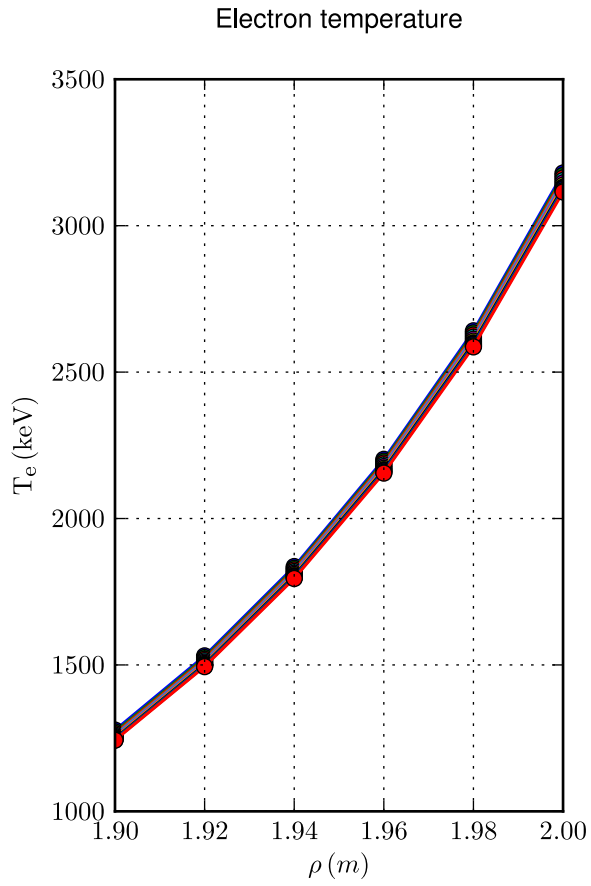
Spatial zoom over magnetic axis; time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

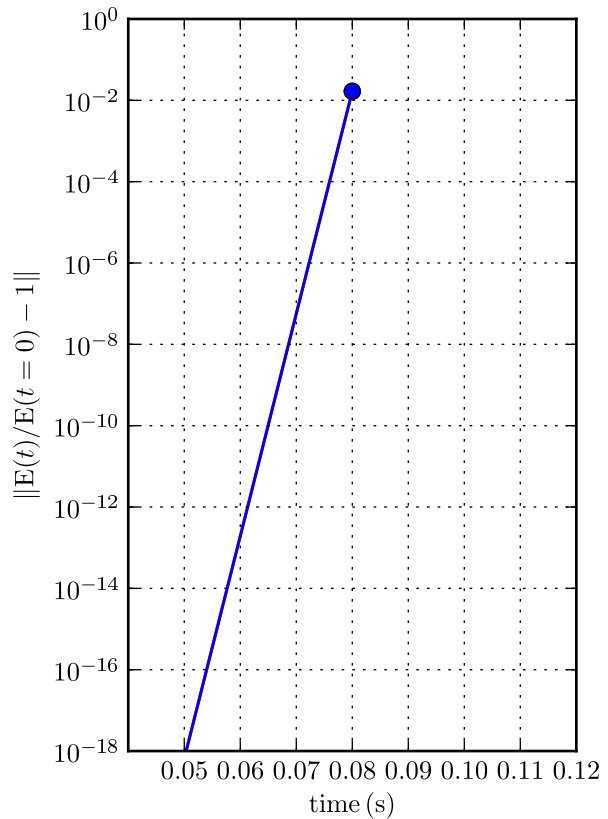
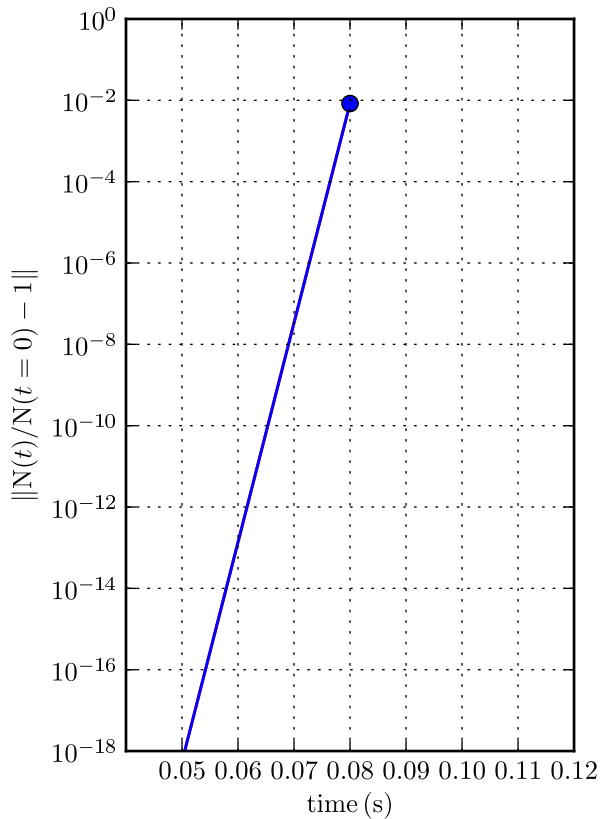
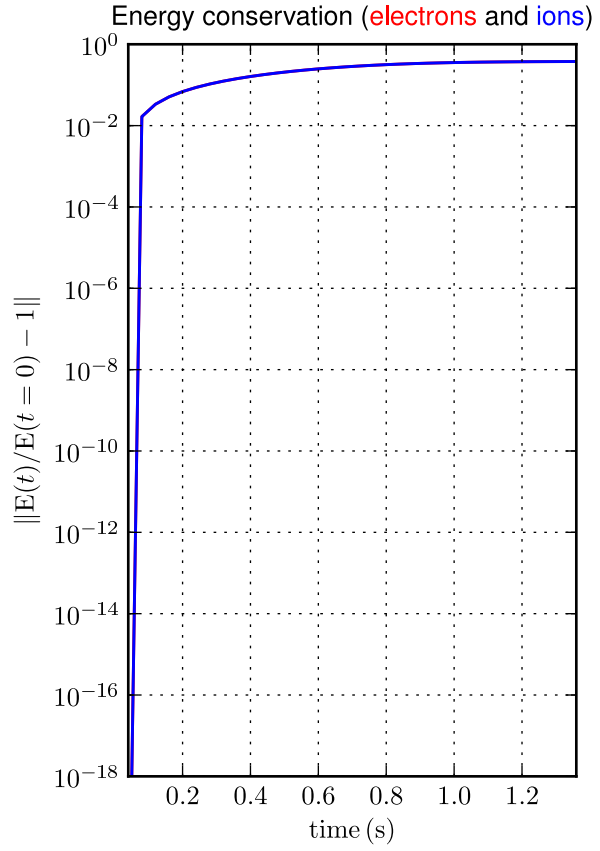
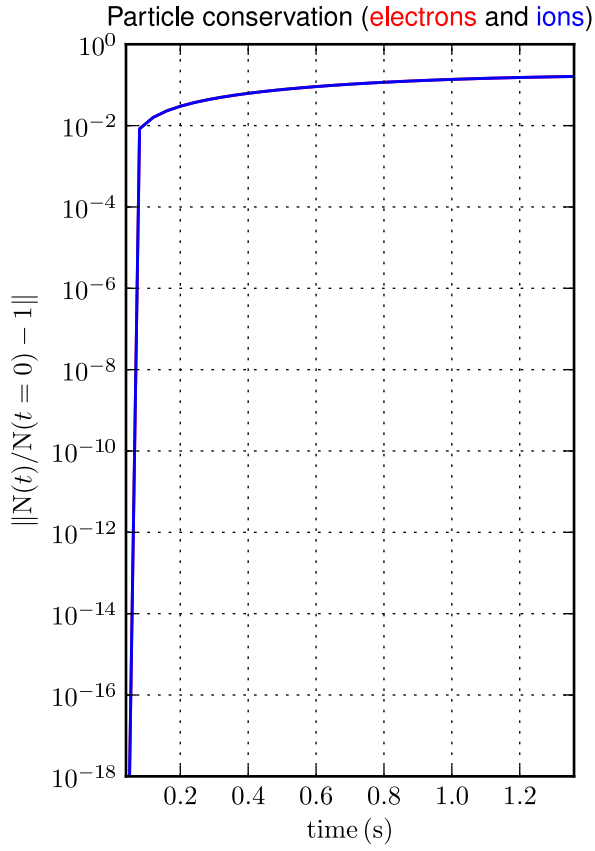
Spatial zoom over edge; time sampling: last 10 time slices



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

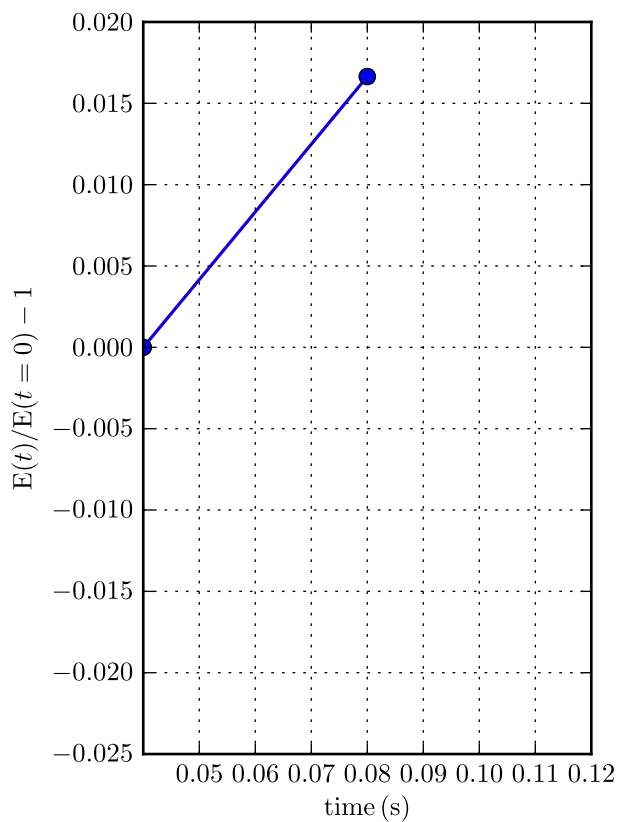
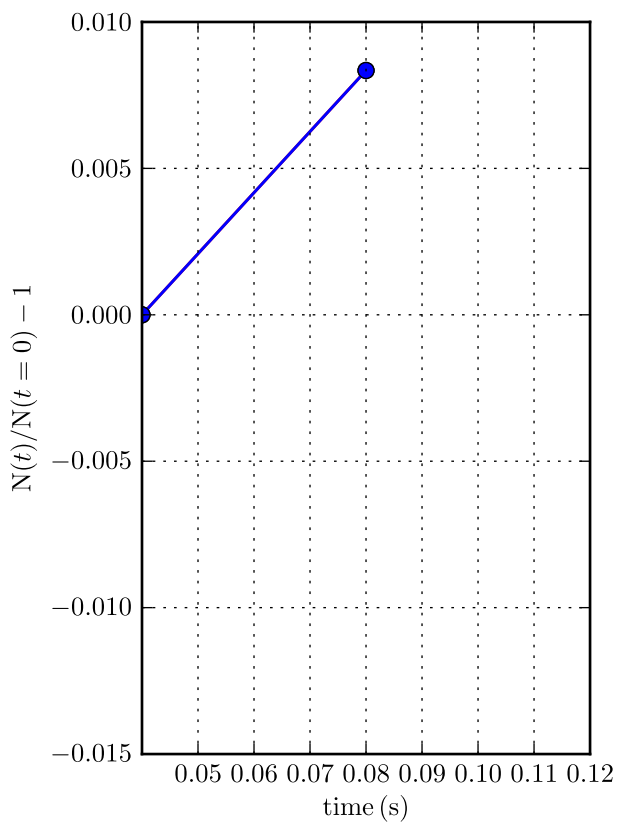
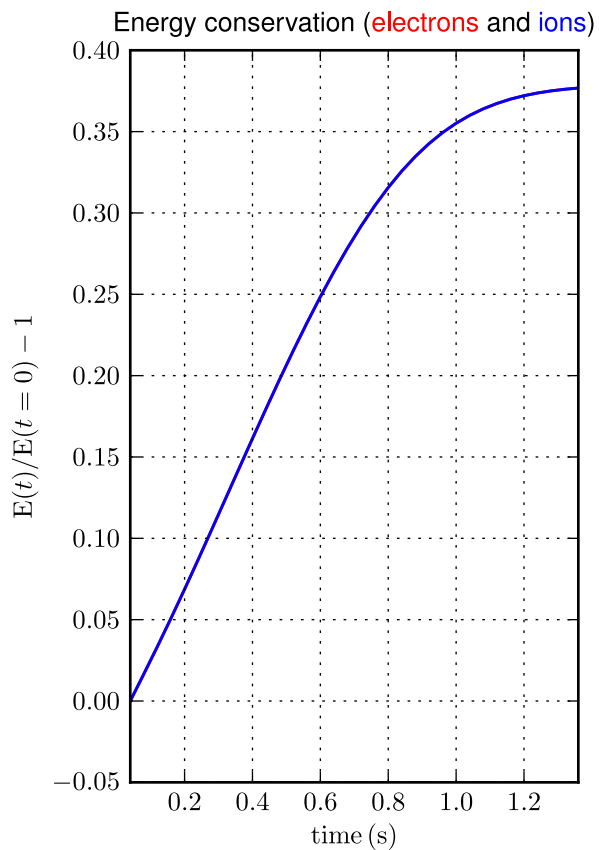
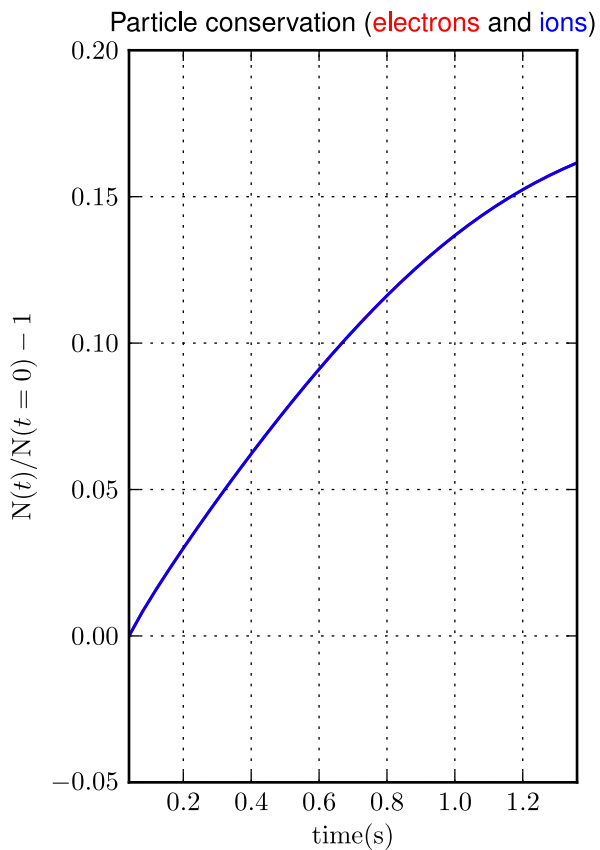
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

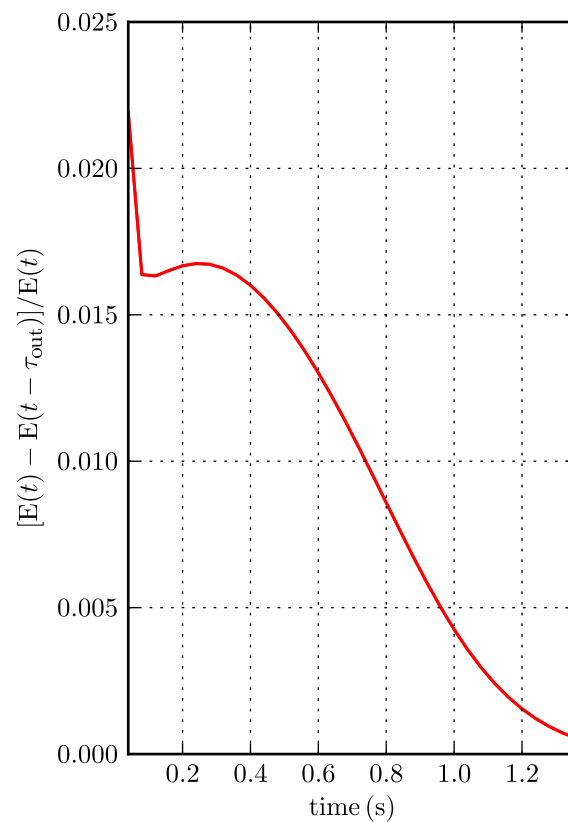
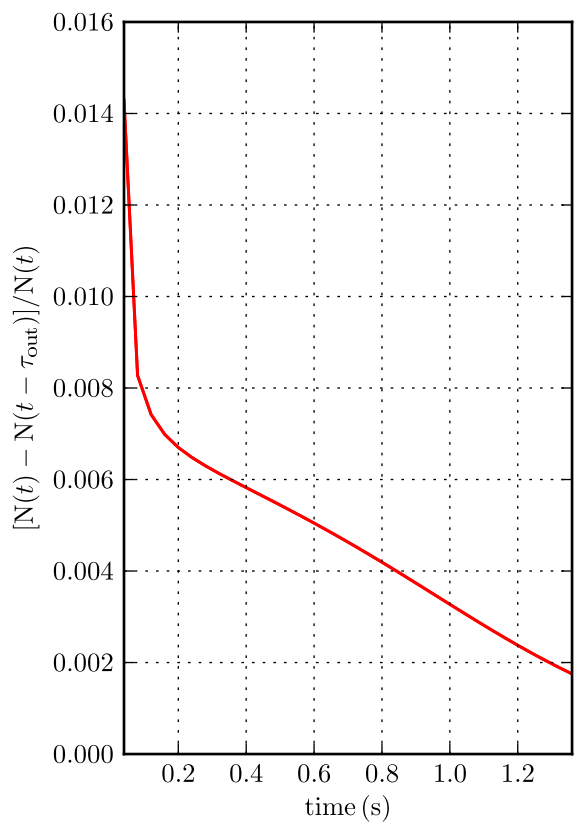
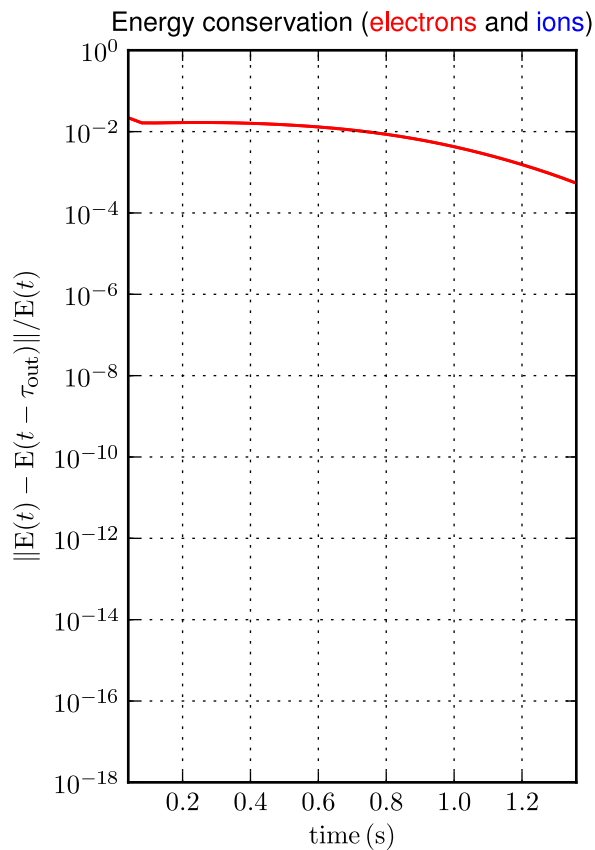
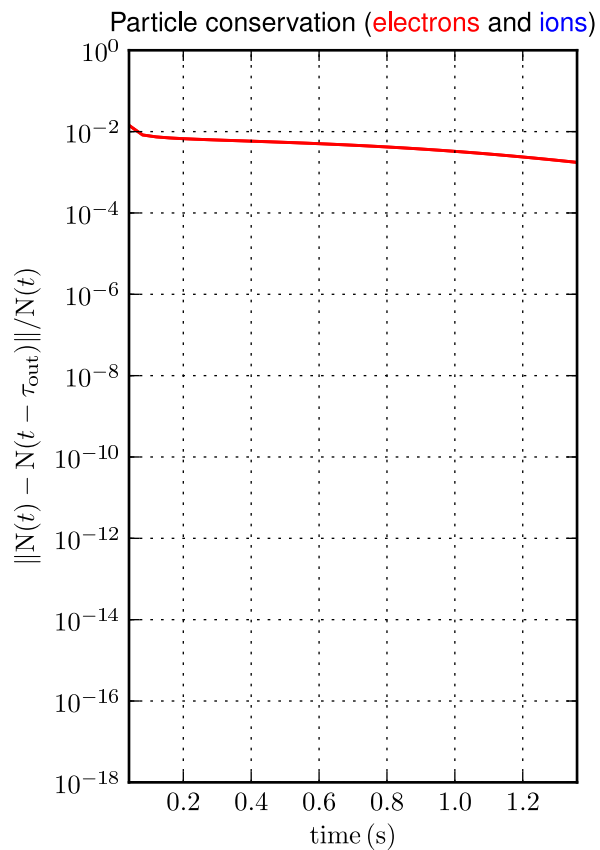
Comparison with initial solution - linear scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

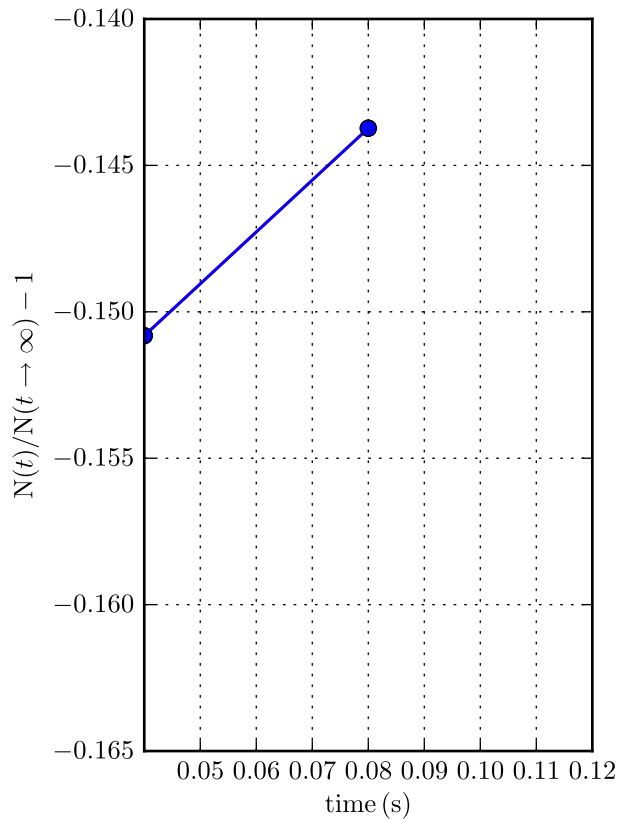
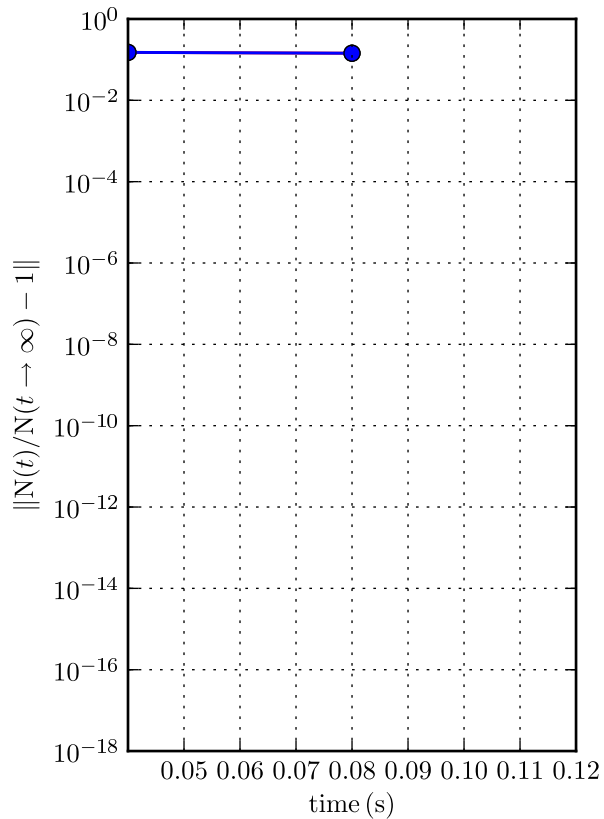
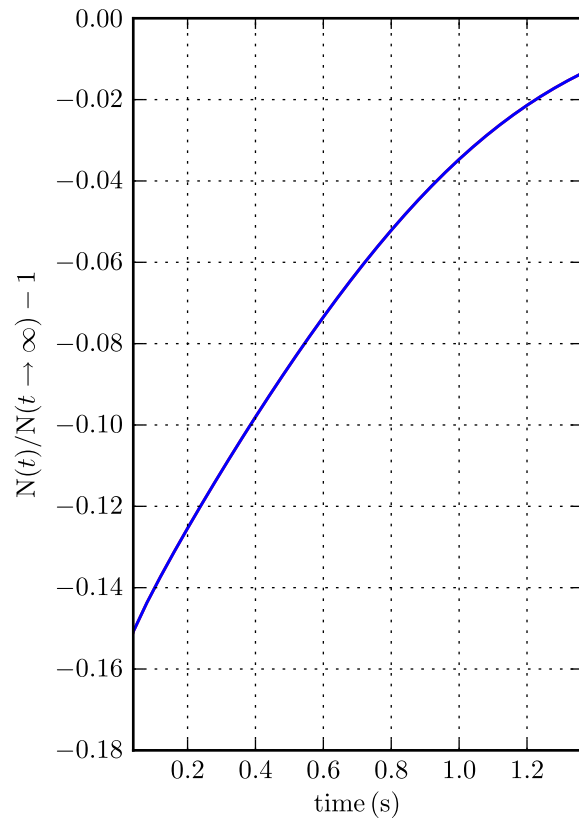
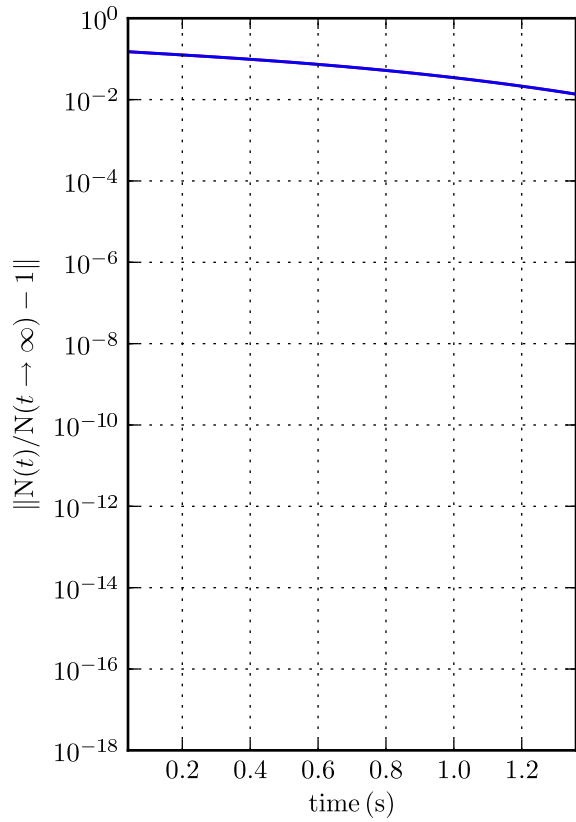
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

Comparison with asymptotic solution (electrons and ions); total time and zoom over time

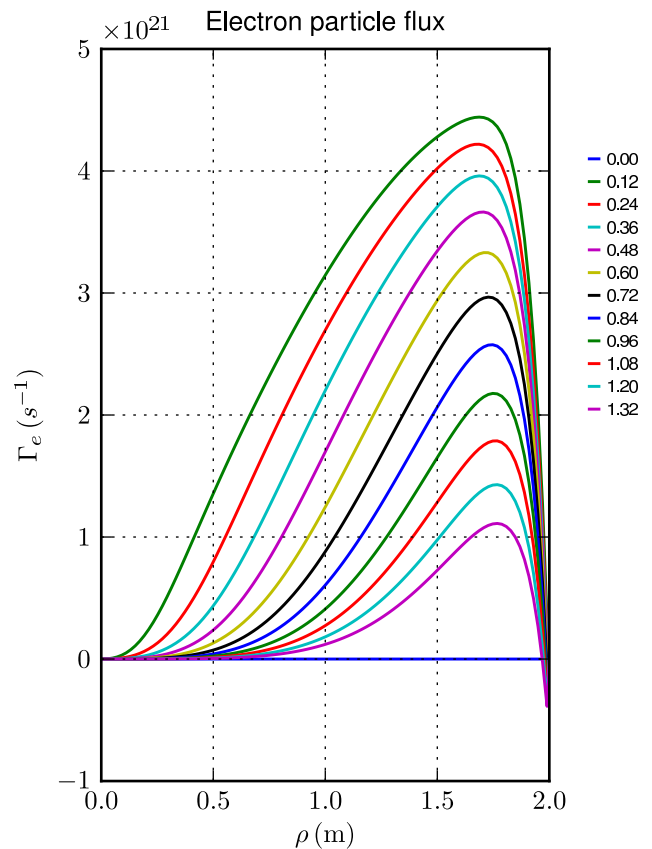
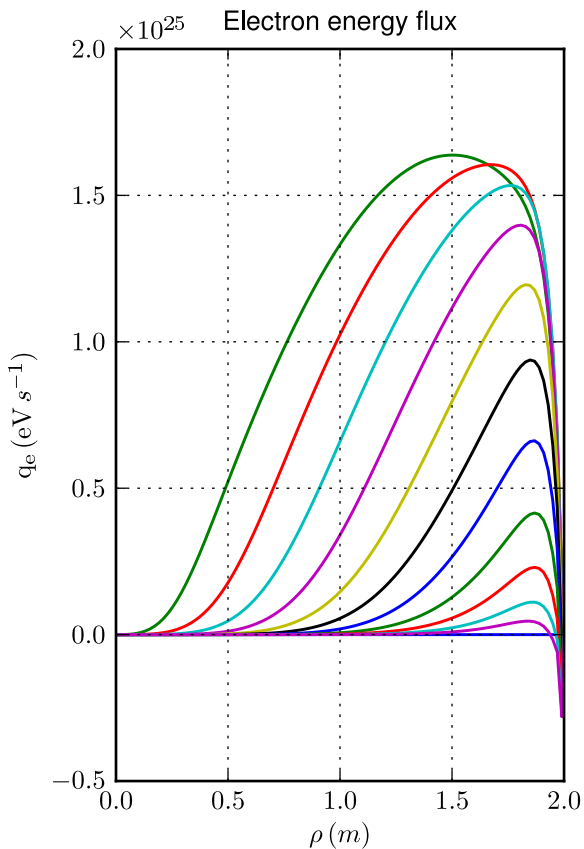
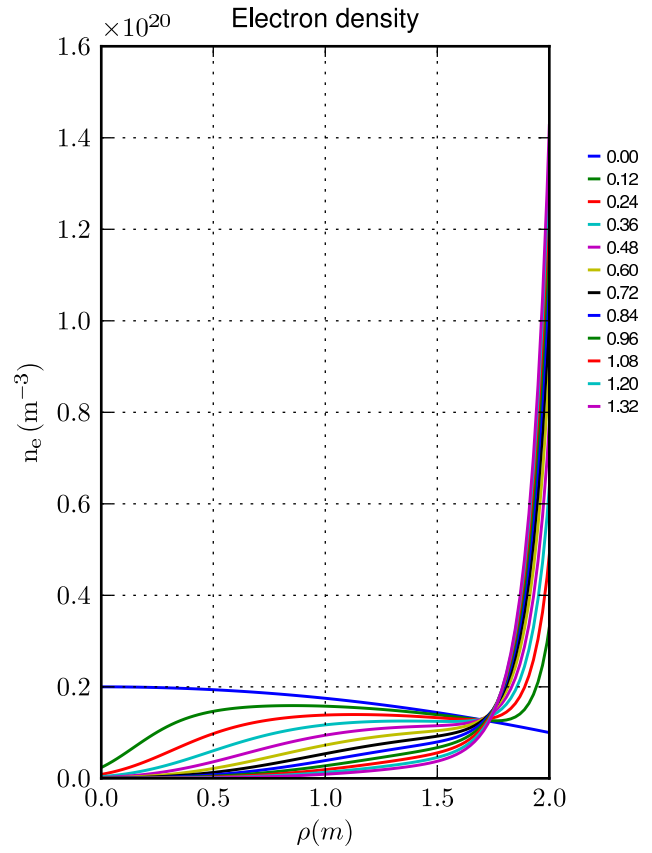
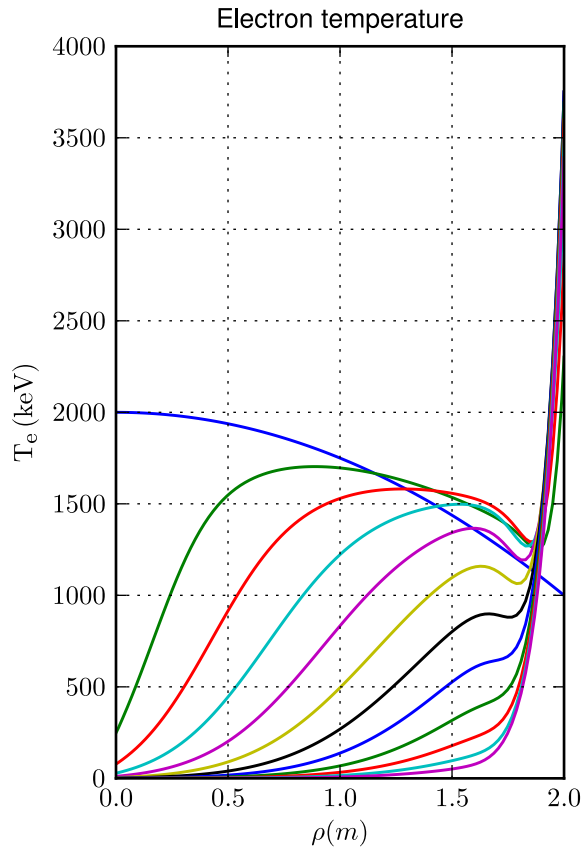




### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: total simulation time/10

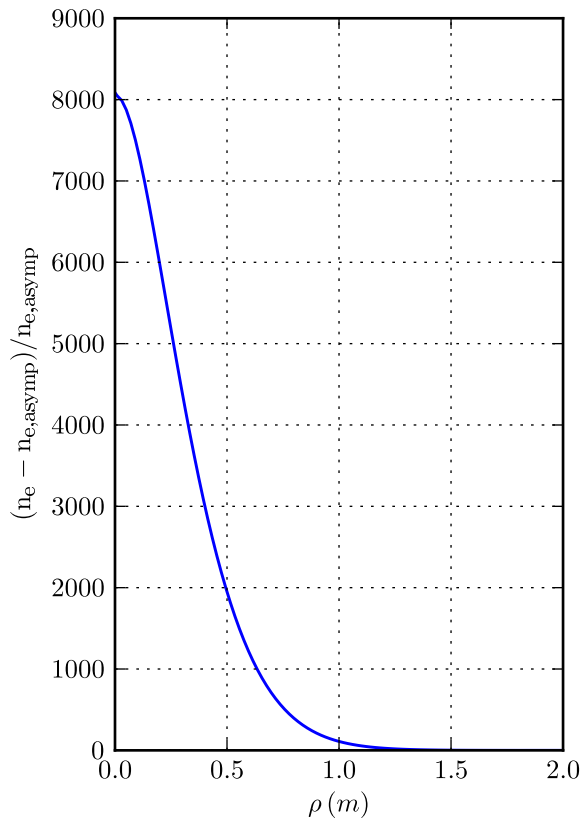


### Profiles

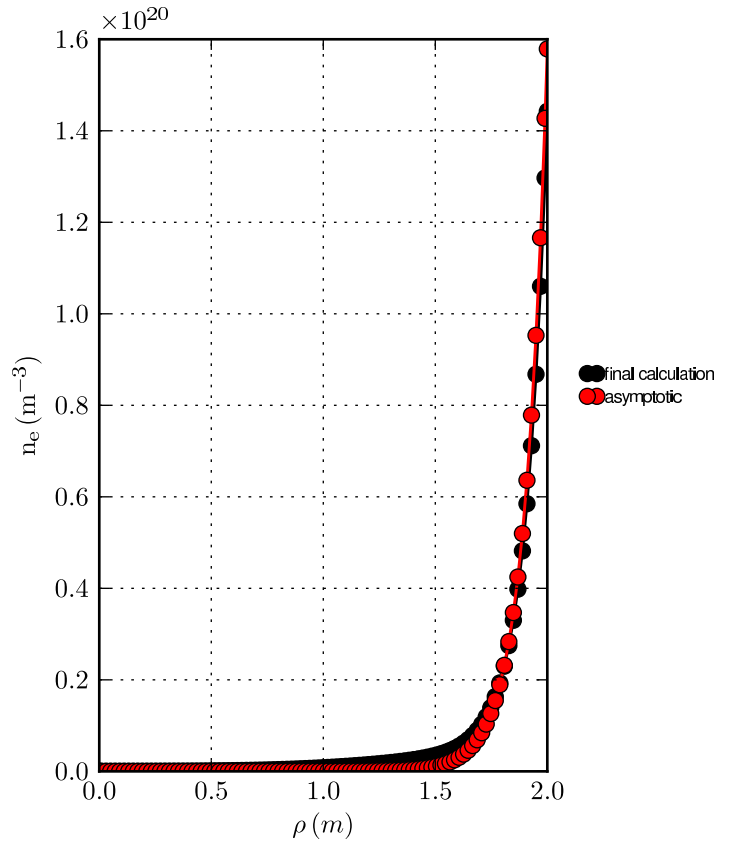
[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

### Comparison with asymptotic solution

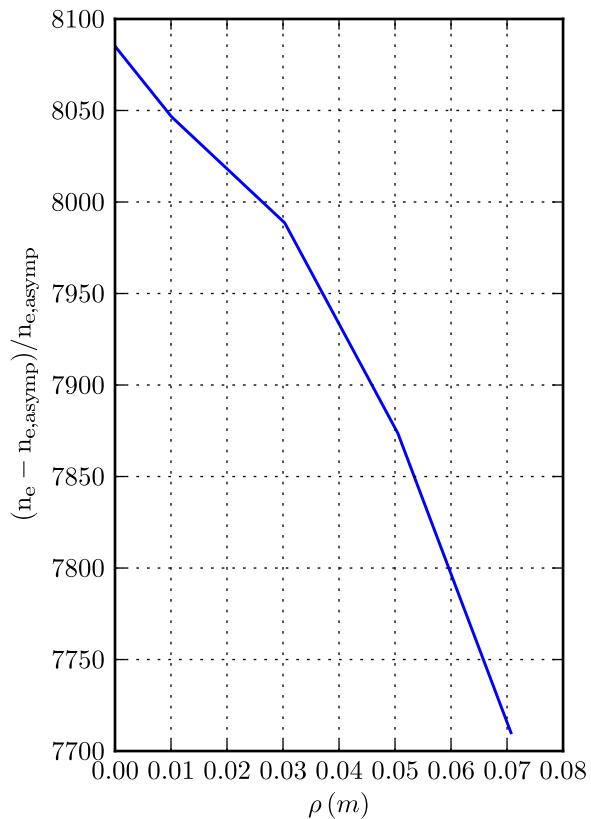
Electron density relative error



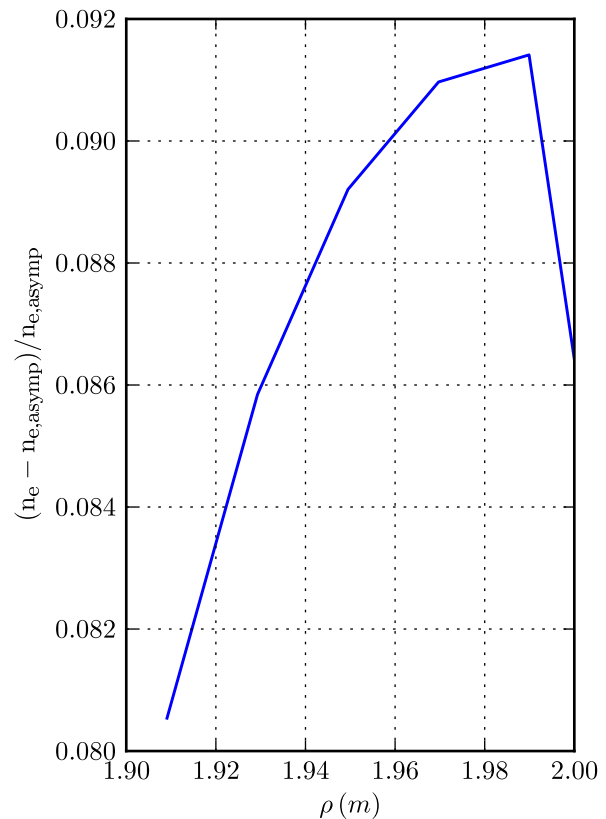
Electron density



Error: zoom over axis



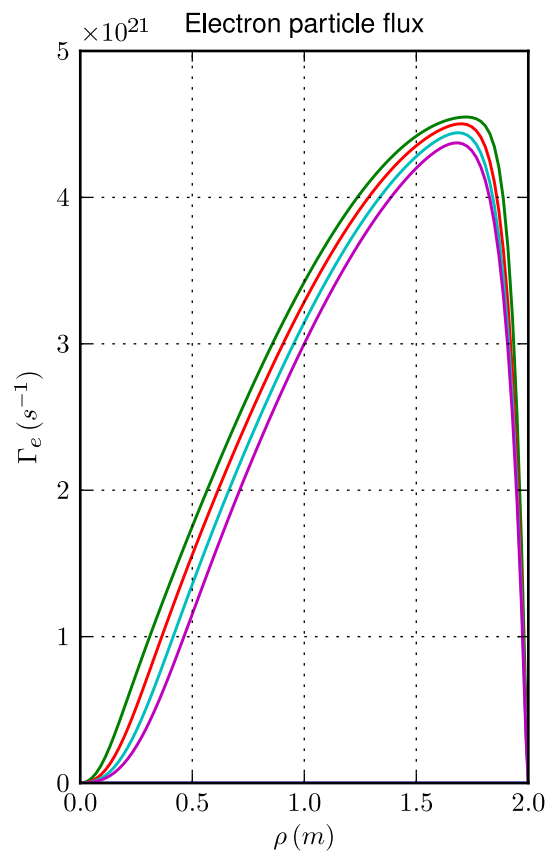
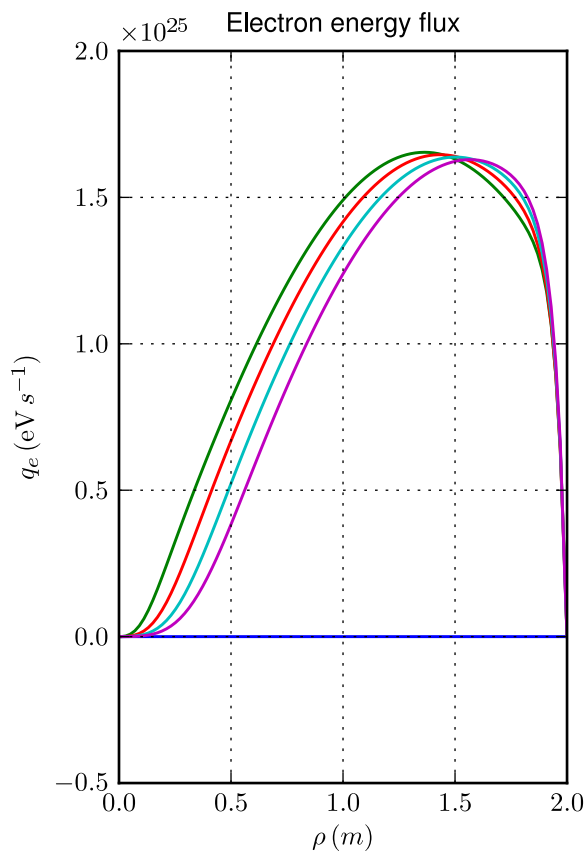
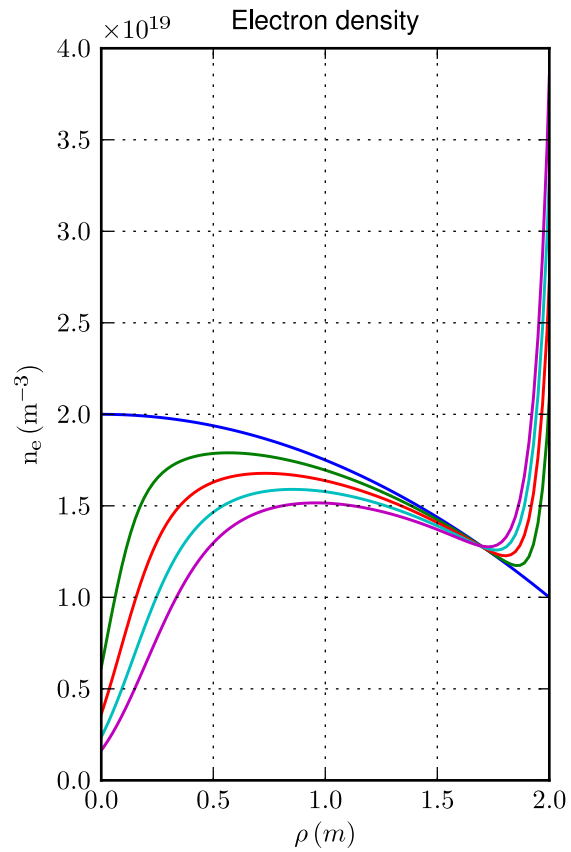
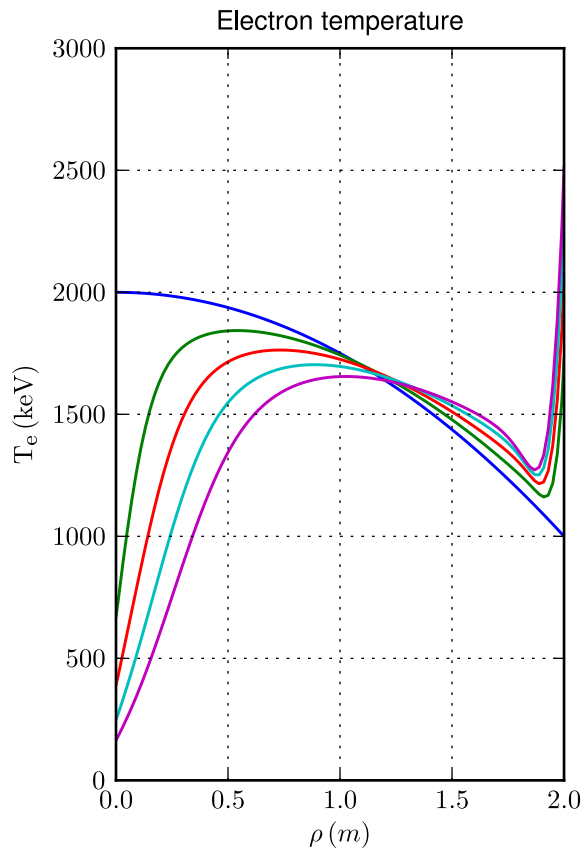
Error: zoom over edge



### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



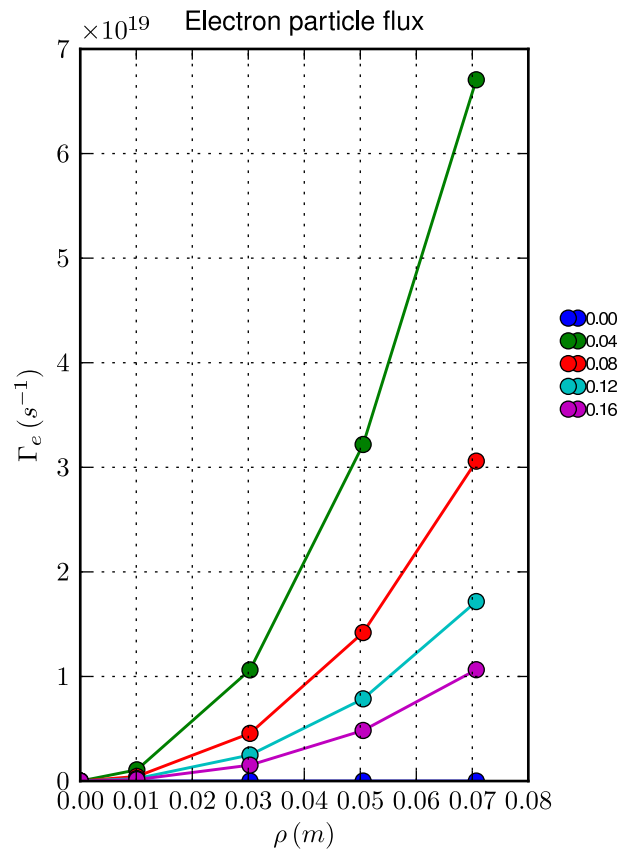
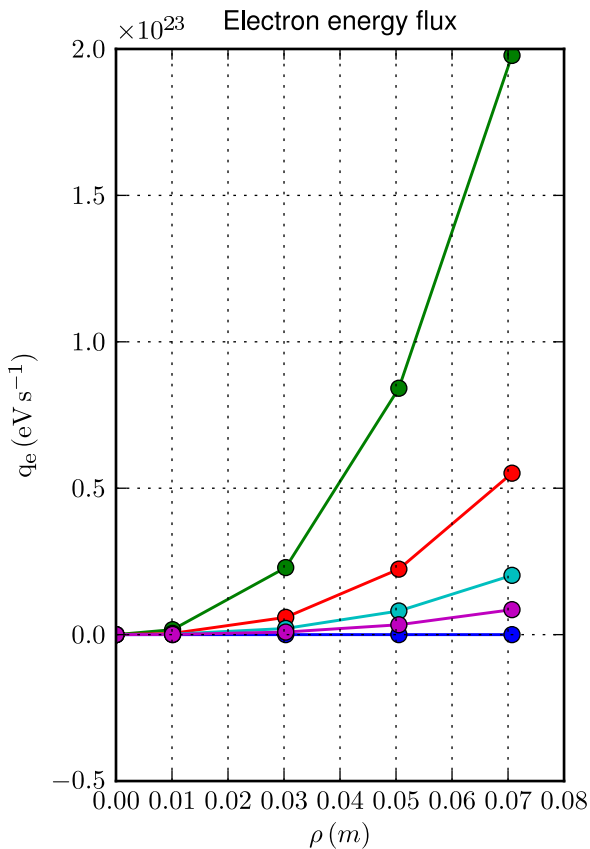
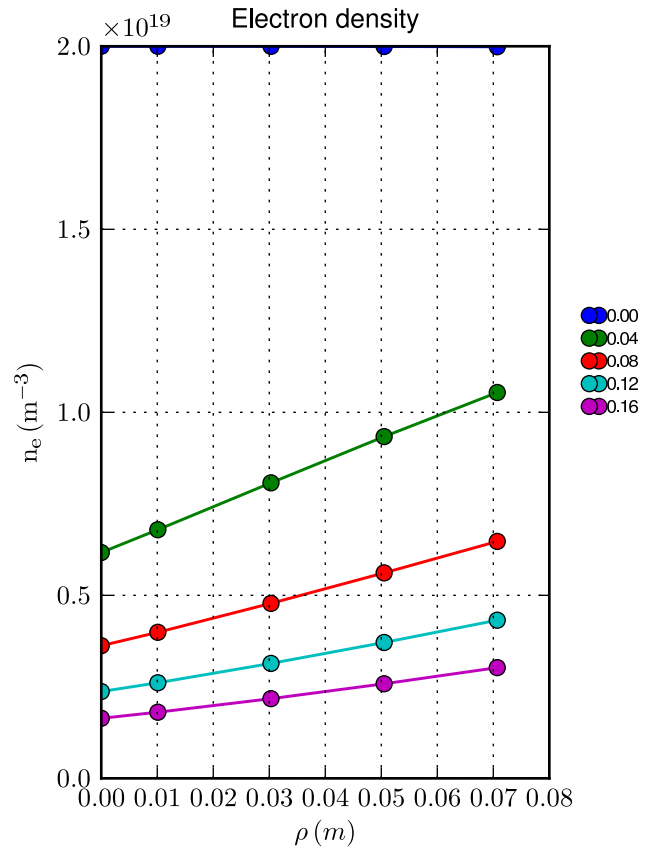
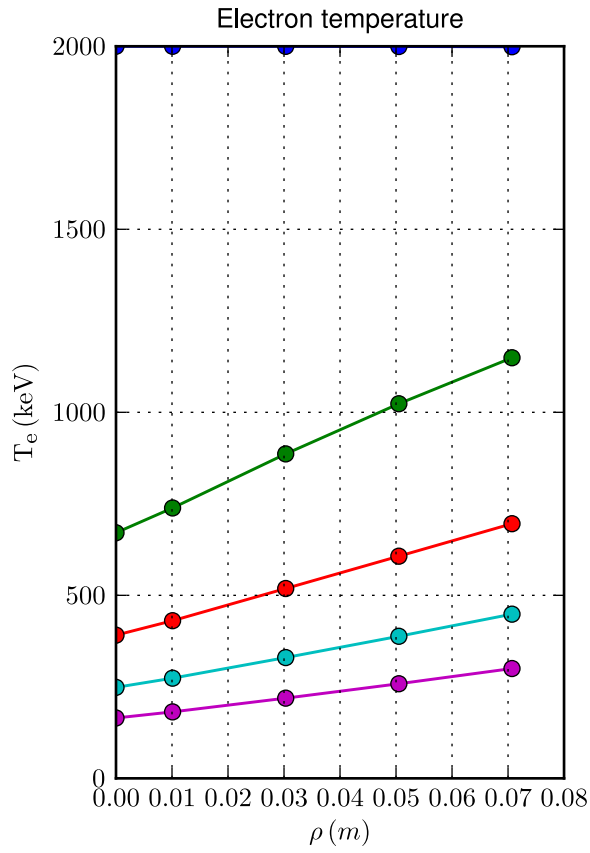
— 0.00  
— 0.04  
— 0.08  
— 0.12  
— 0.16

### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over magnetic axis

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$

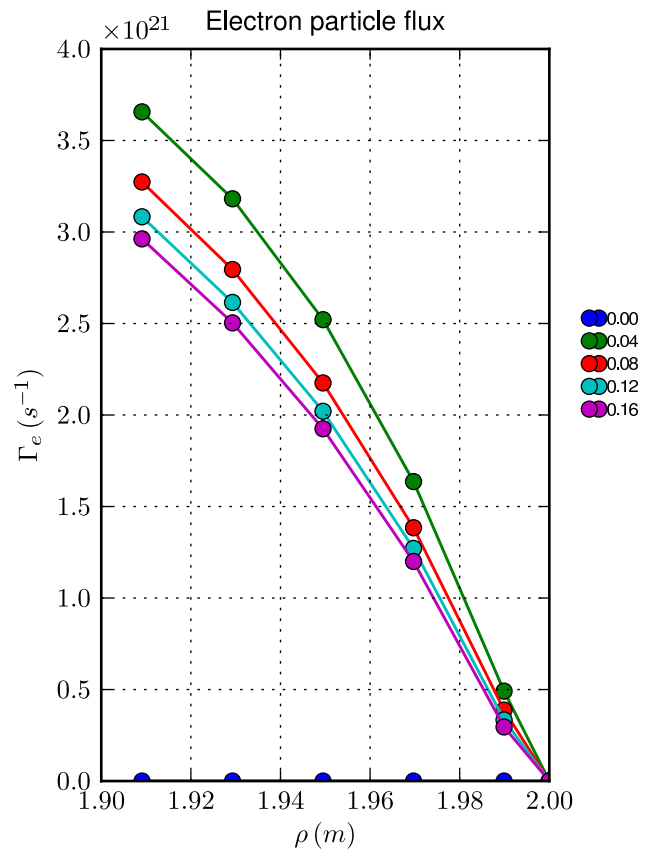
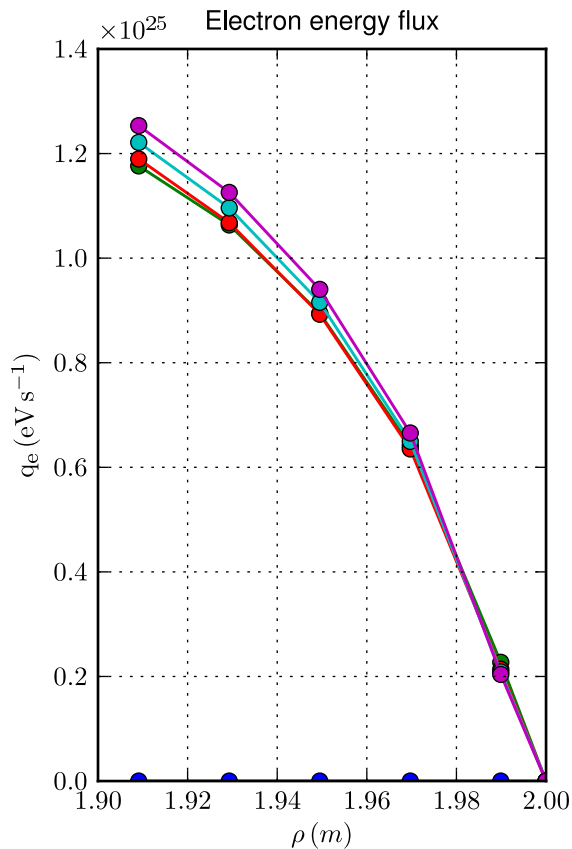
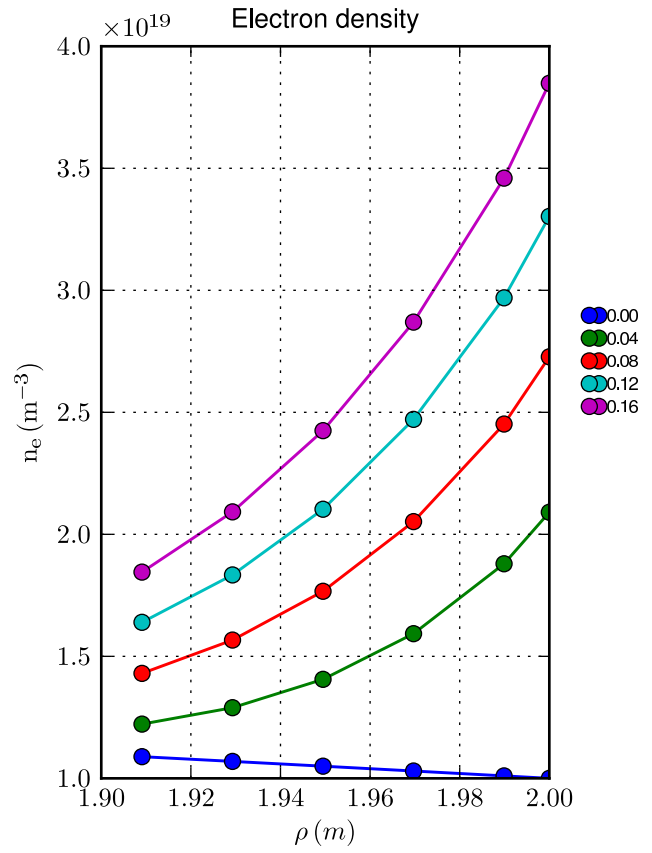
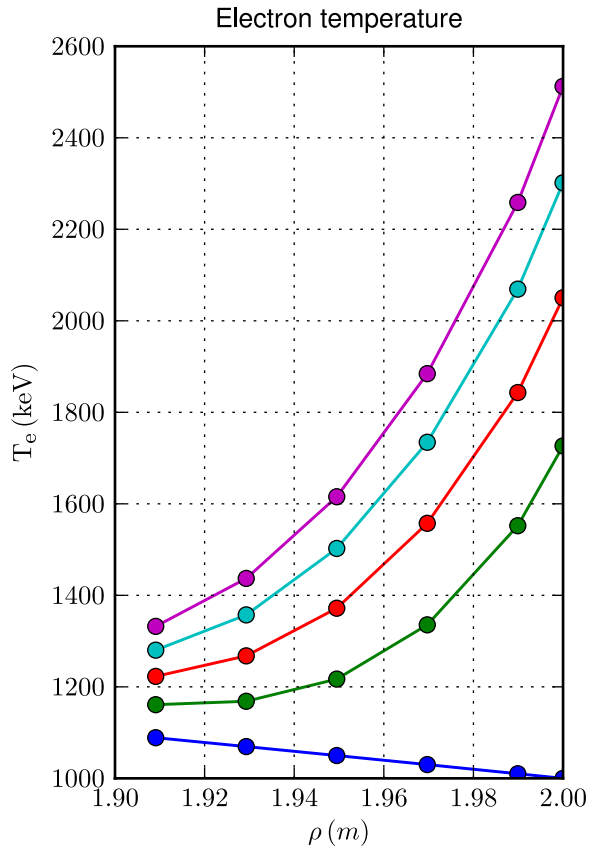


### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge

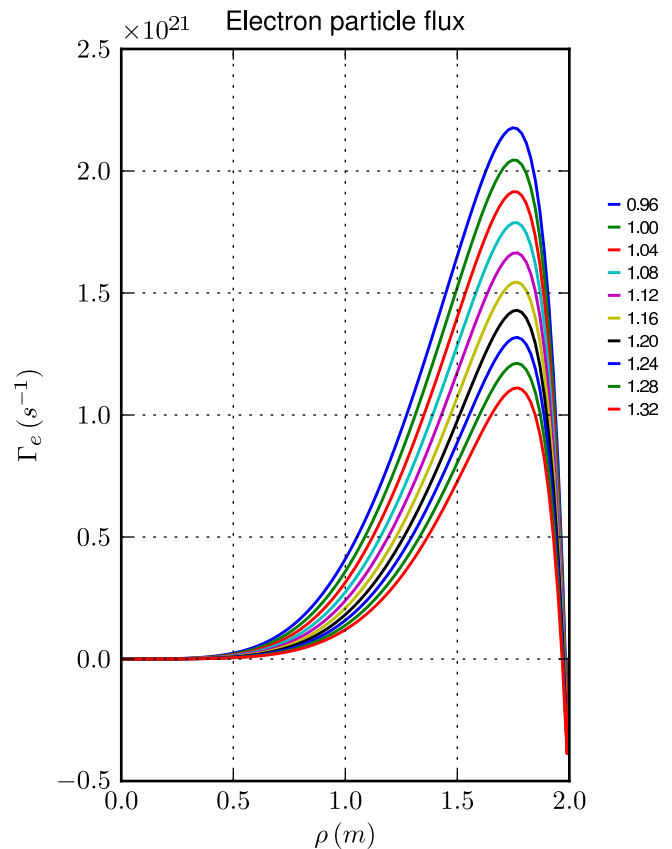
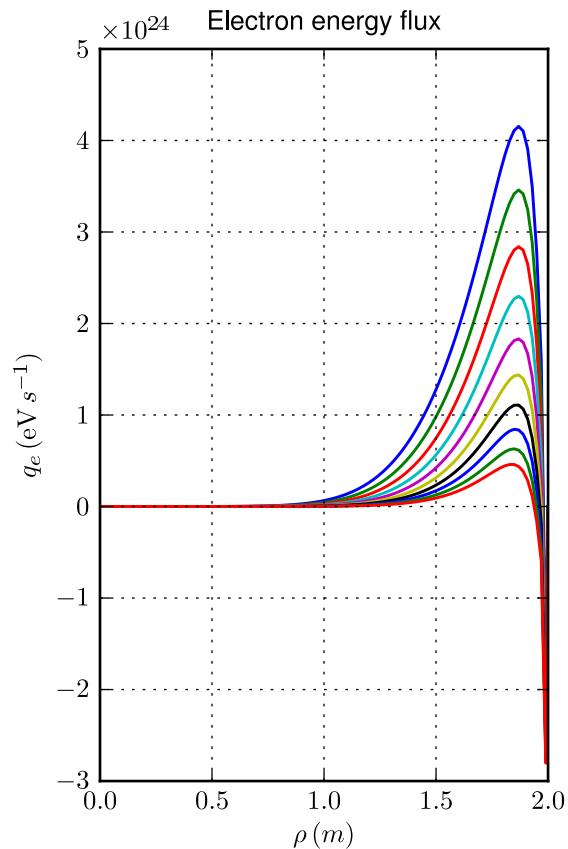
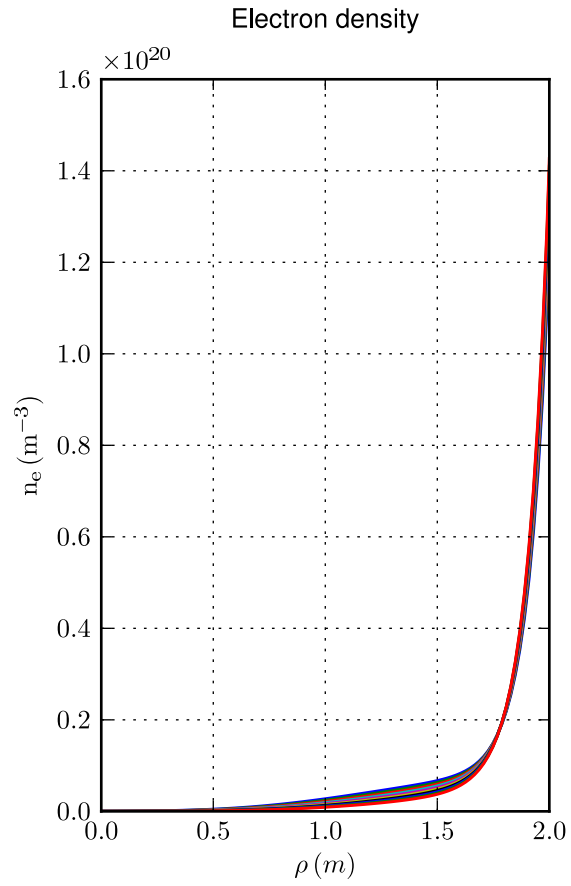
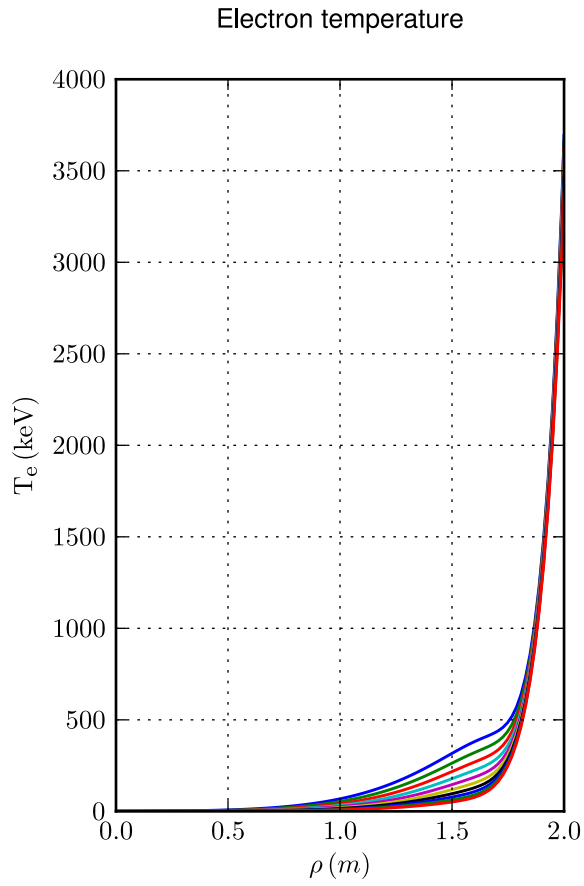
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

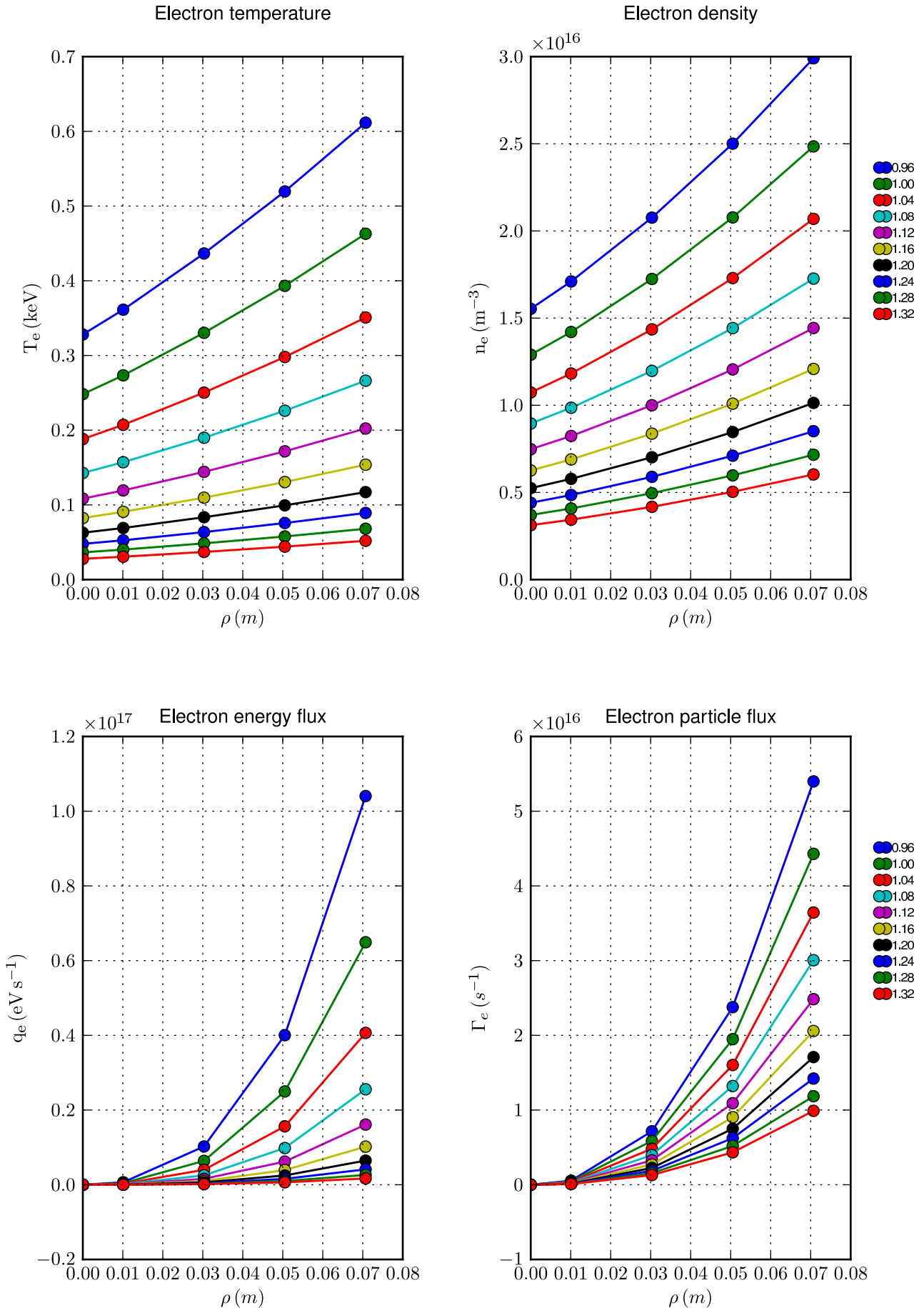
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

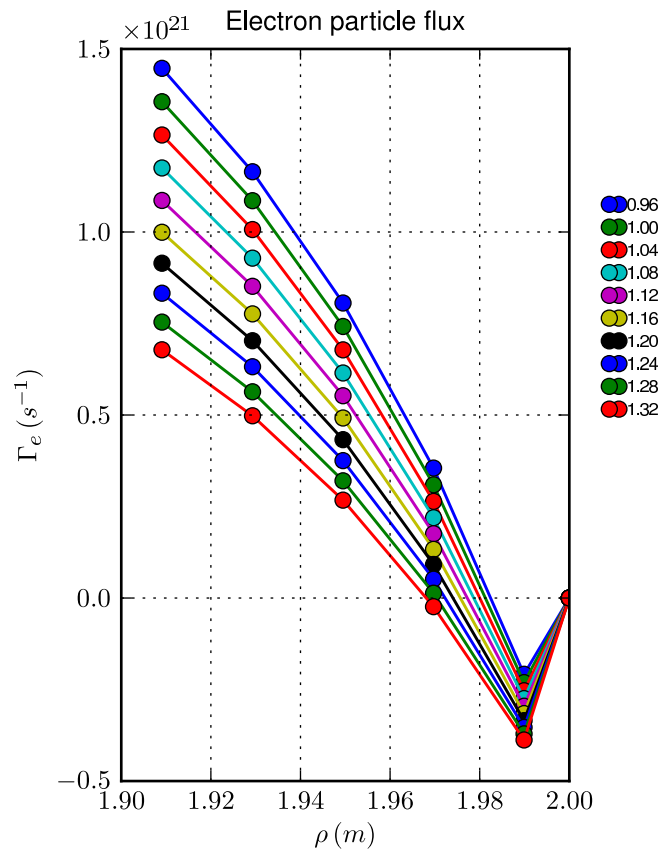
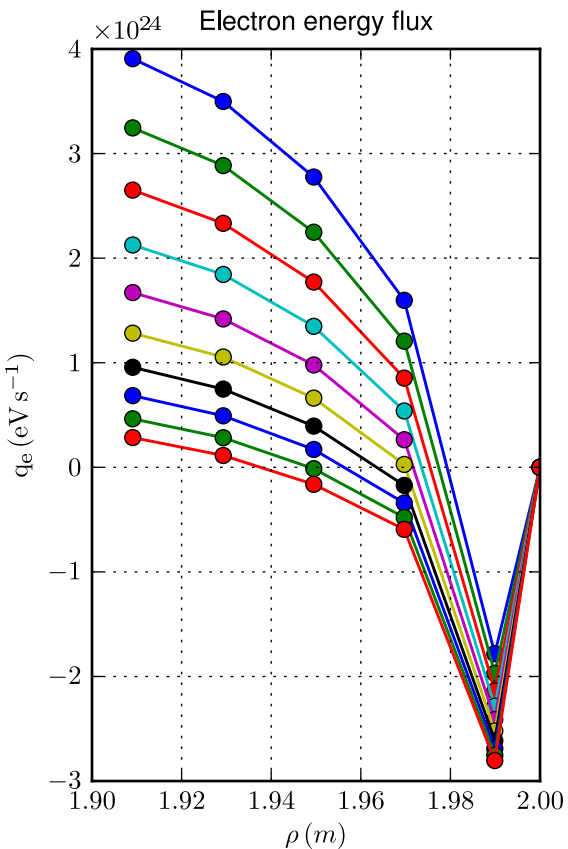
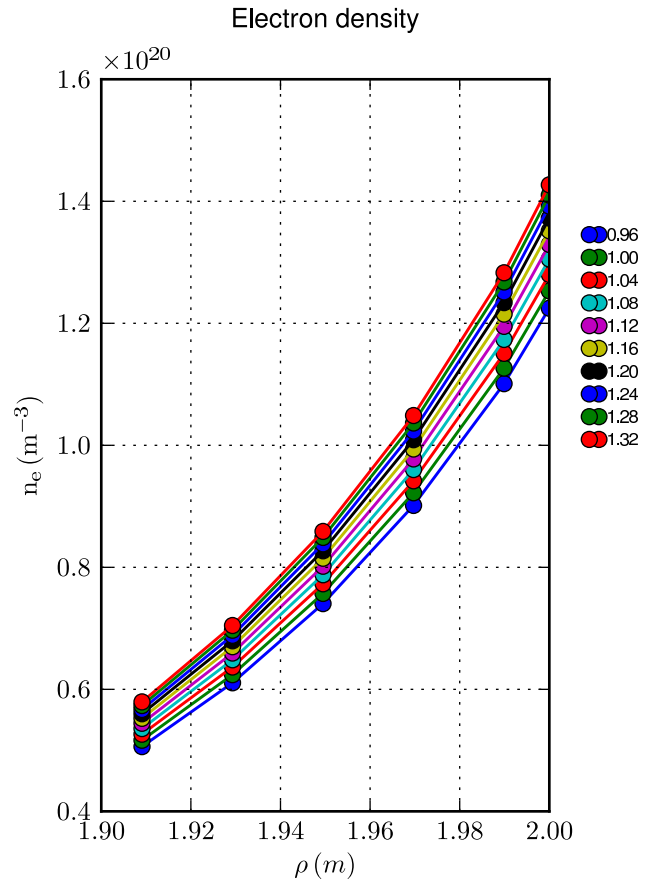
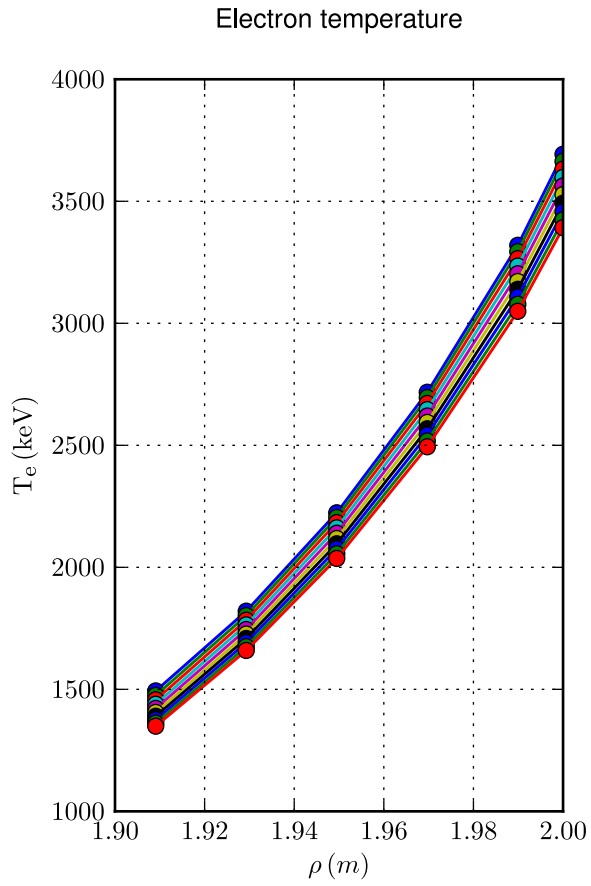
Spatial zoom over magnetic axis; time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge; time sampling: last 10 time slices

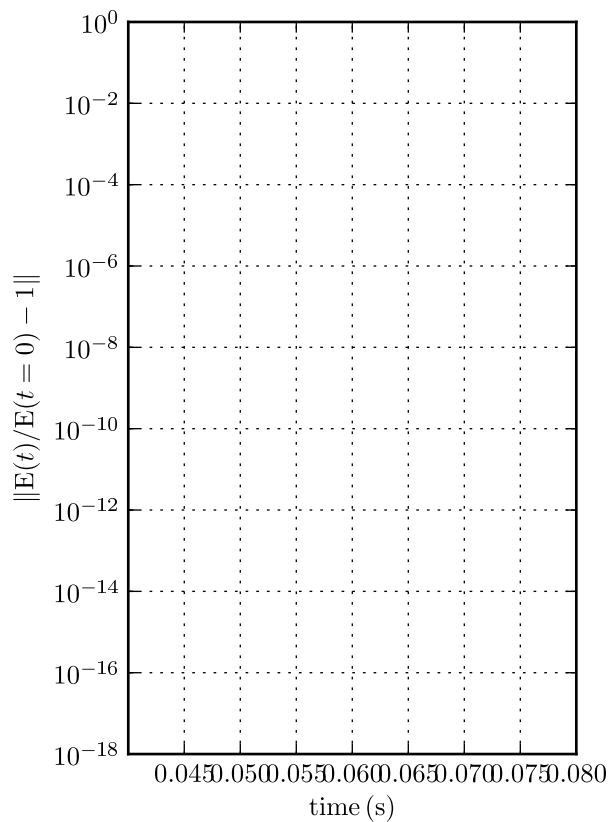
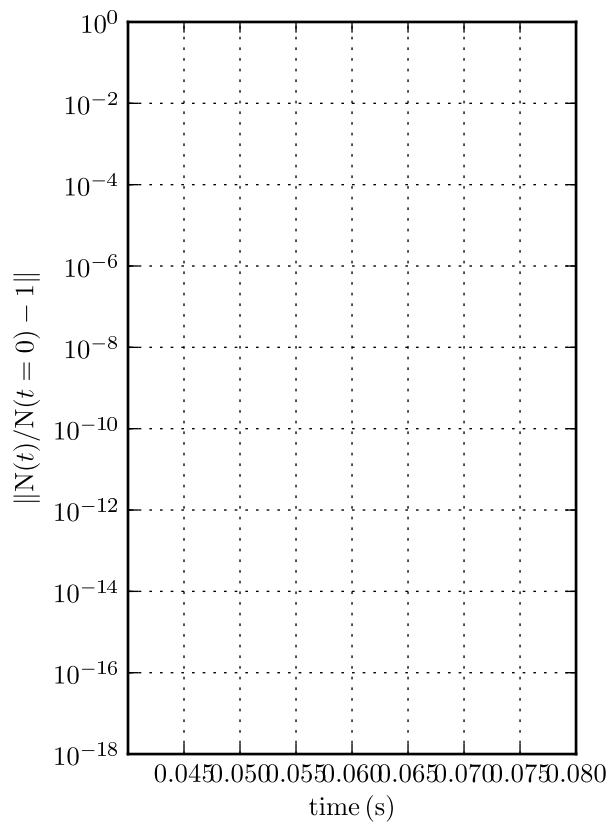
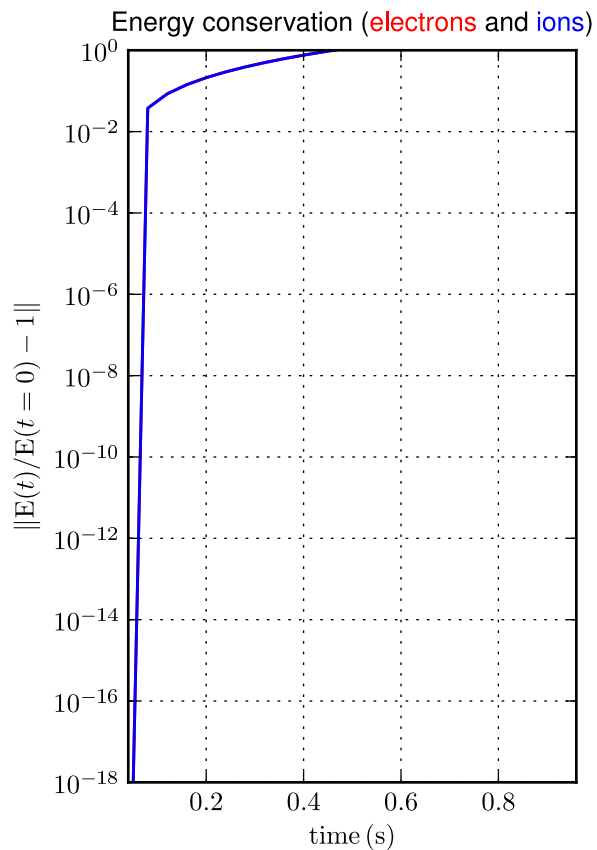
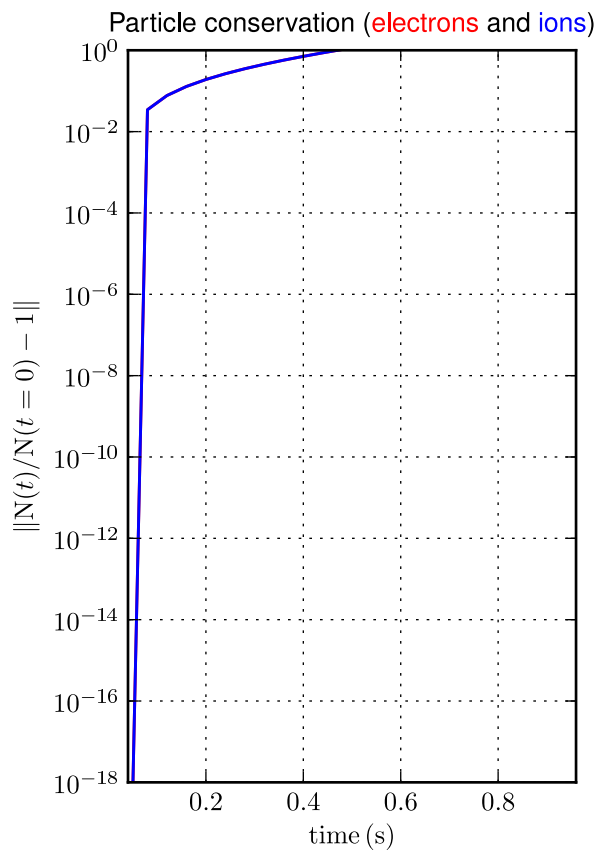




### Part. & Energy conservation

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

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

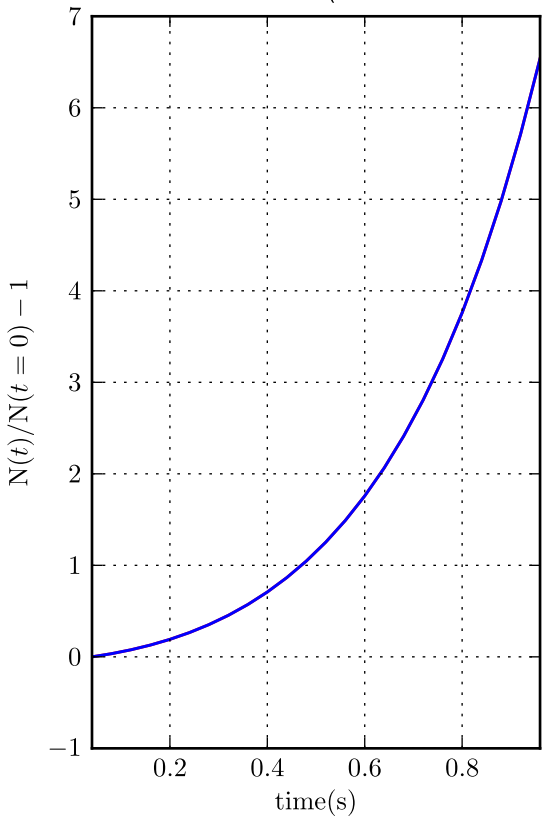


### Part. & Energy conservation

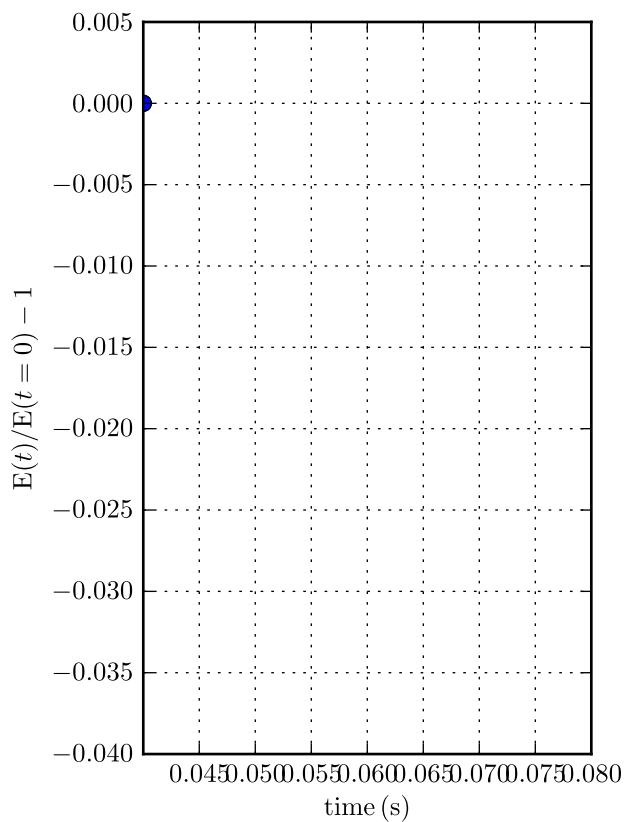
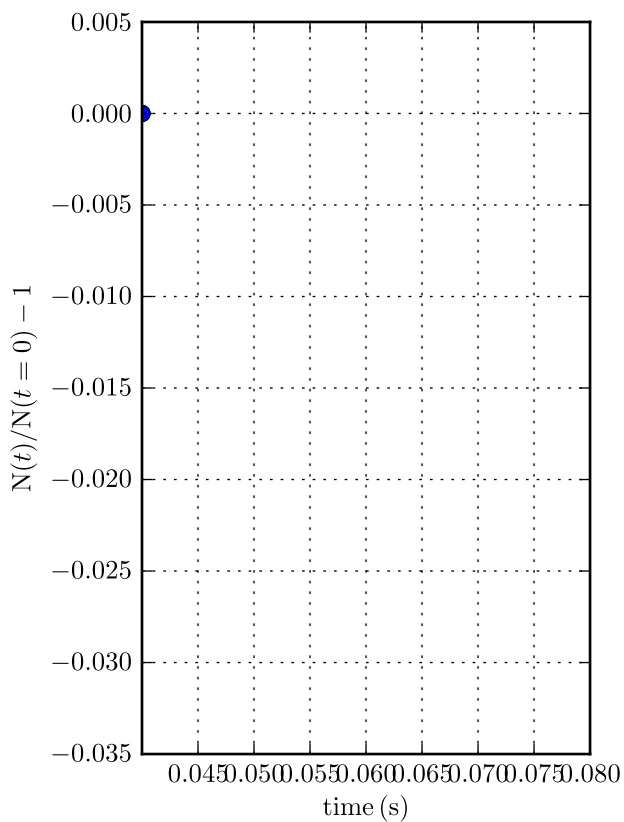
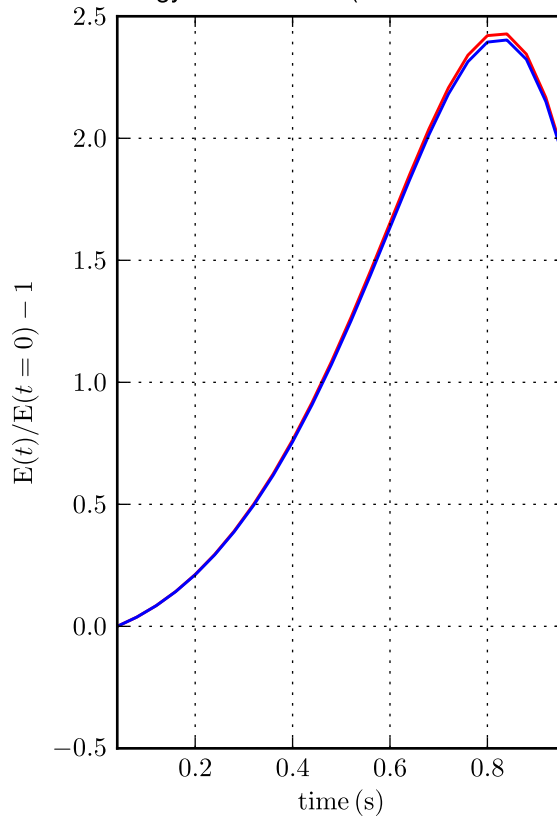
[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

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

Particle conservation (electrons and ions)



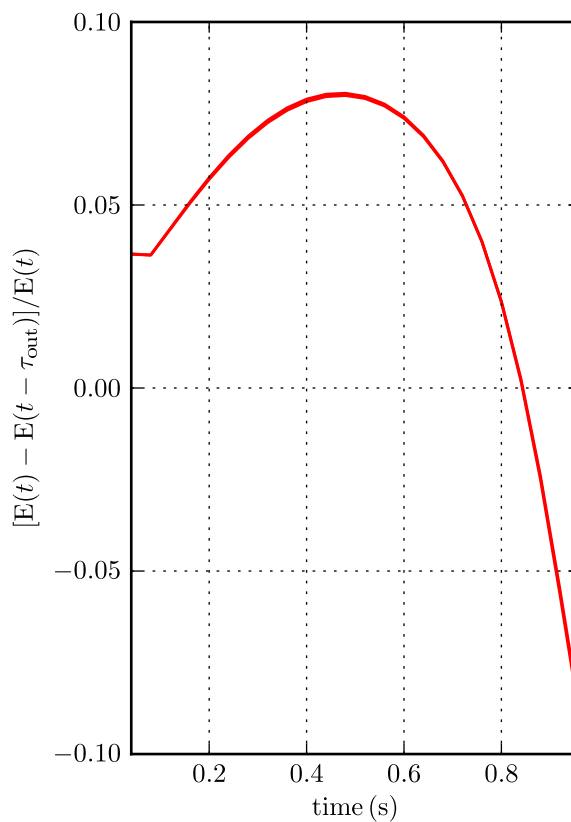
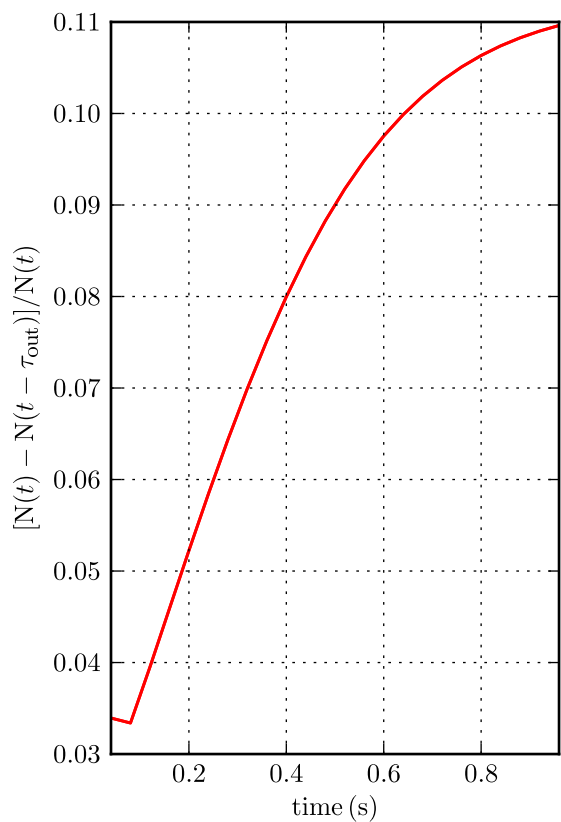
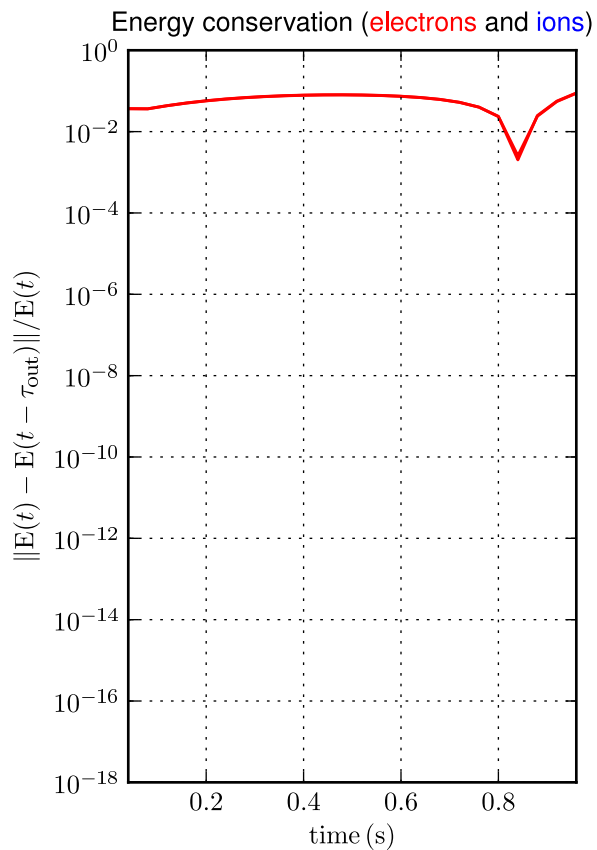
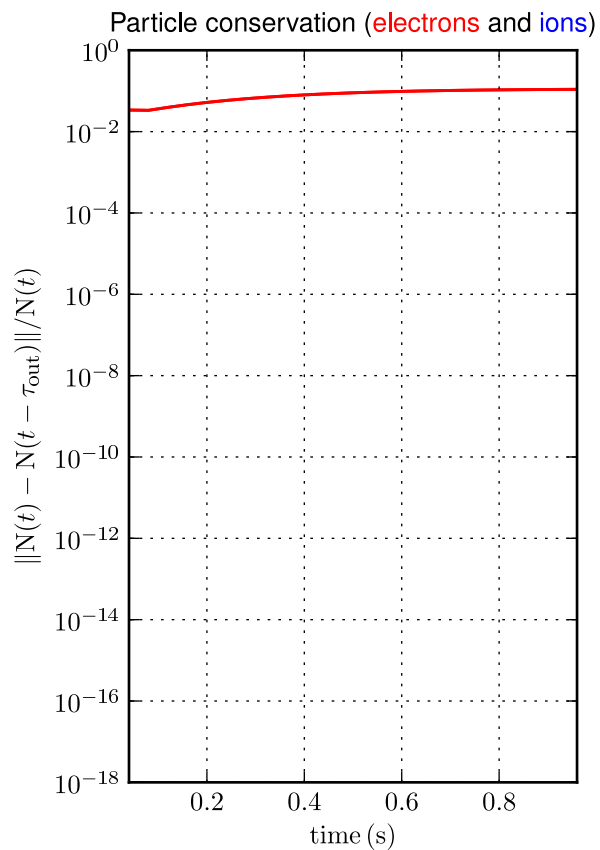
Energy conservation (electrons and ions)



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

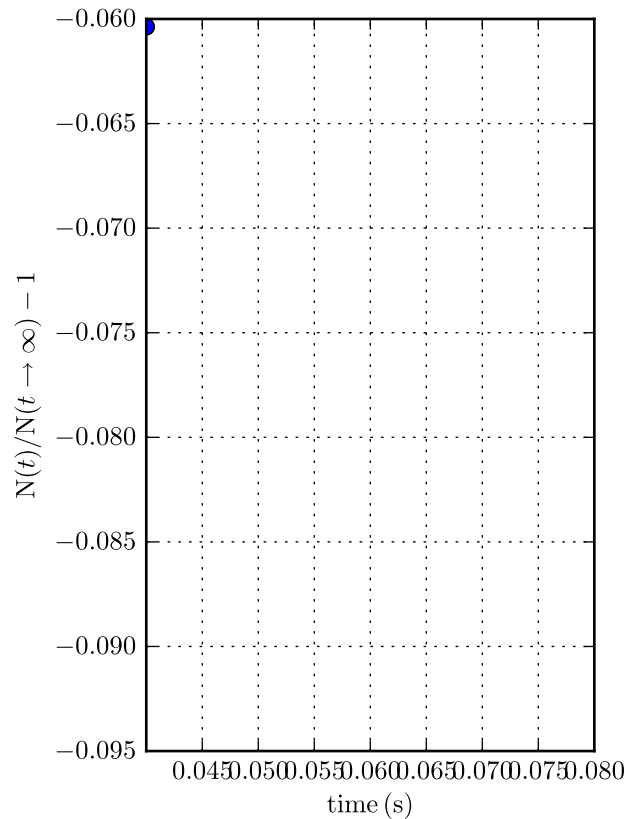
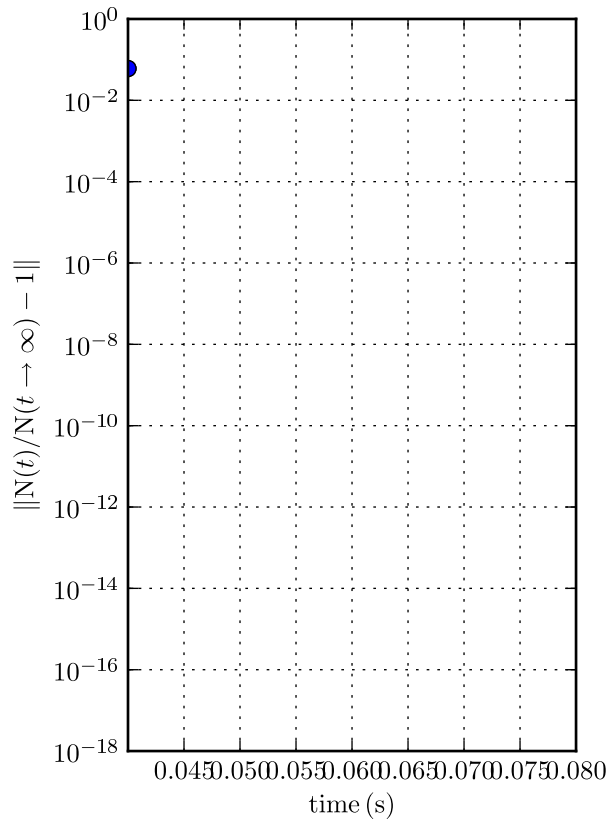
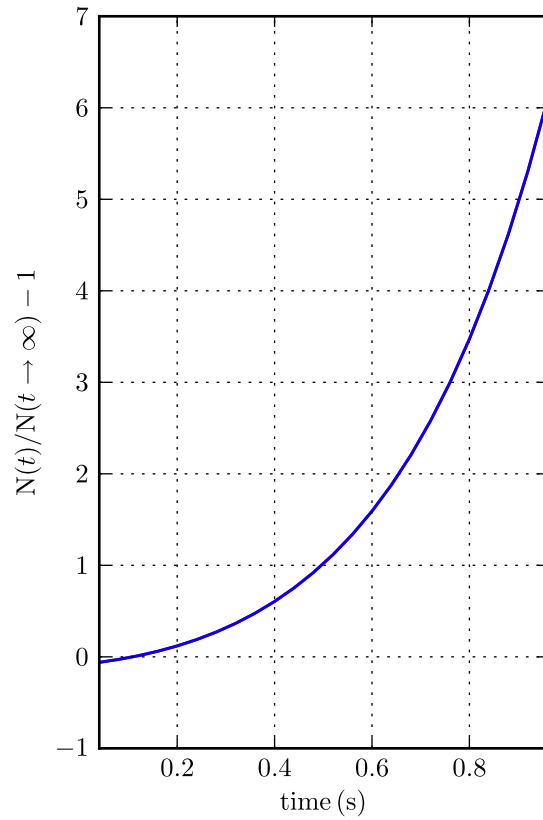
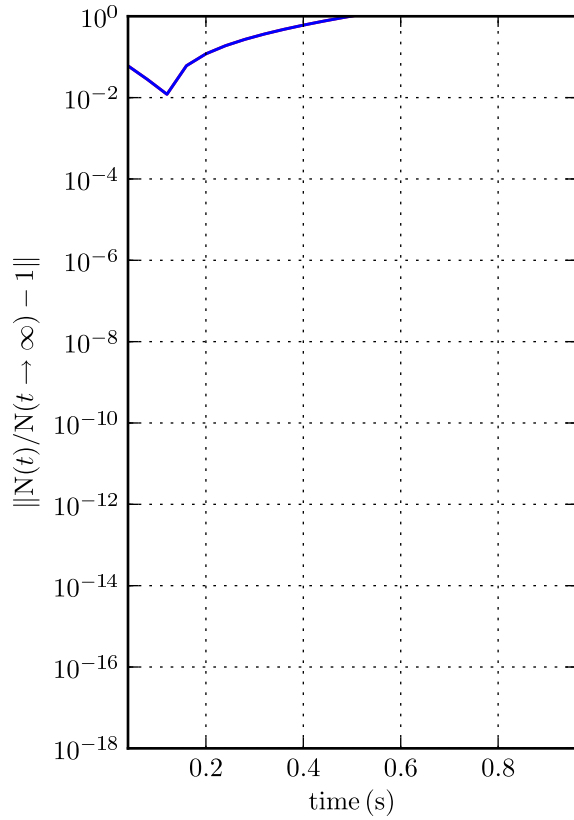
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 101$ ]

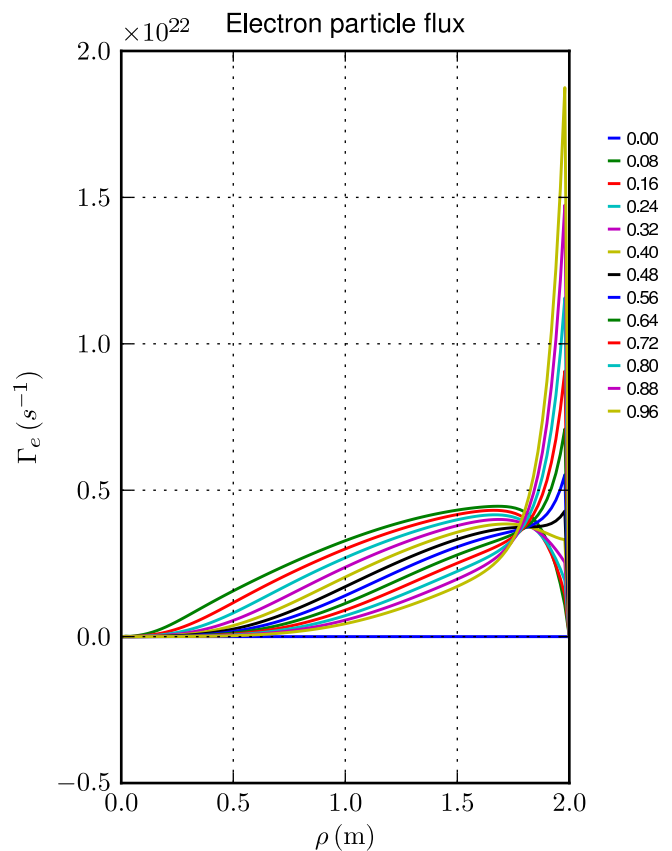
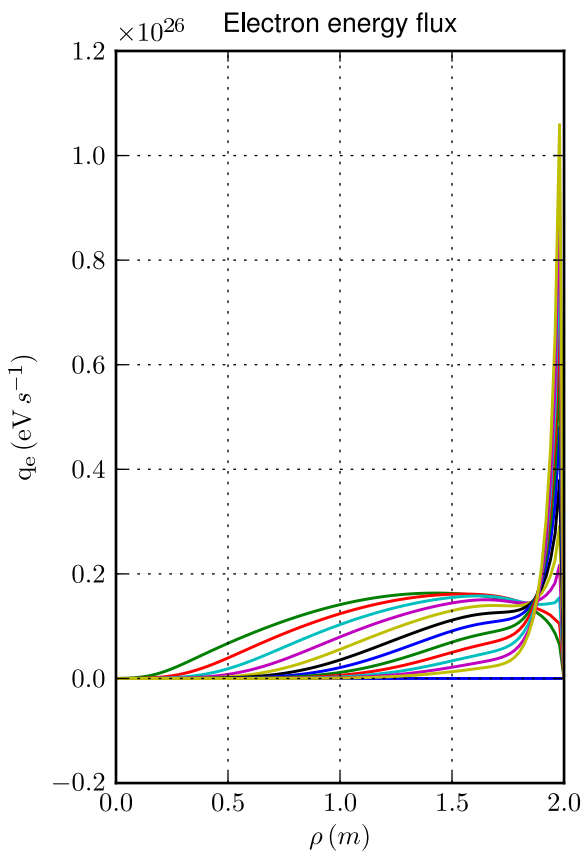
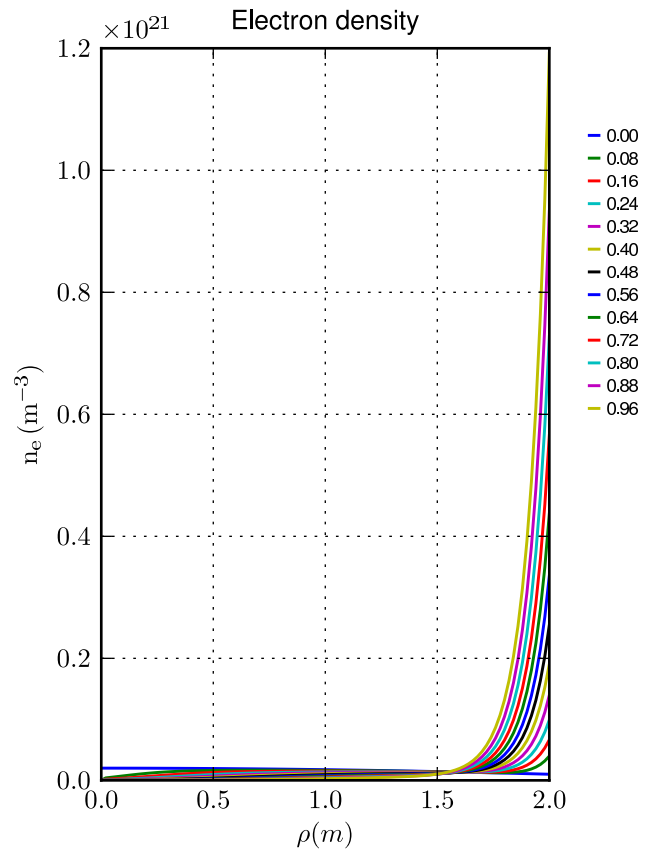
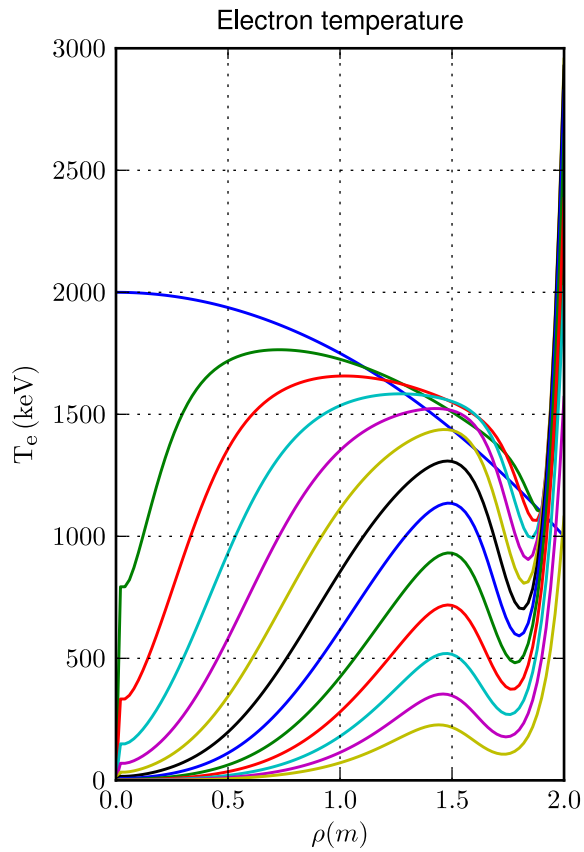
Comparison with asymptotic solution (electrons and ions); total time and zoom over time



### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: total simulation time/10

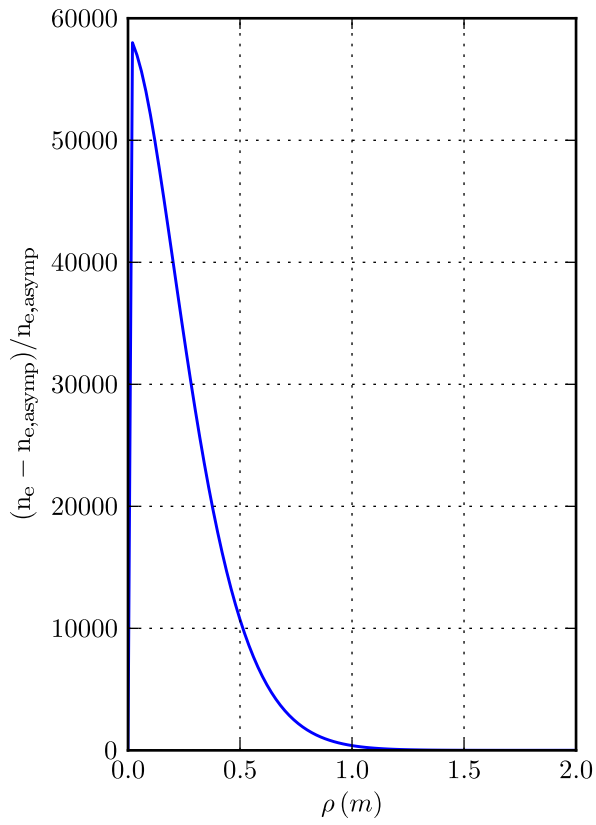


### Profiles

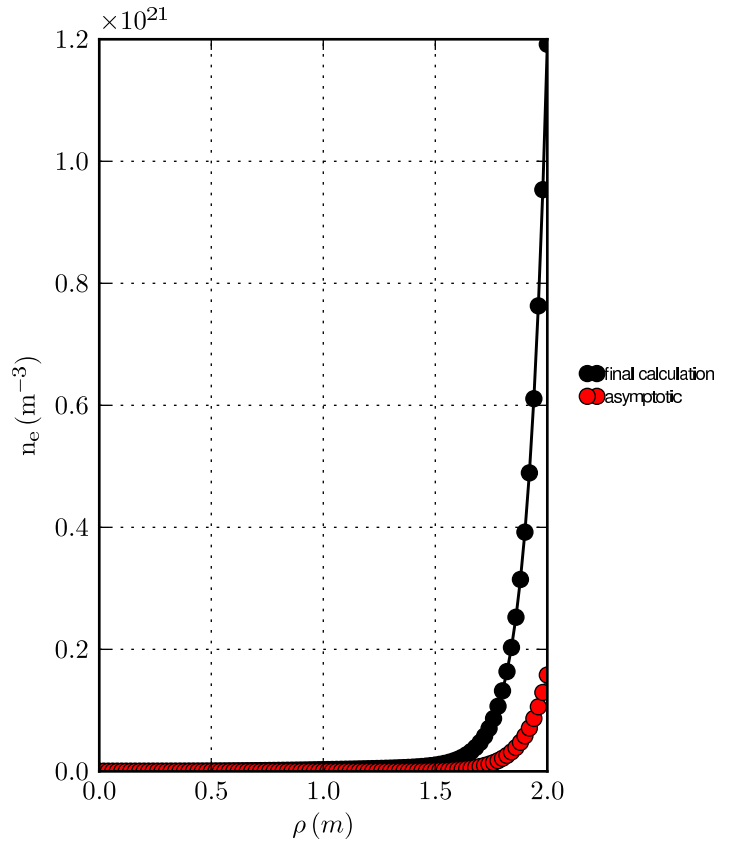
[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Comparison with asymptotic solution

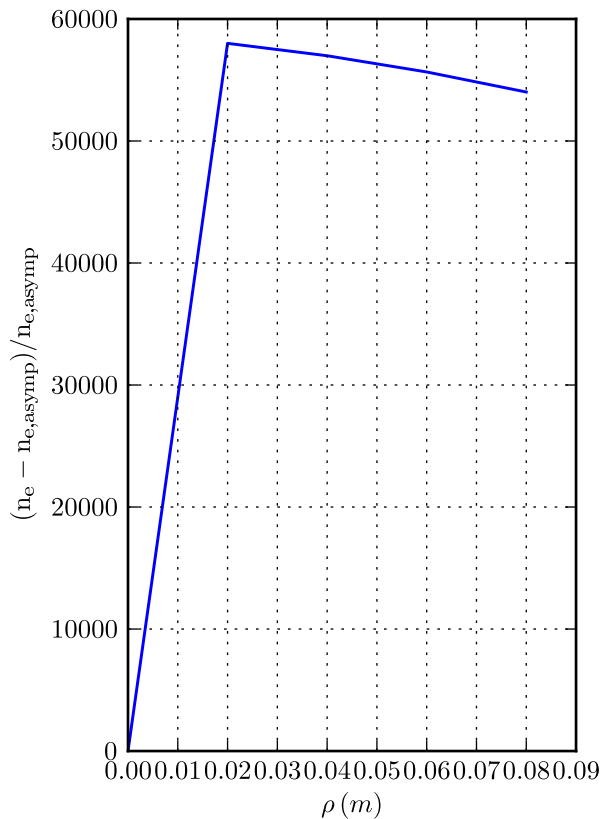
Electron density relative error



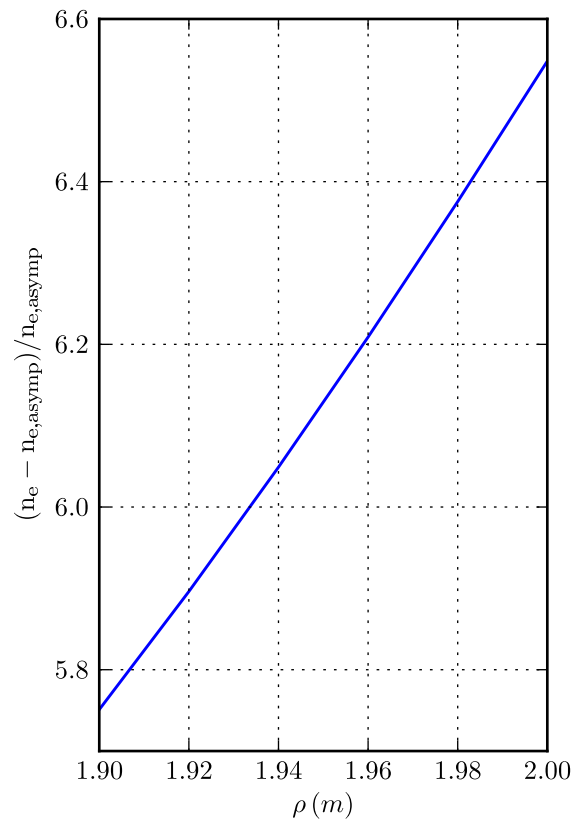
Electron density



Error: zoom over axis



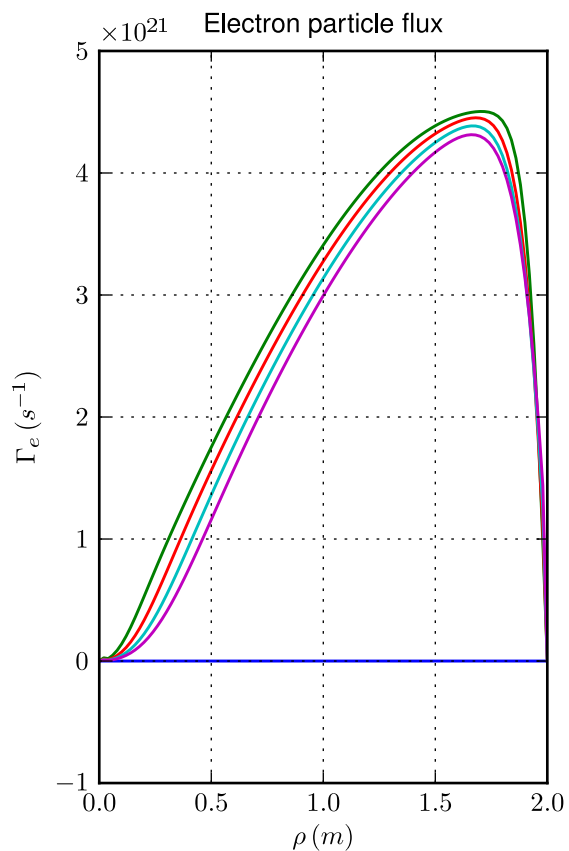
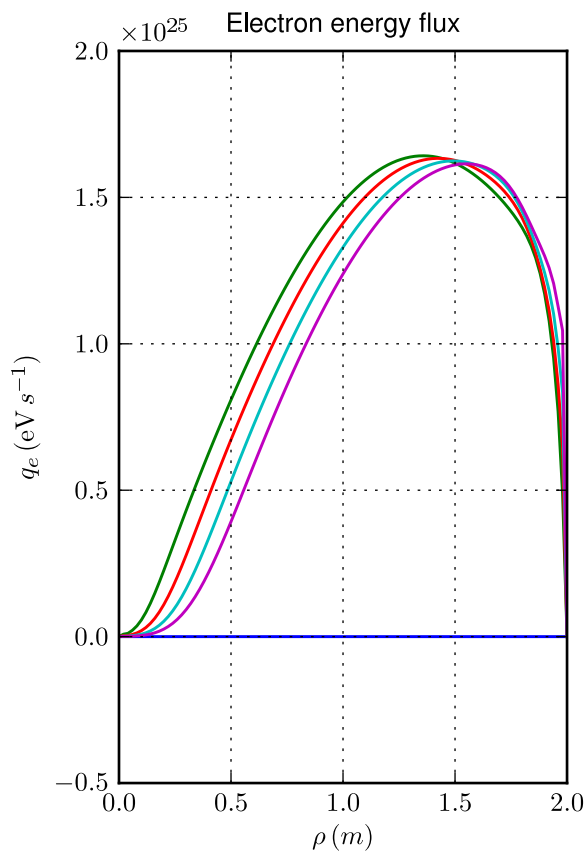
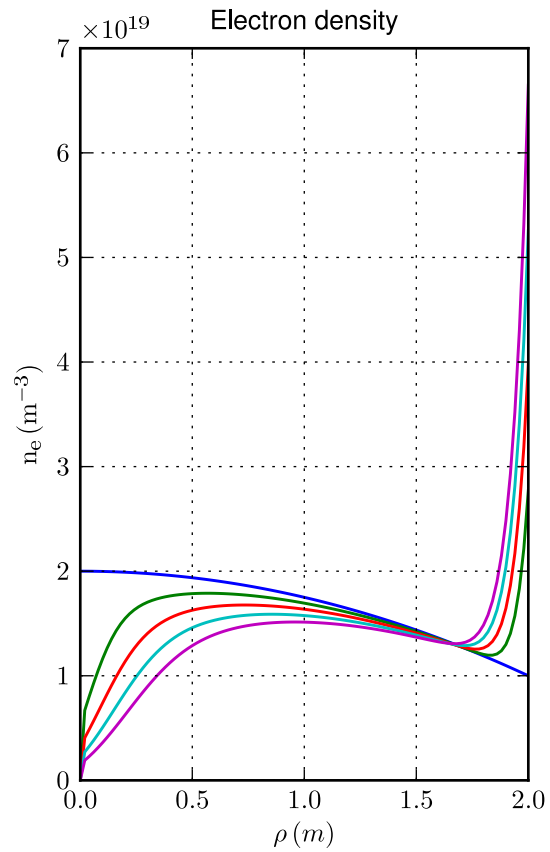
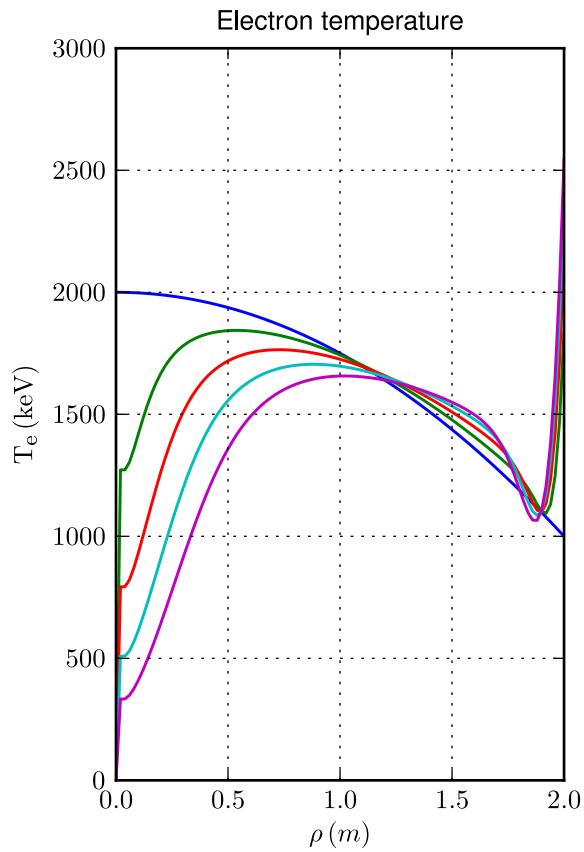
Error: zoom over edge



### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$

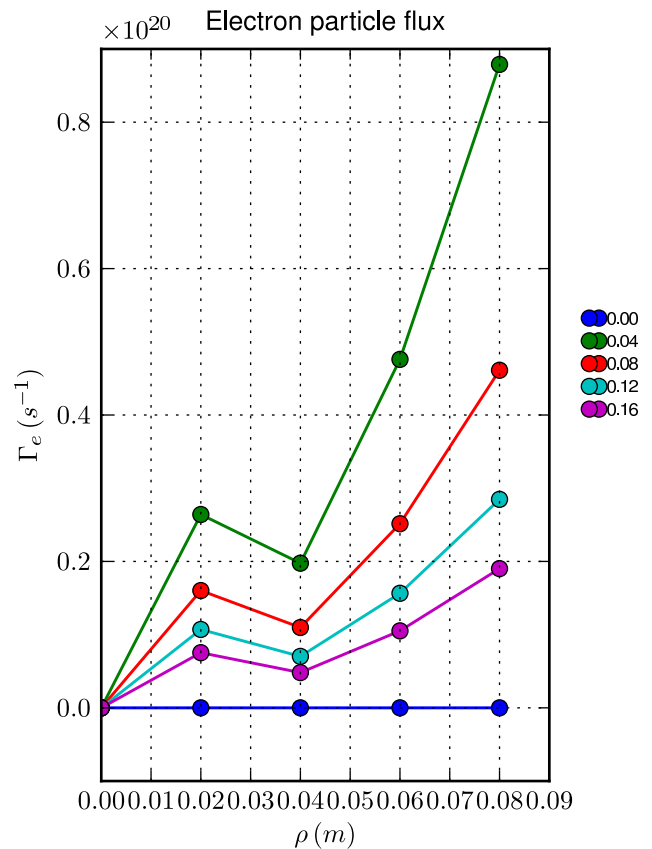
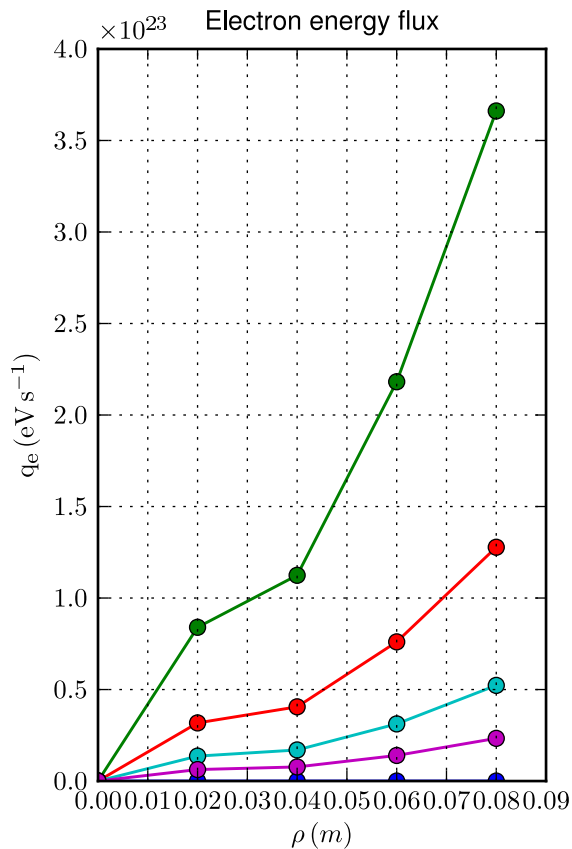
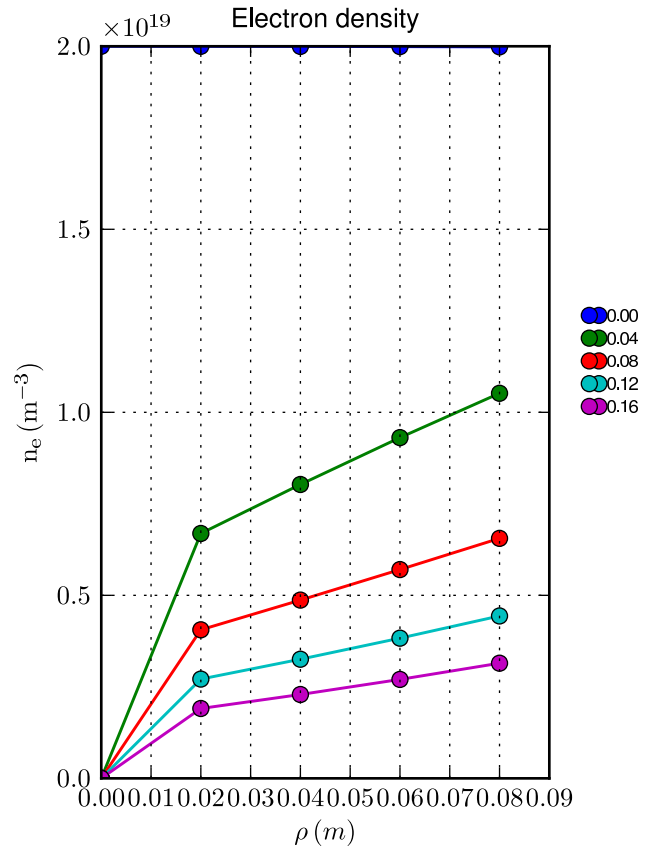
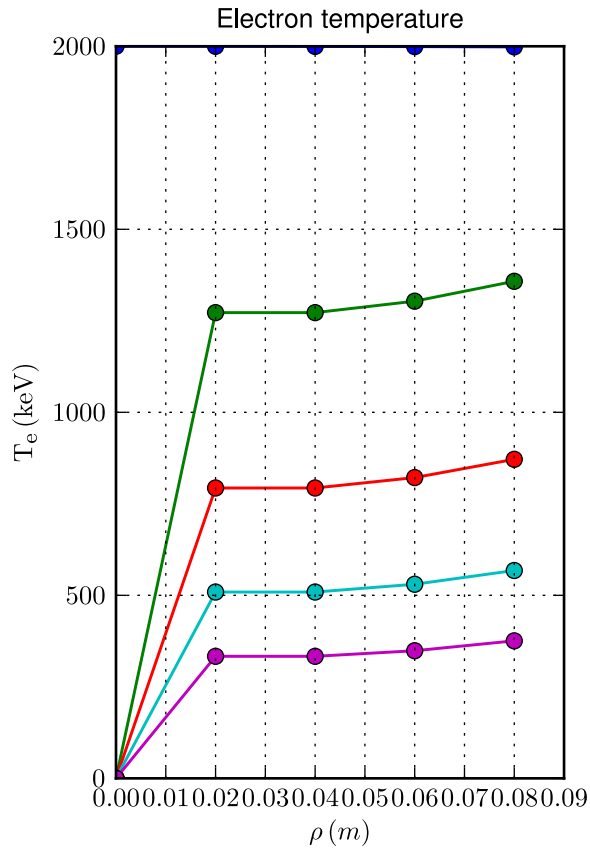


### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over magnetic axis

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



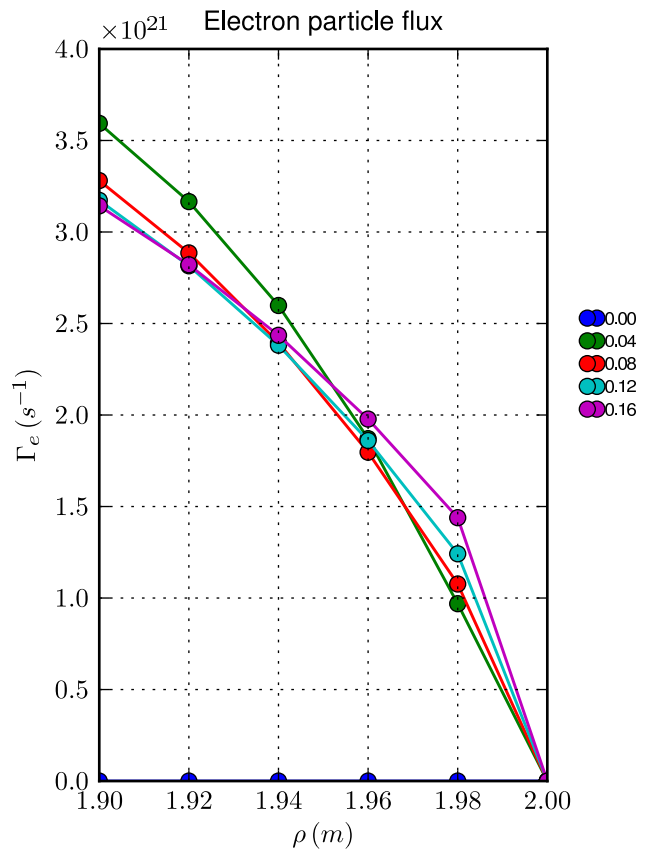
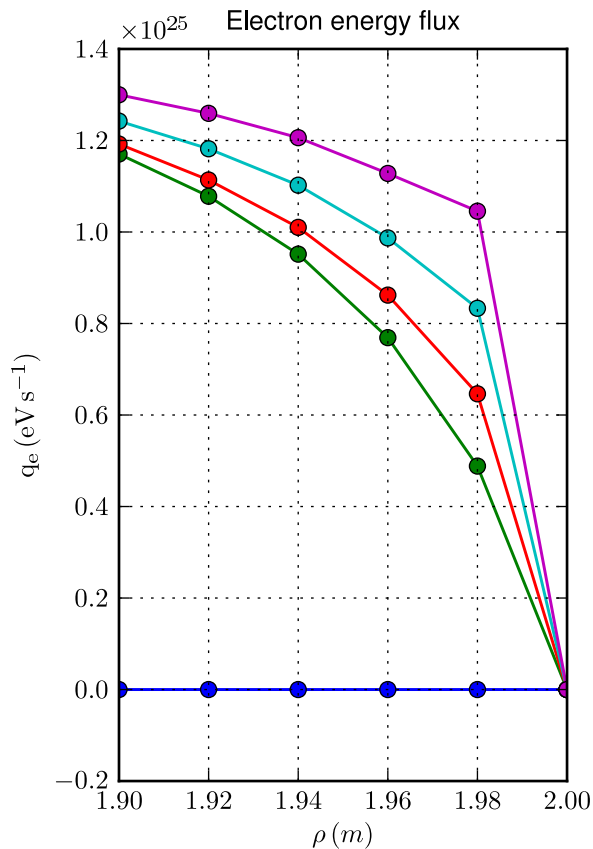
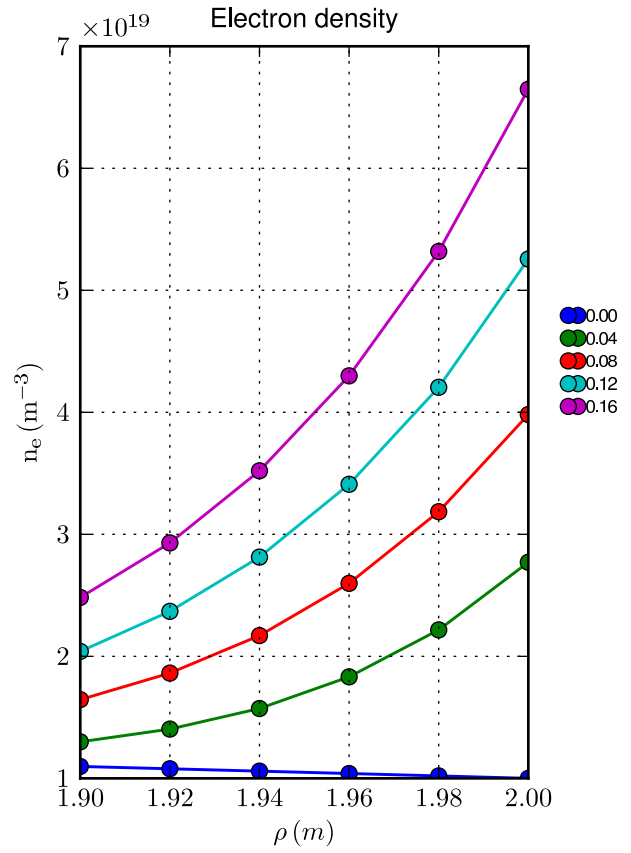
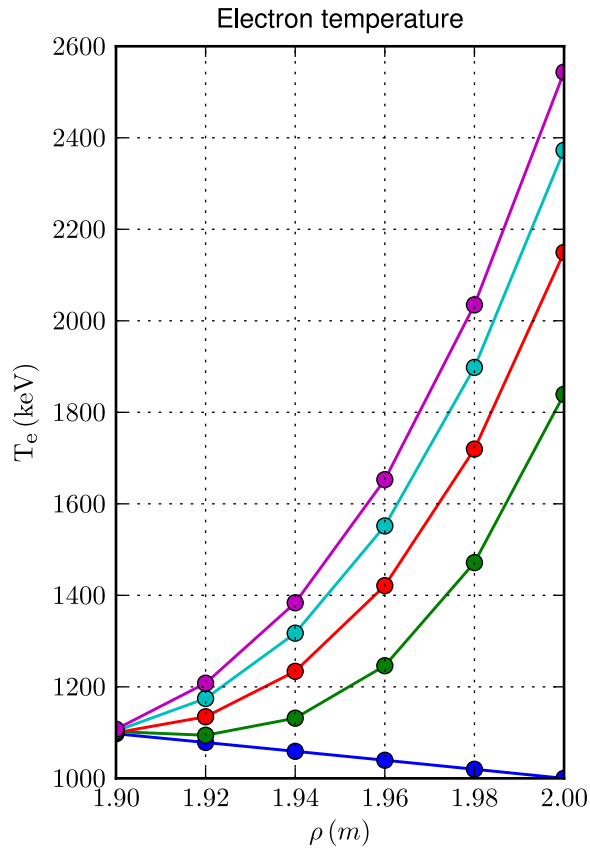


### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge

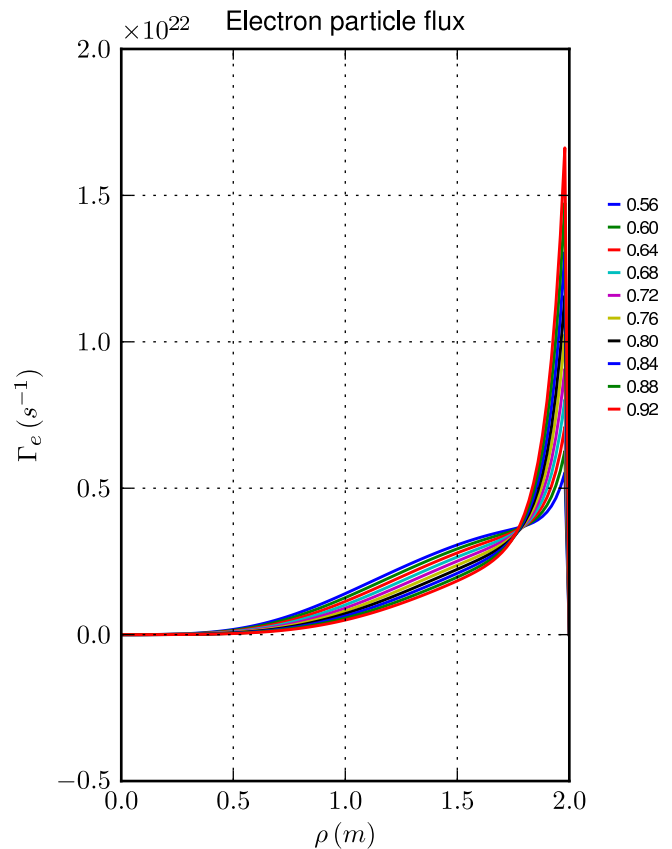
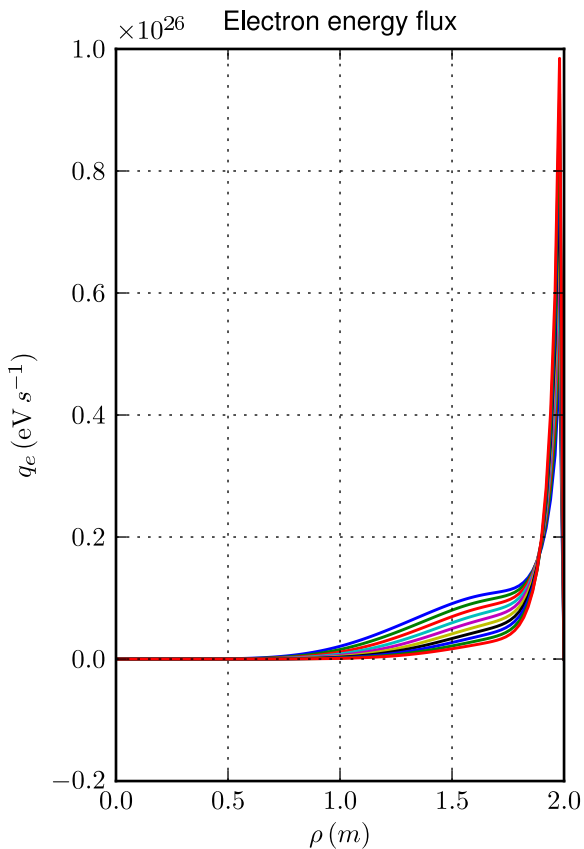
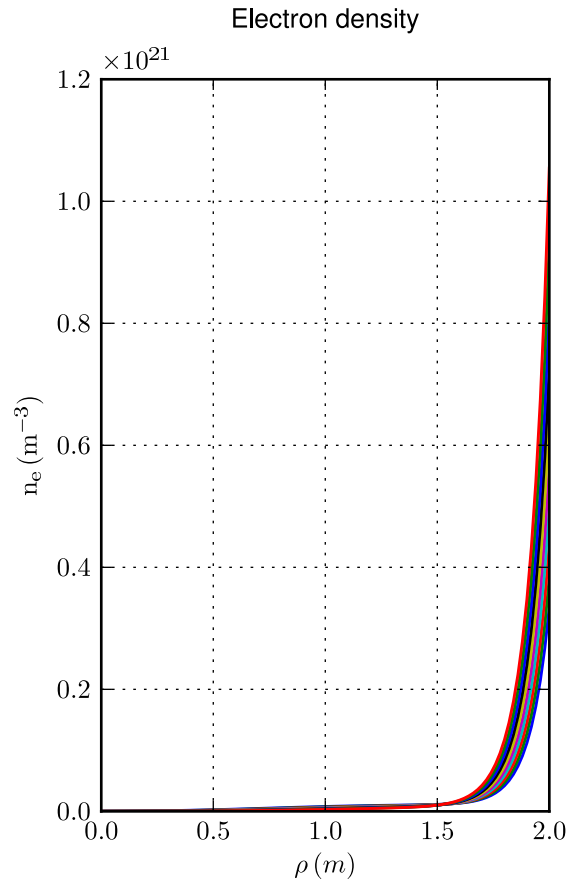
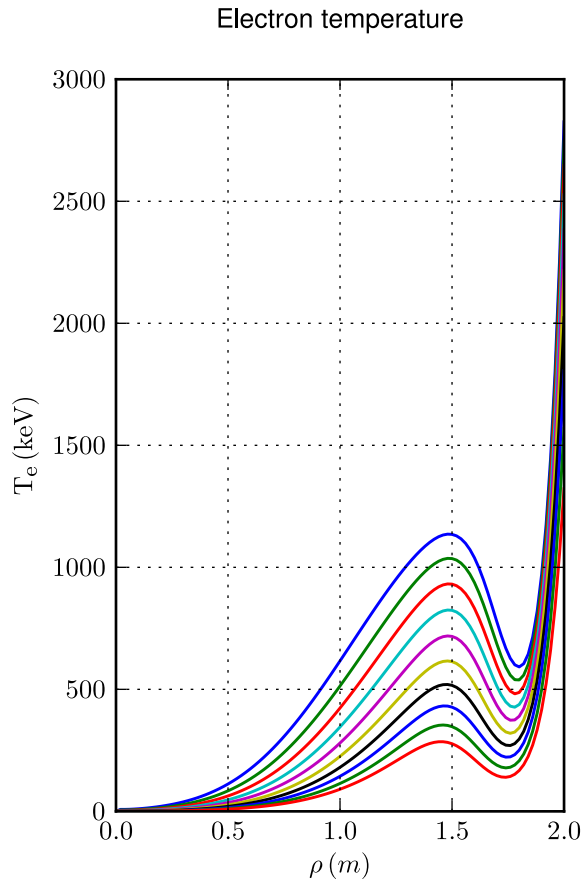
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

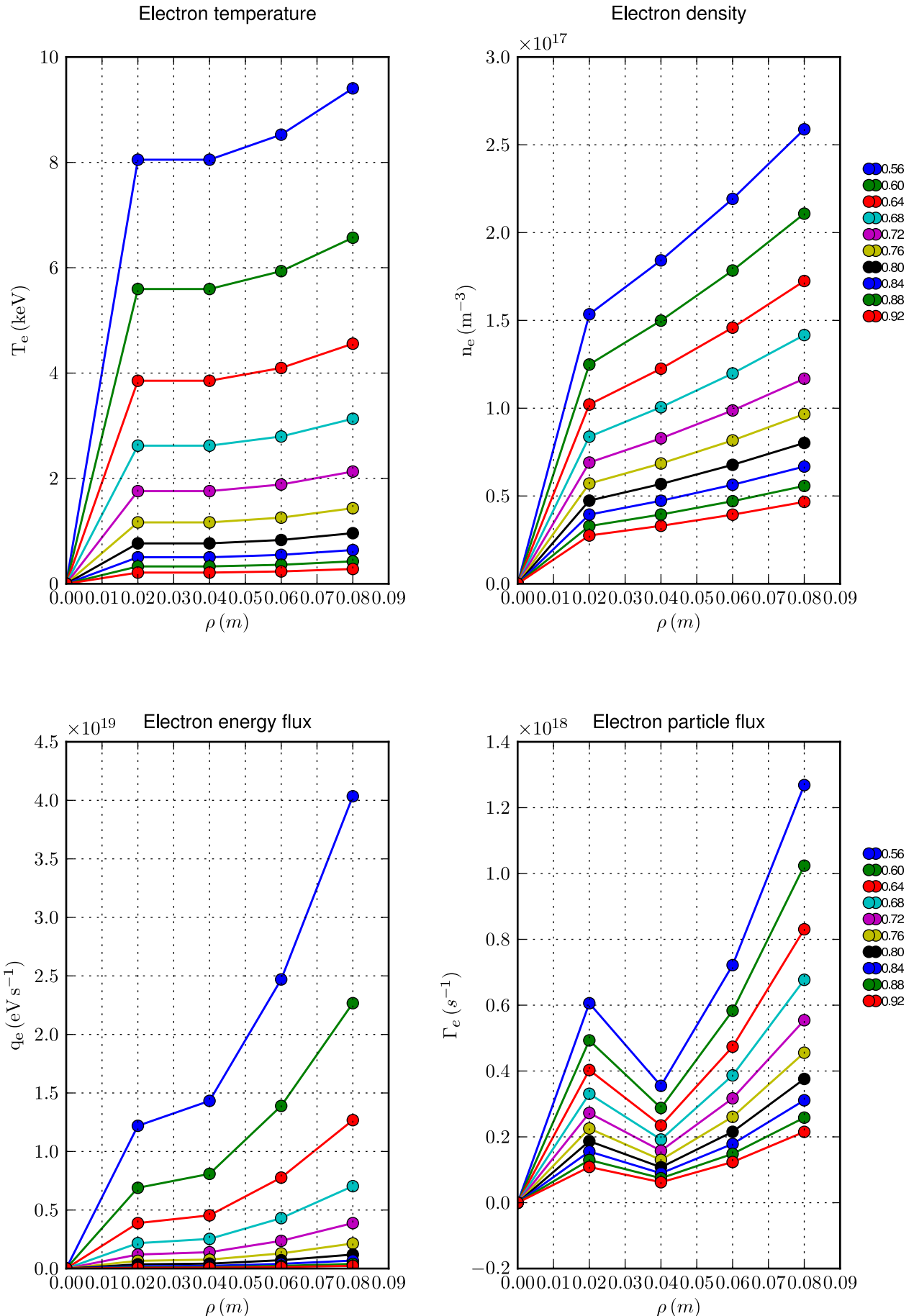
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

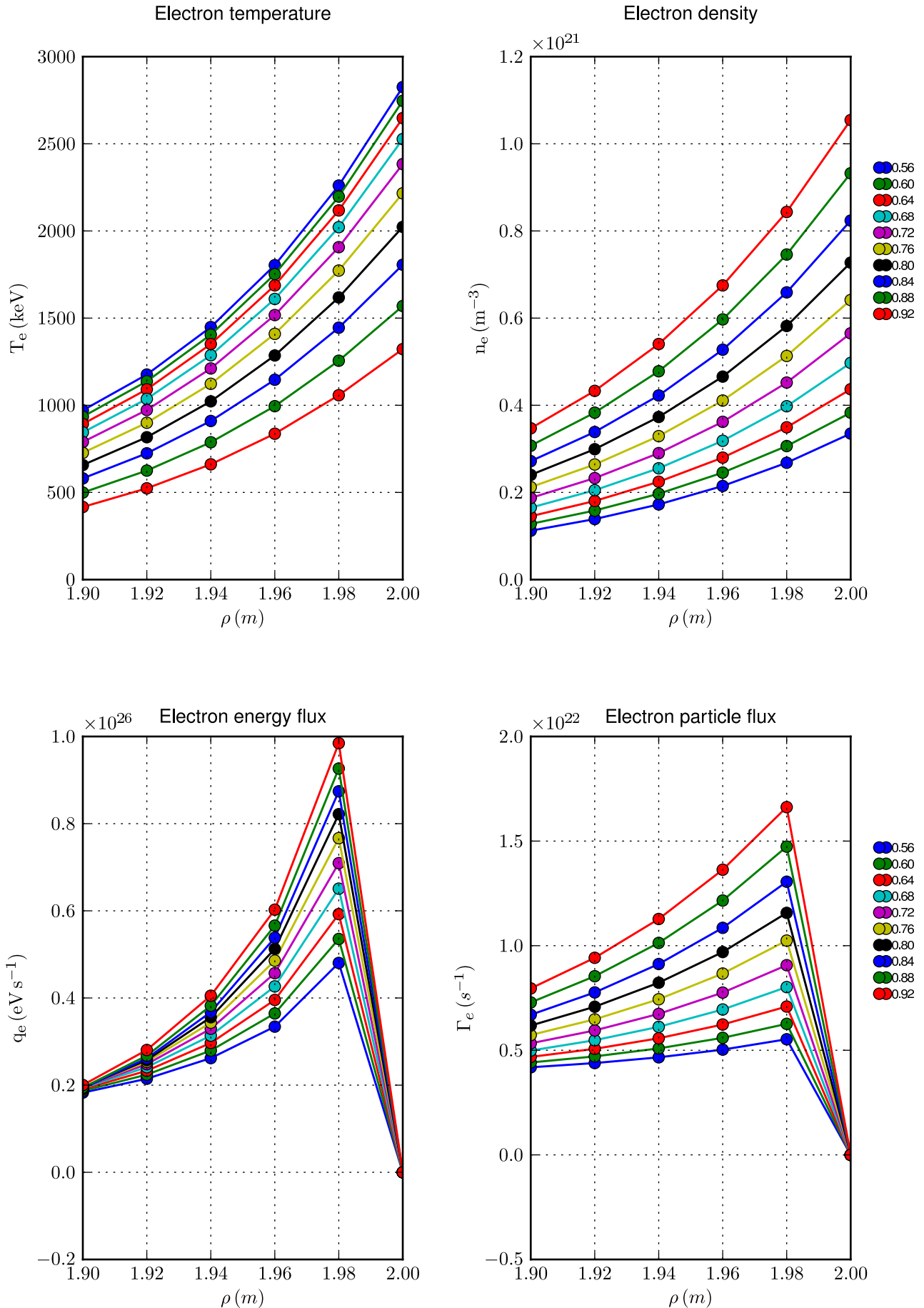
Spatial zoom over magnetic axis; time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

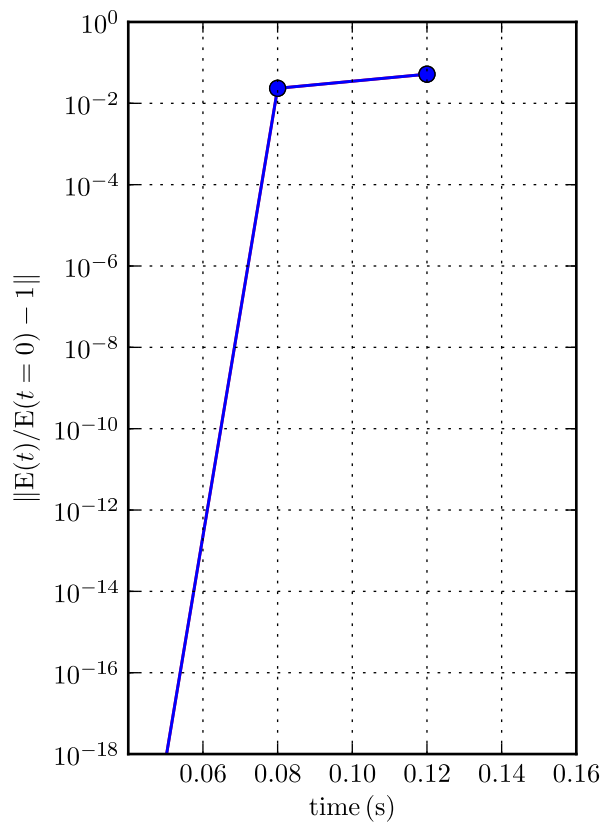
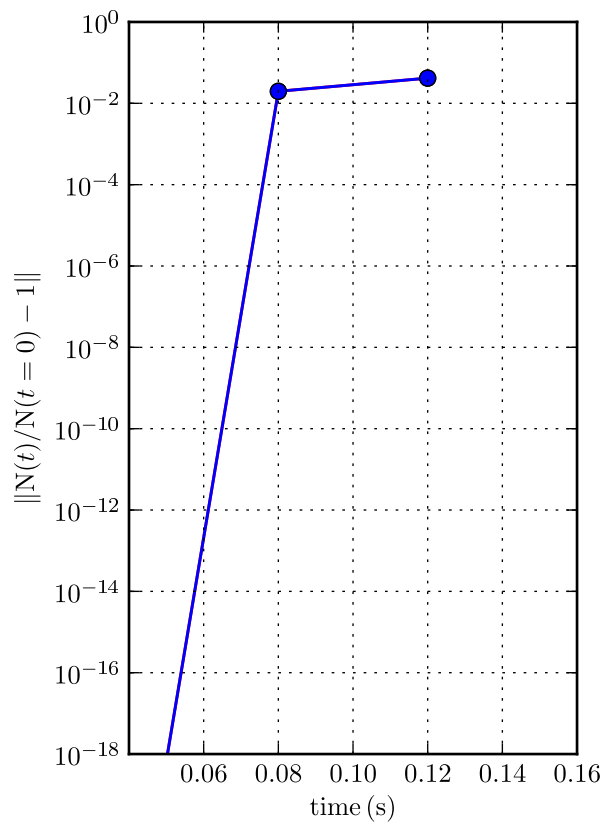
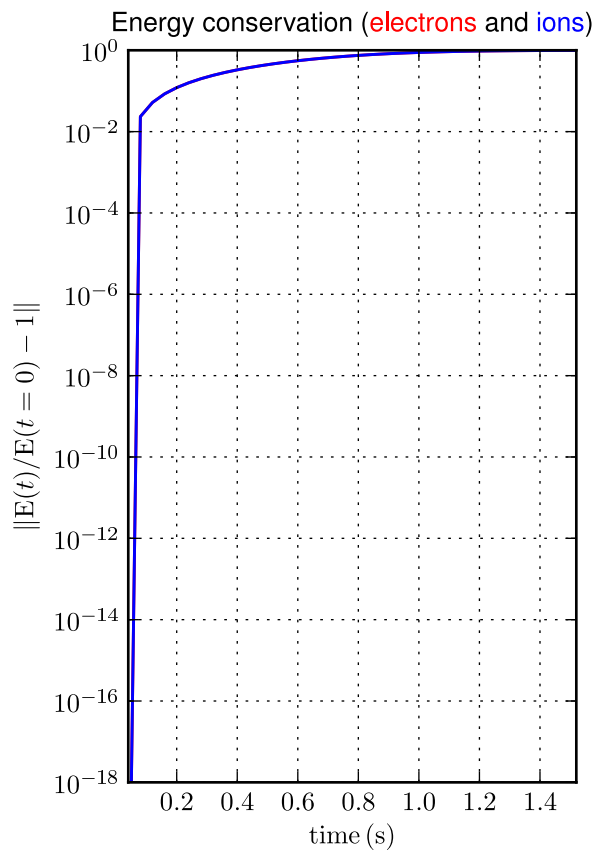
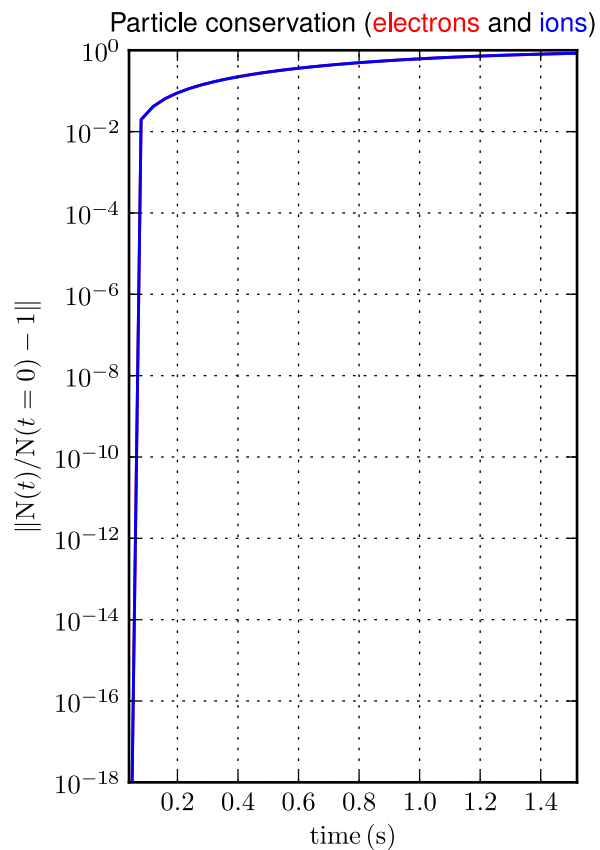
Spatial zoom over edge; time sampling: last 10 time slices



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

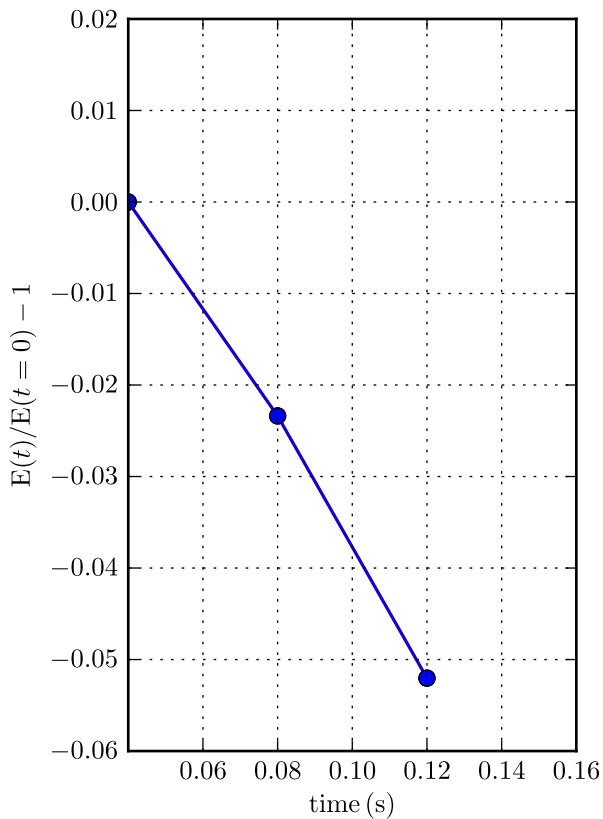
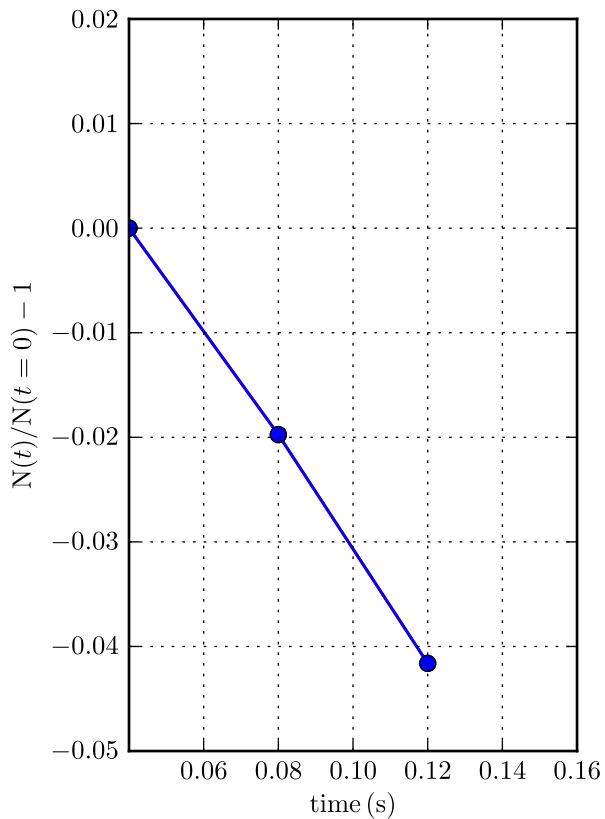
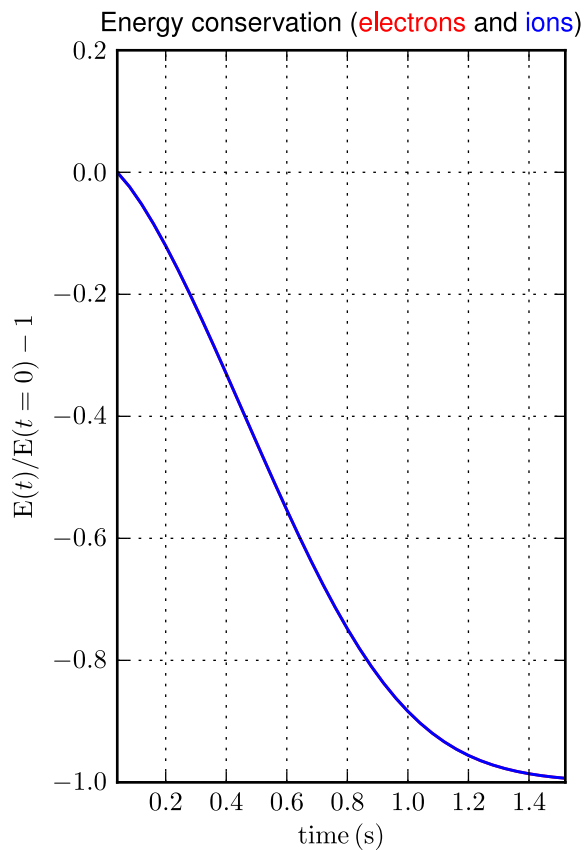
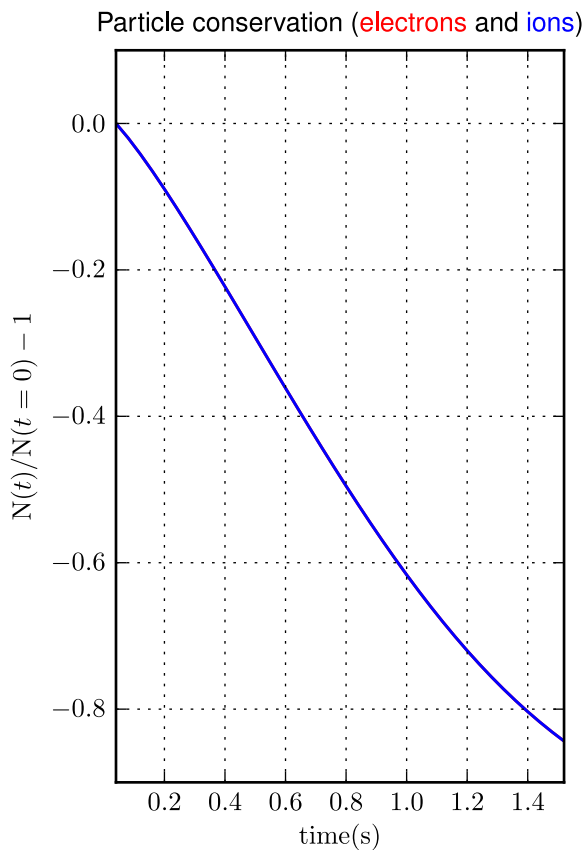
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

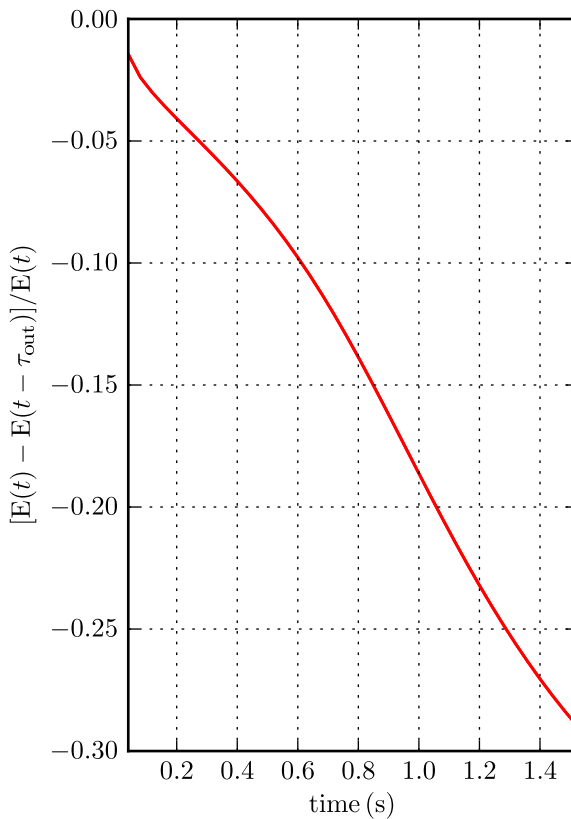
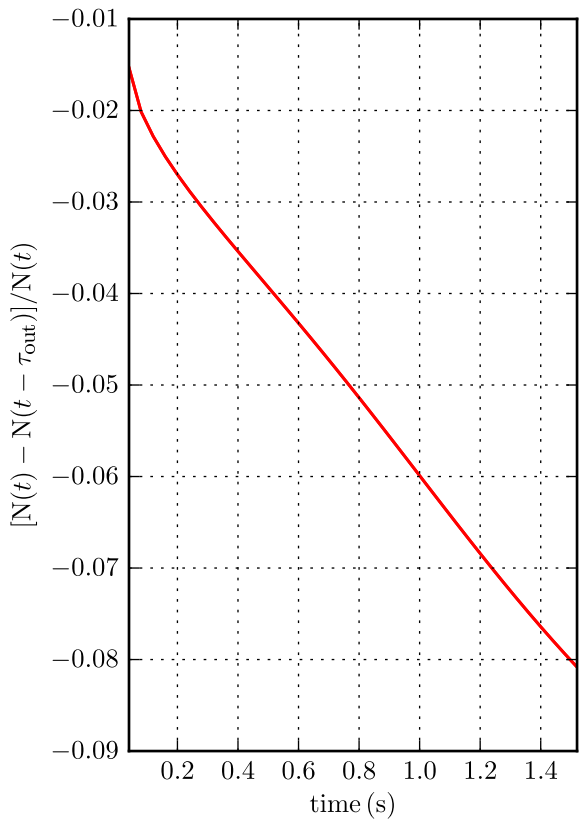
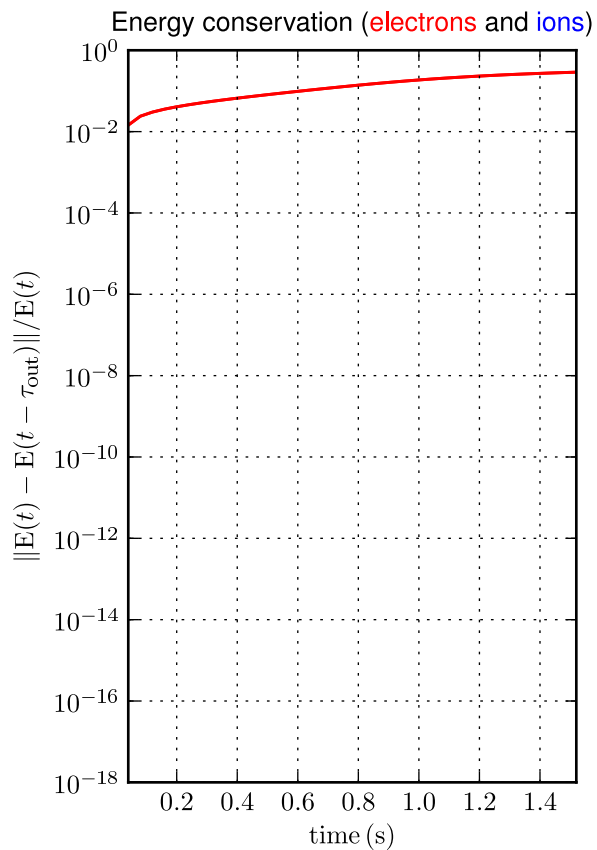
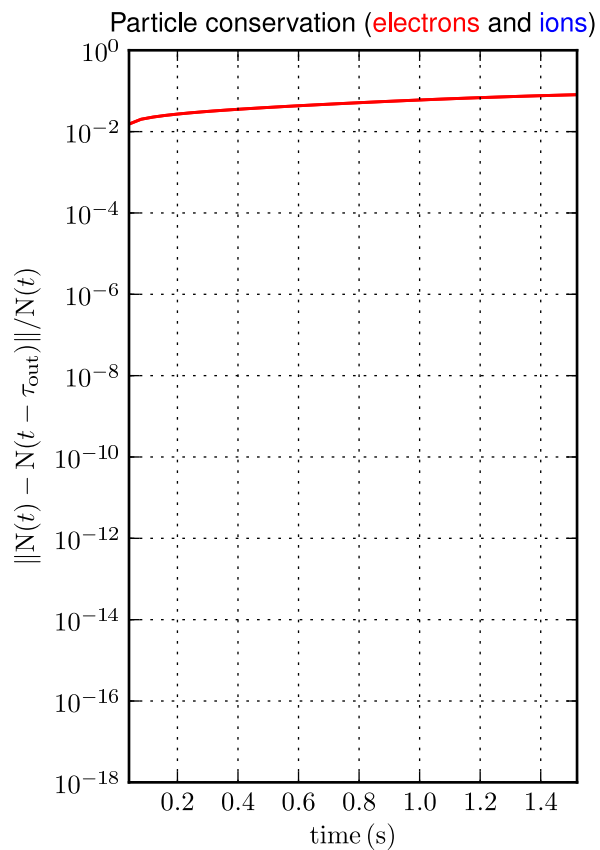
Comparison with initial solution - linear scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

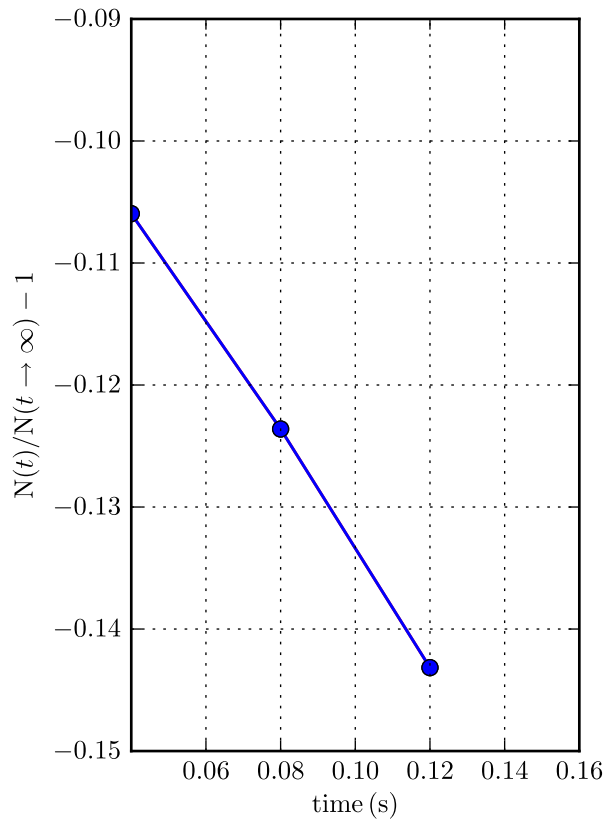
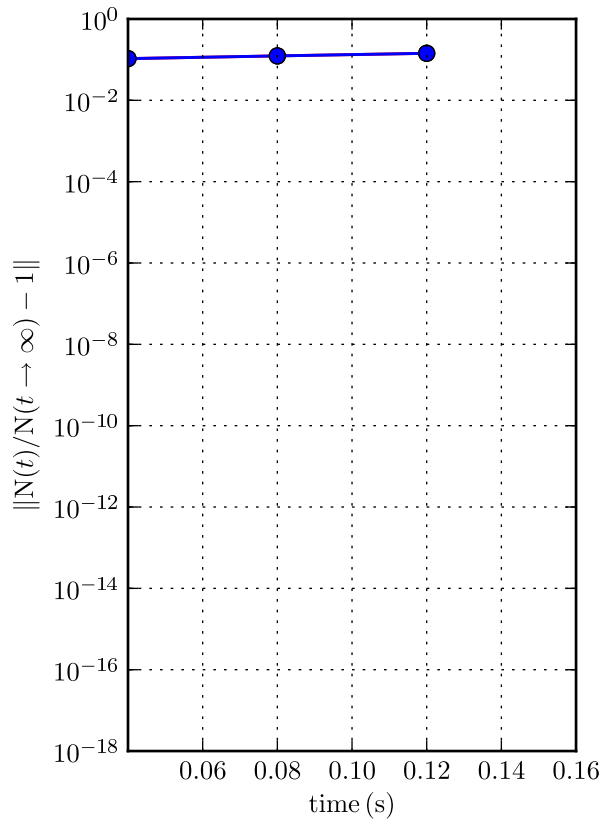
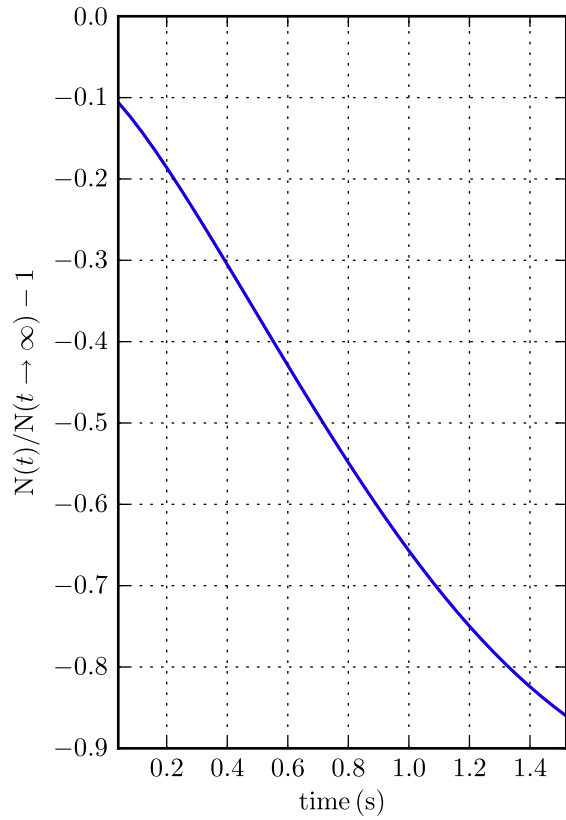
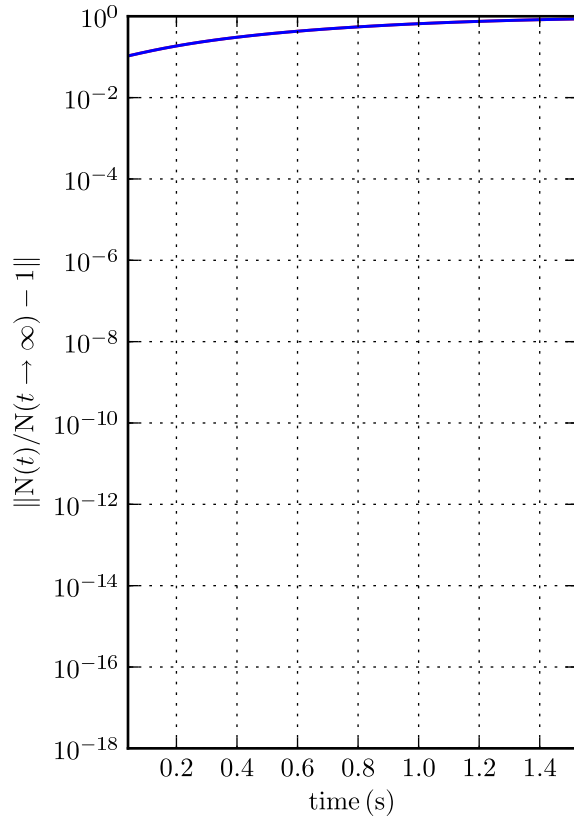
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Comparison with asymptotic solution (electrons and ions); total time and zoom over time

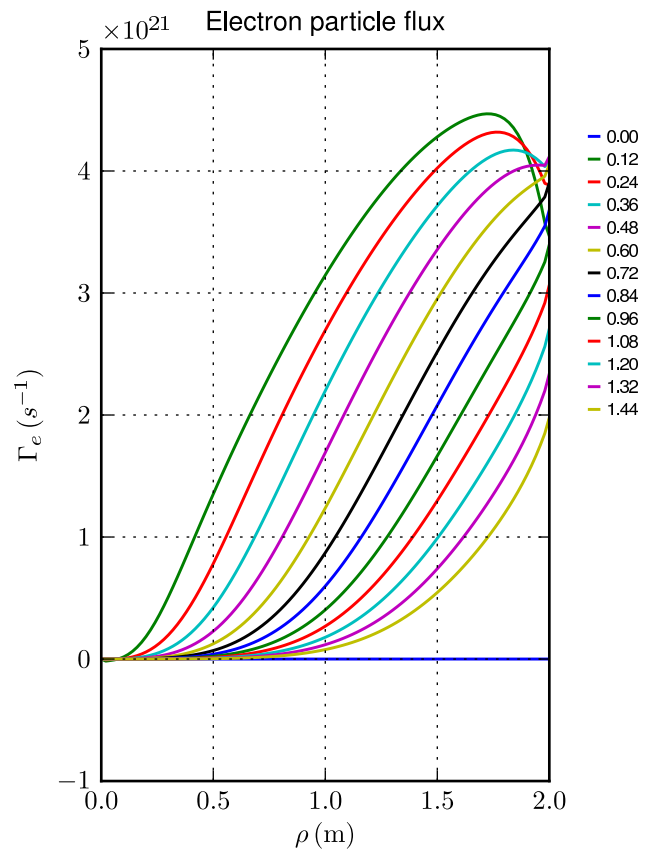
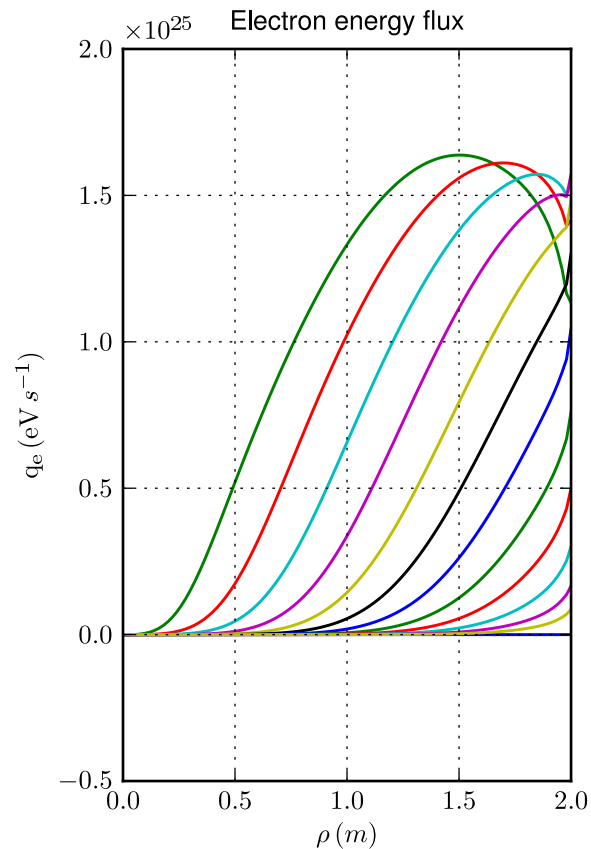
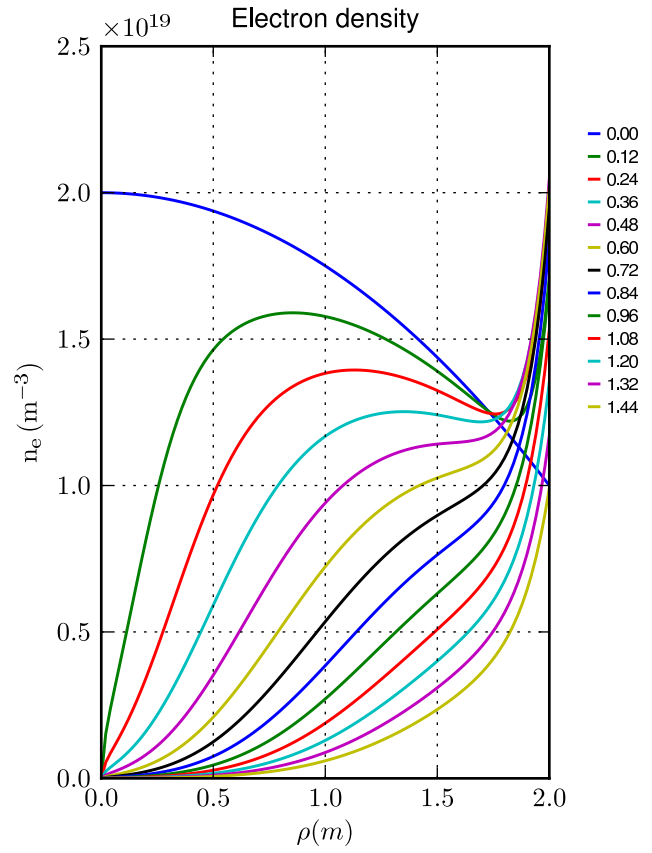
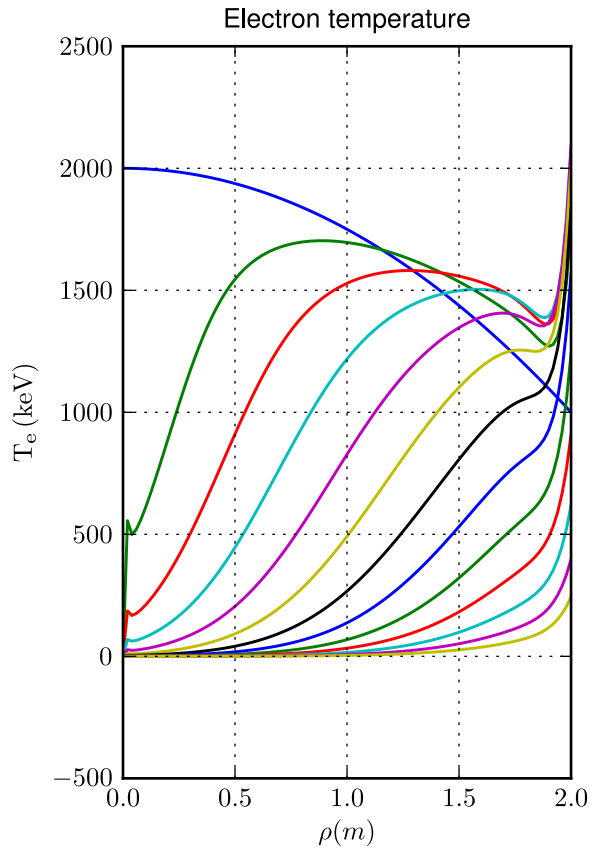




### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: total simulation time/10

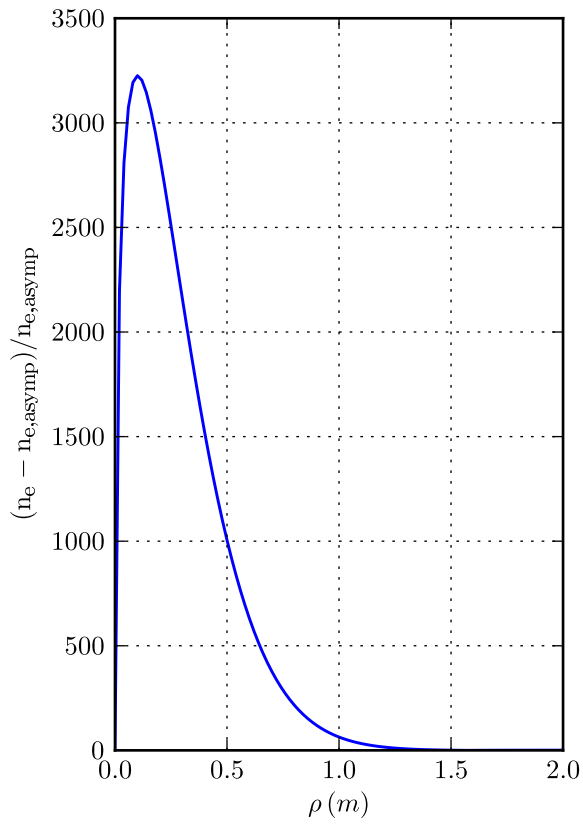


### Profiles

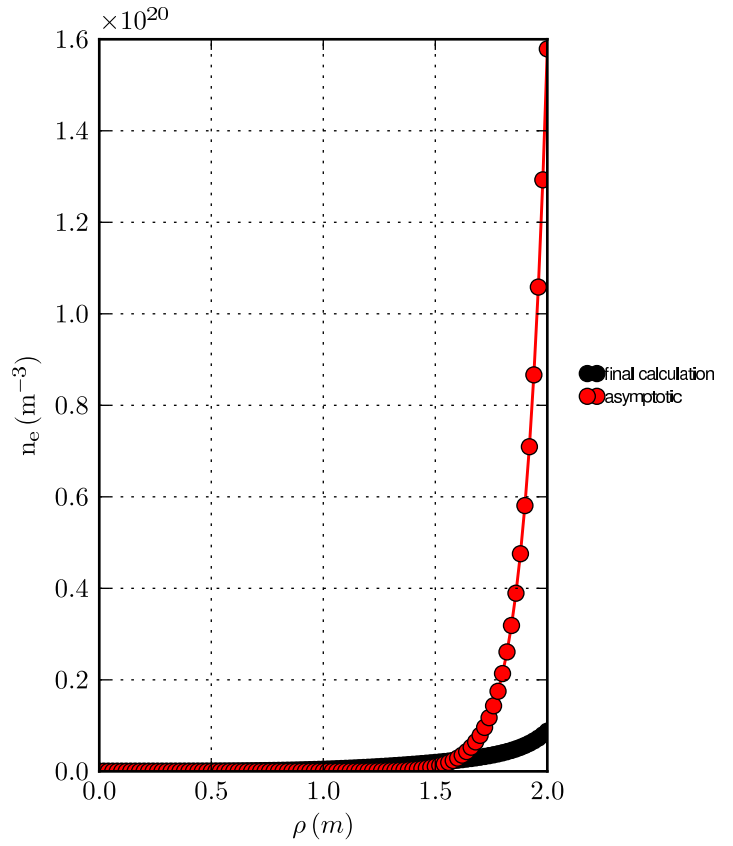
[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Comparison with asymptotic solution

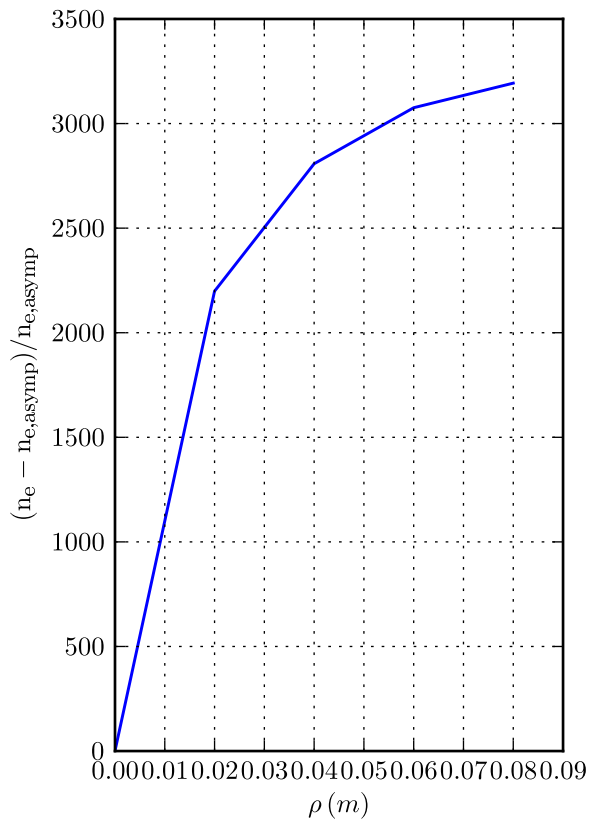
Electron density relative error



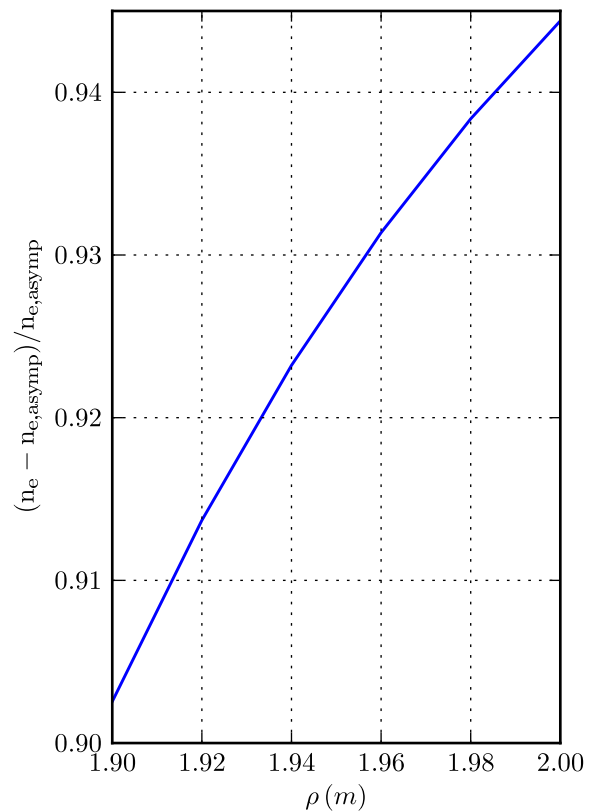
Electron density



Error: zoom over axis



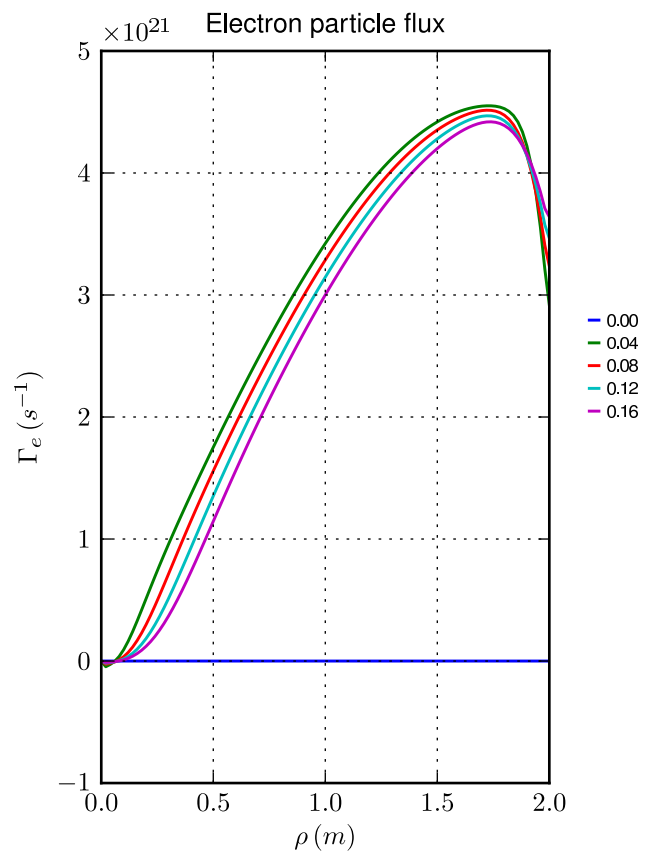
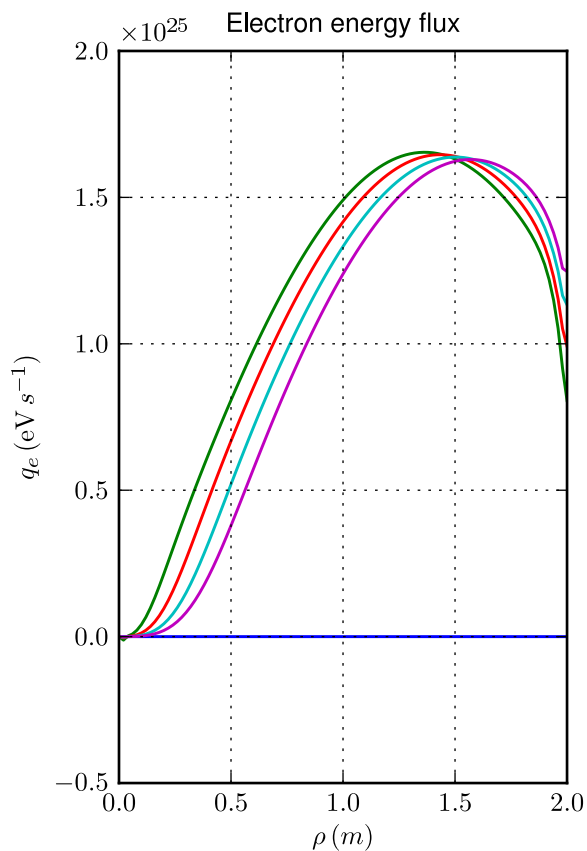
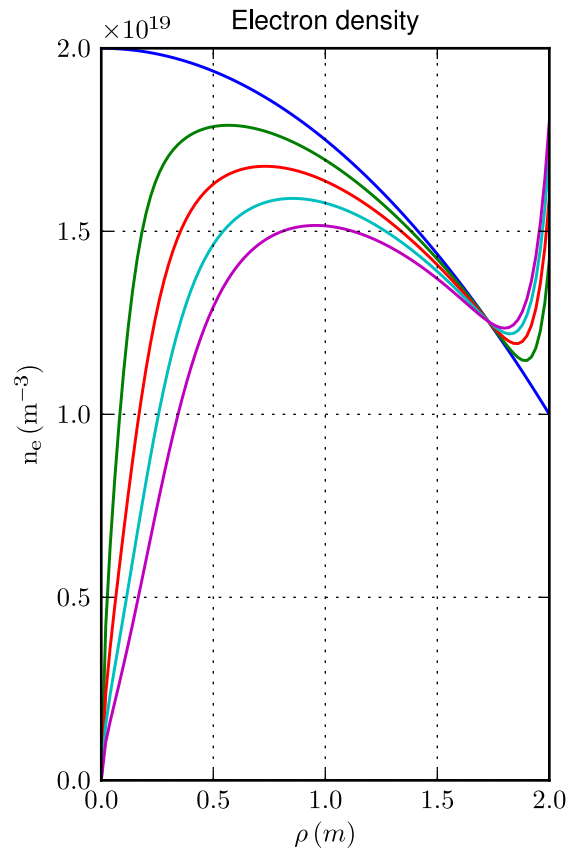
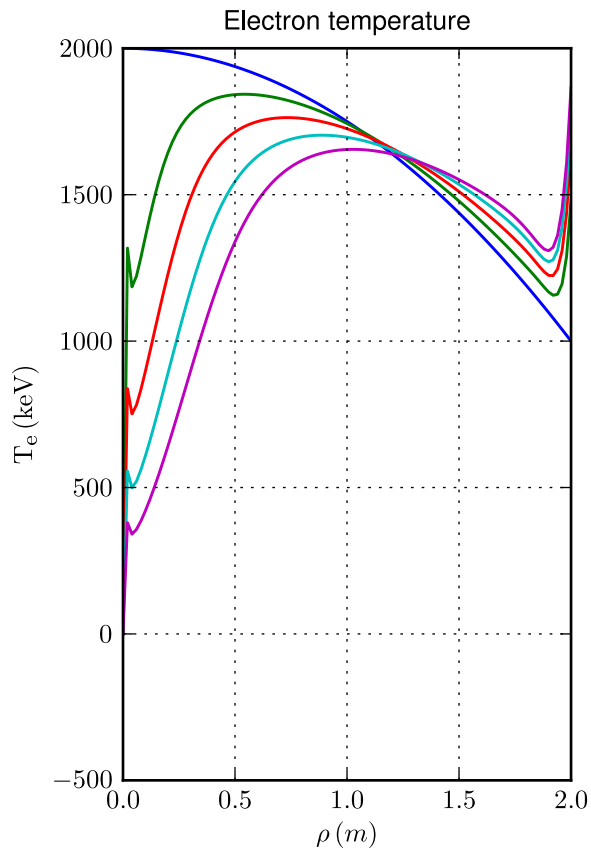
Error: zoom over edge



### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$

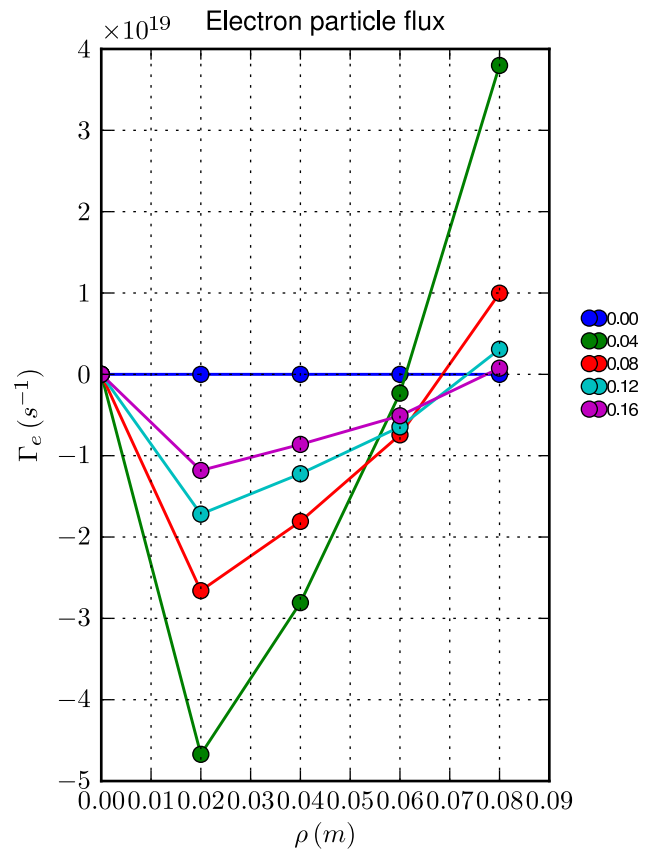
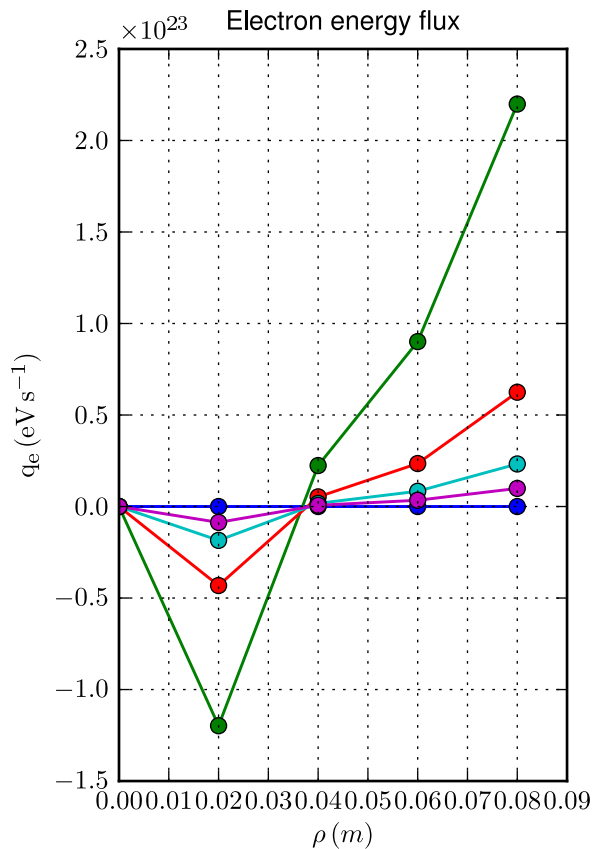
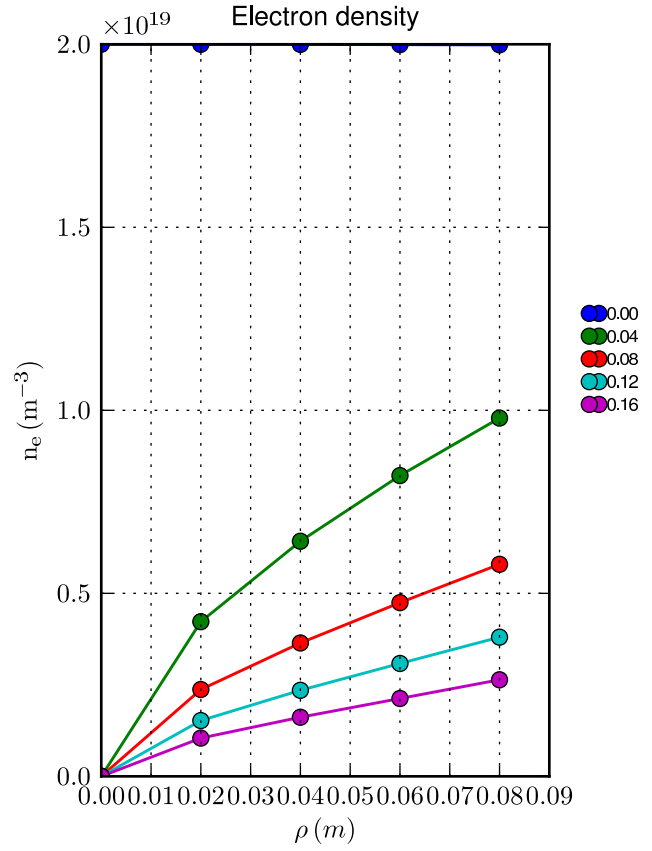
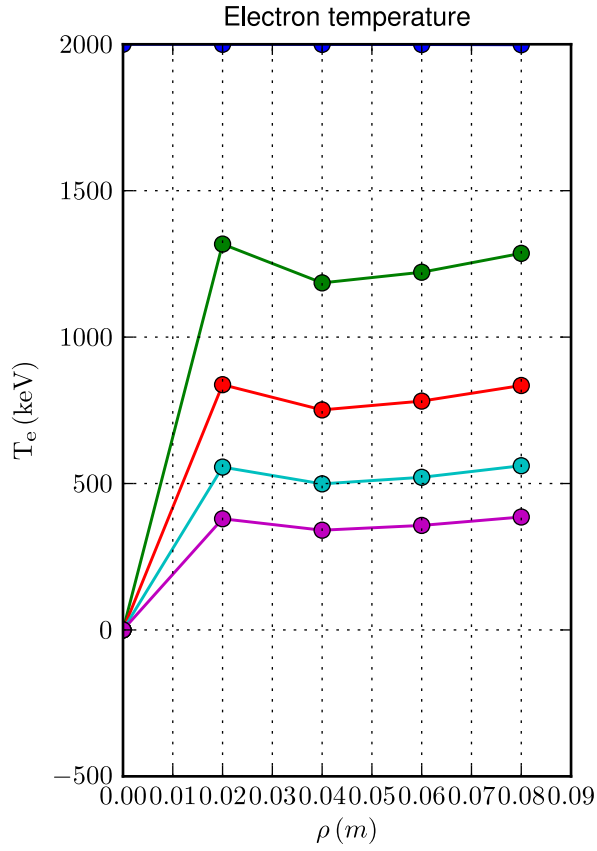


### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over magnetic axis

Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$

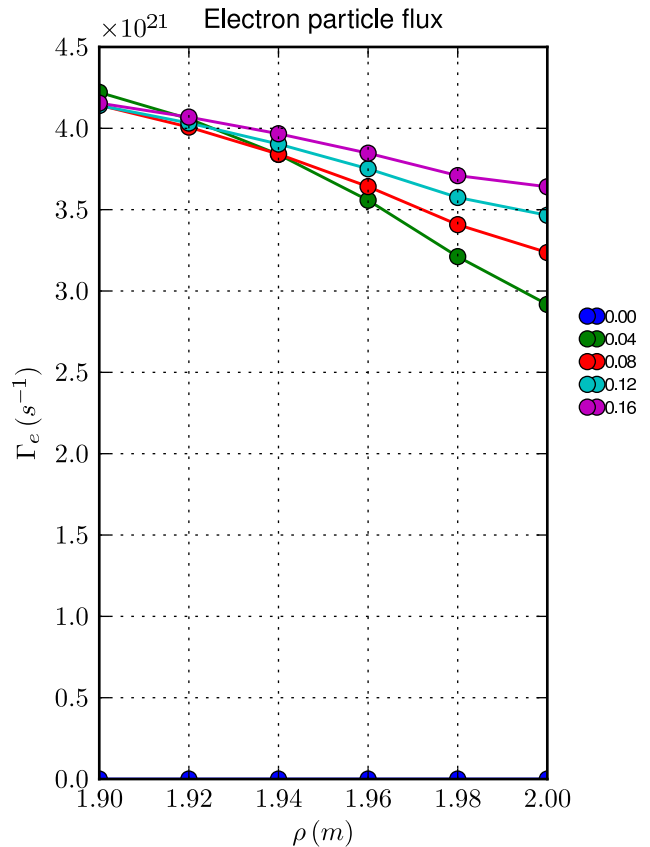
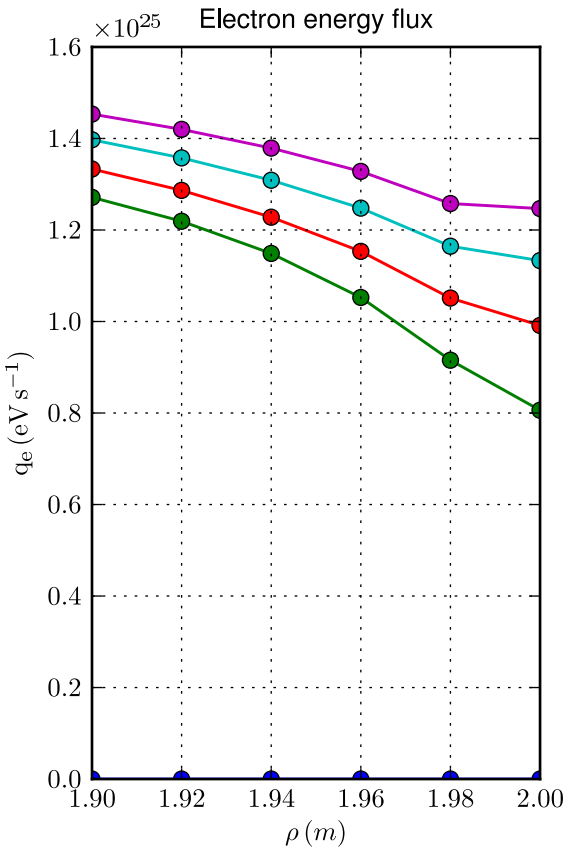
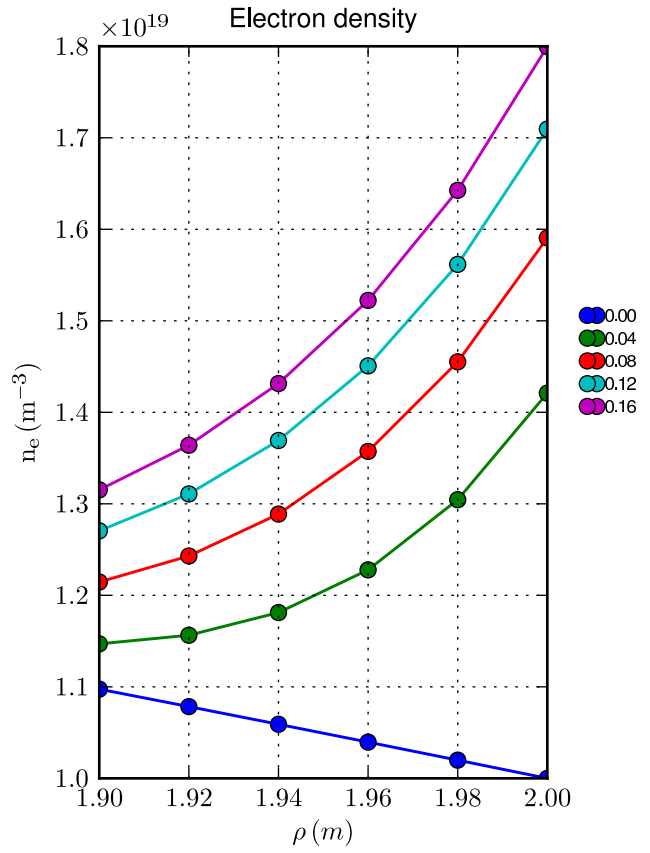
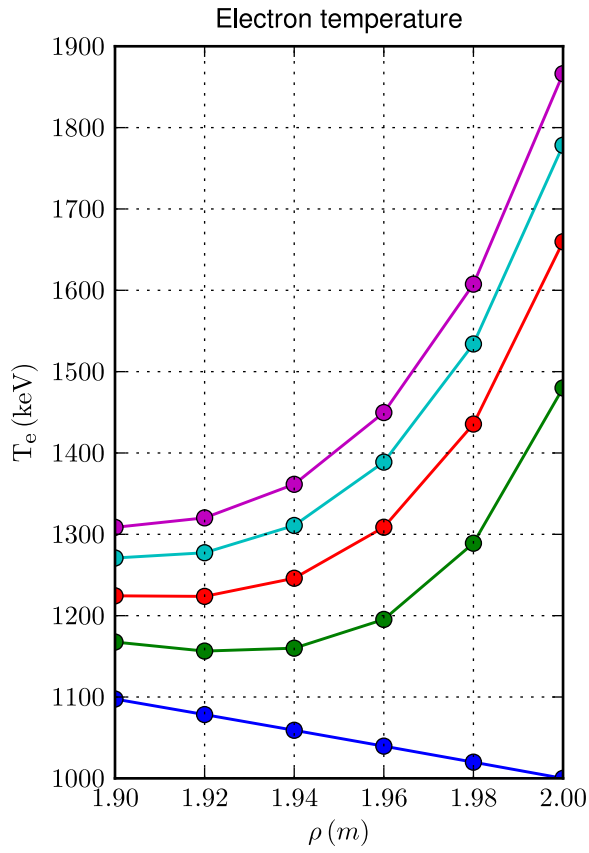


### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge

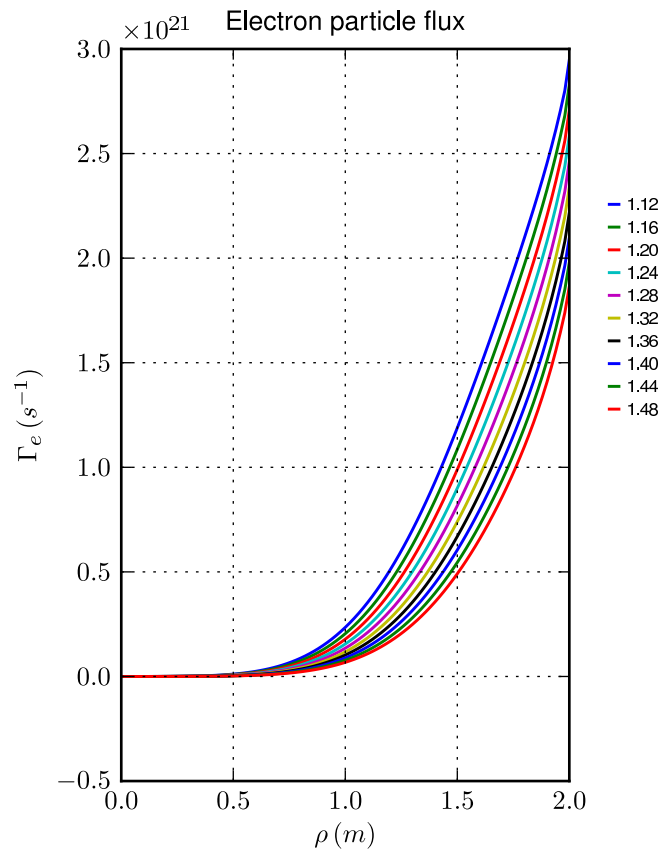
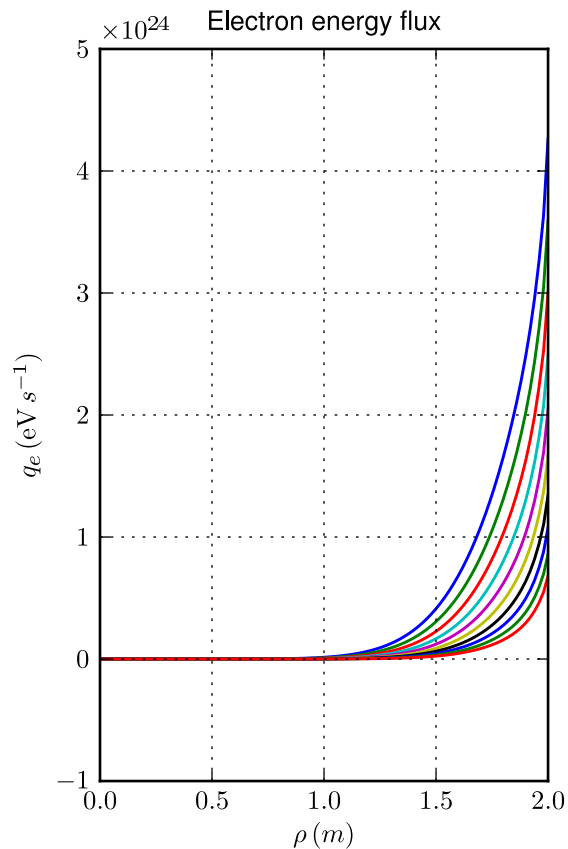
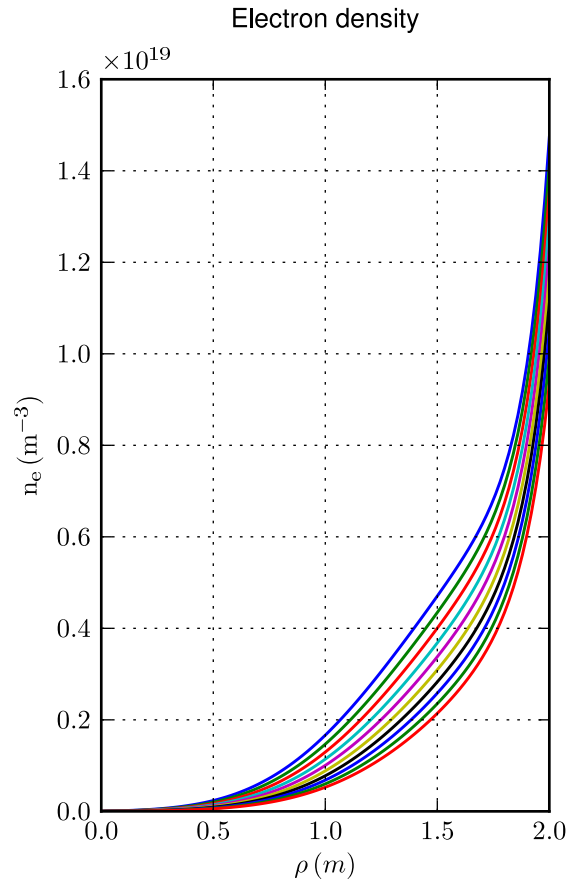
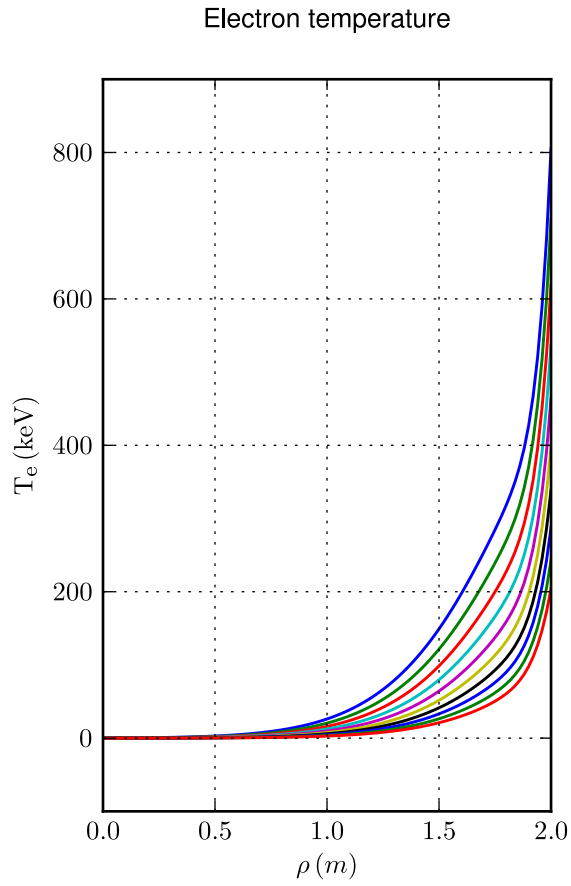
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 0.21 \text{ s}$



## Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

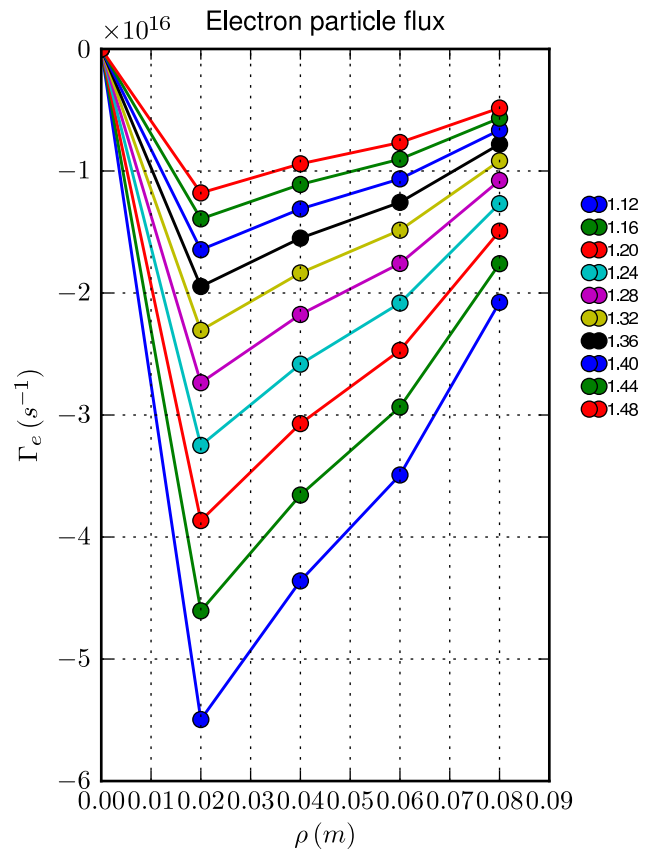
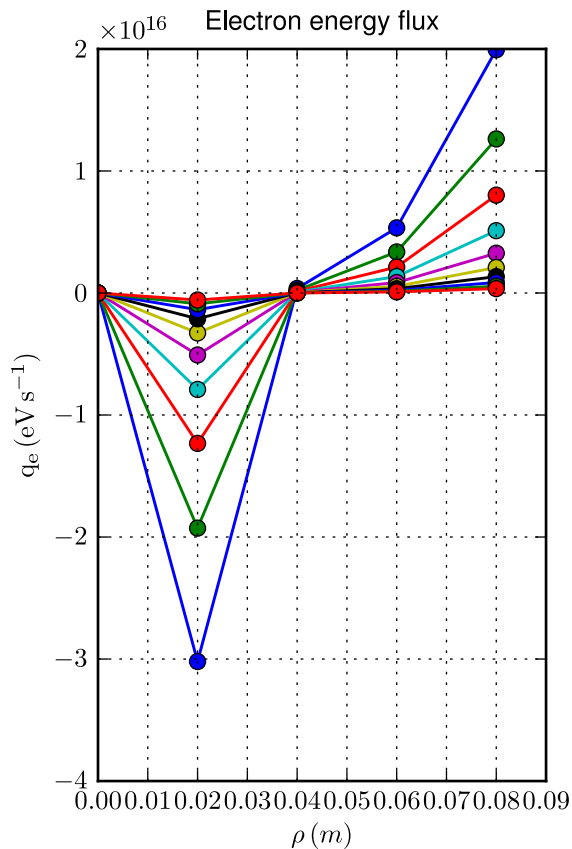
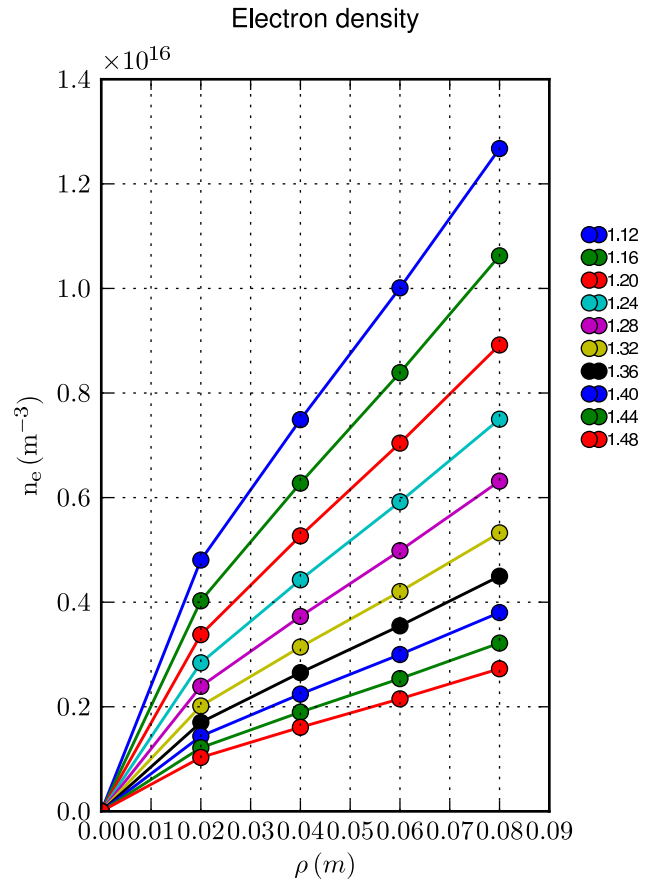
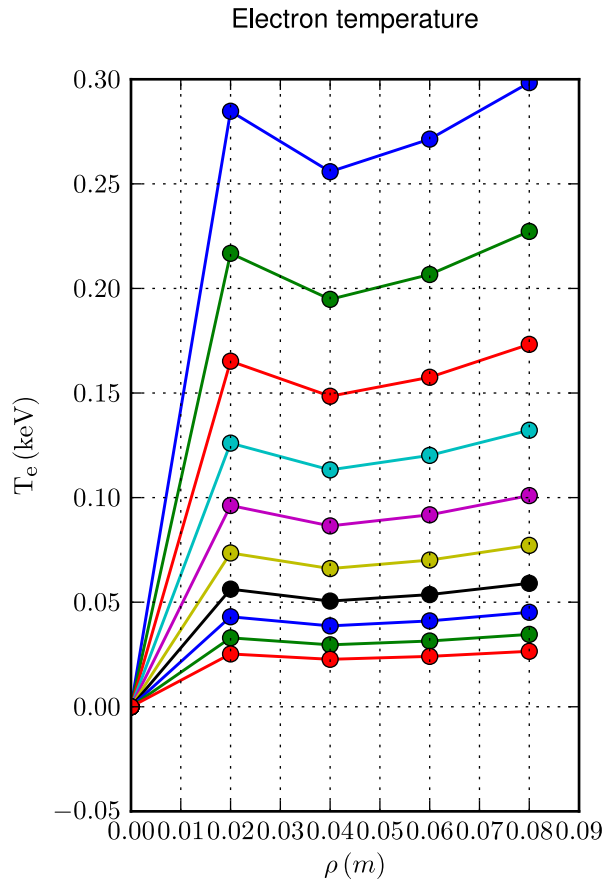
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

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



### Profiles

[Case: I.1.5.c, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 1.00 \text{ m/s}$ ,  $\Delta t = 4.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 101$ ]

Spatial zoom over edge; time sampling: last 10 time slices

