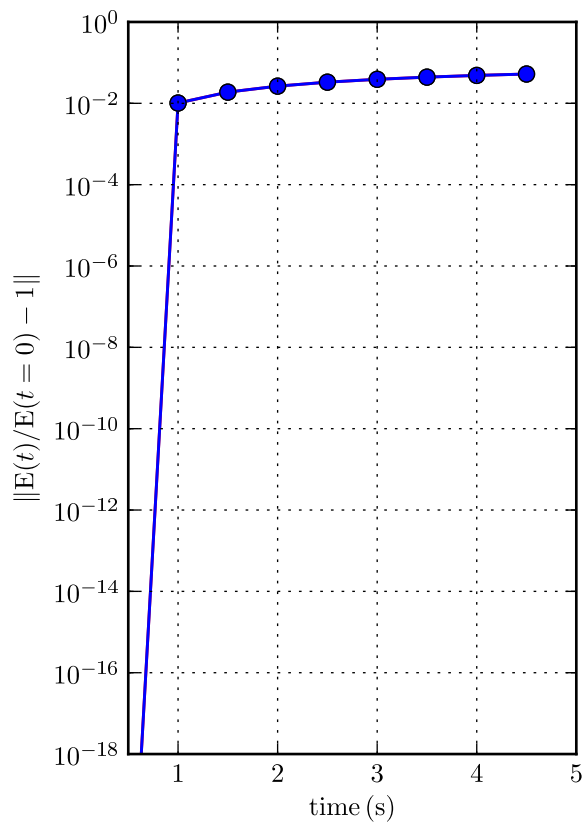
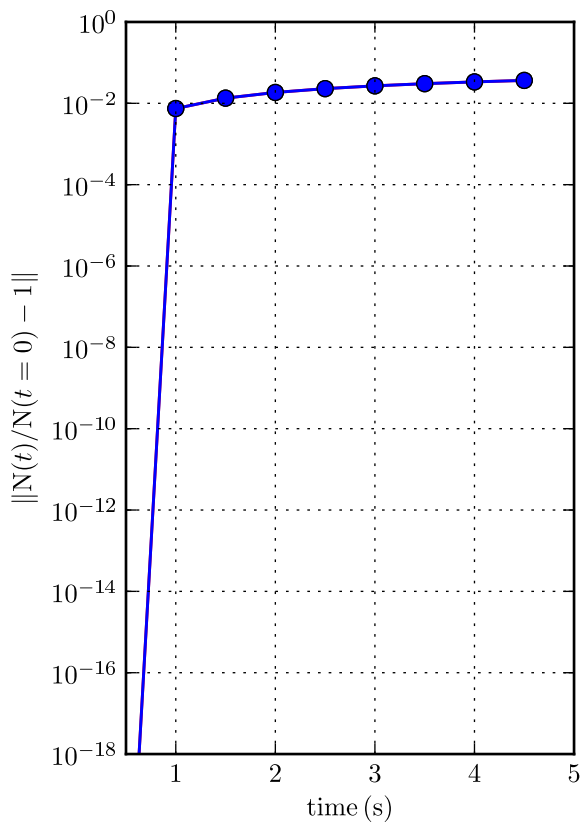
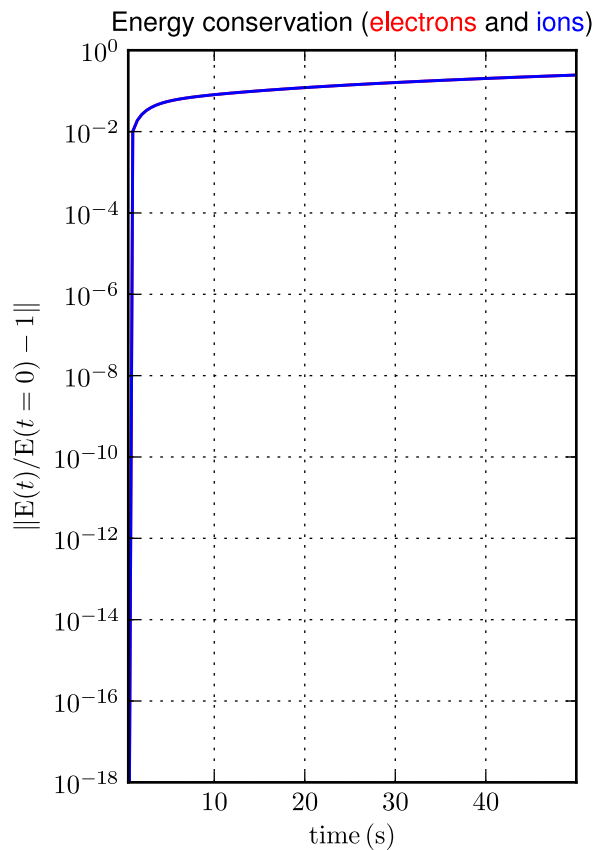
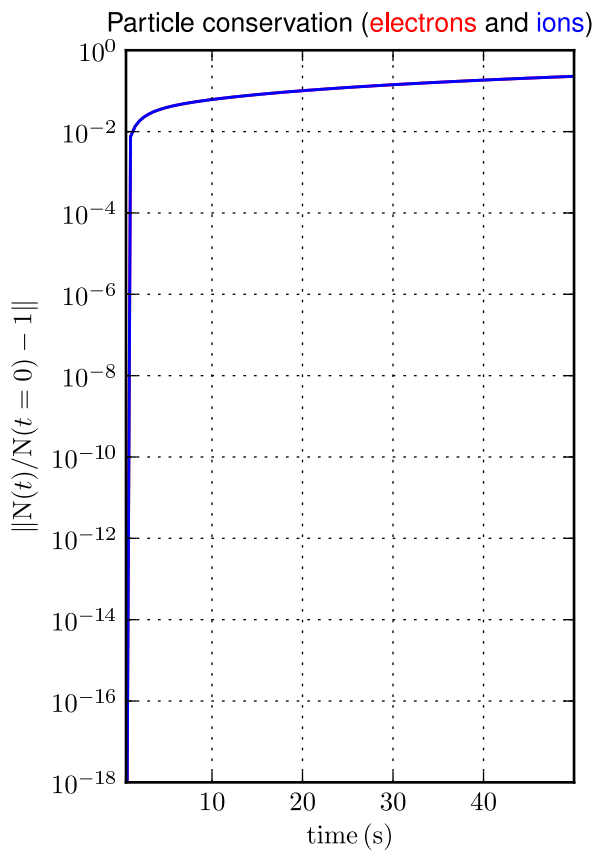


### Part. & Energy conservation

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

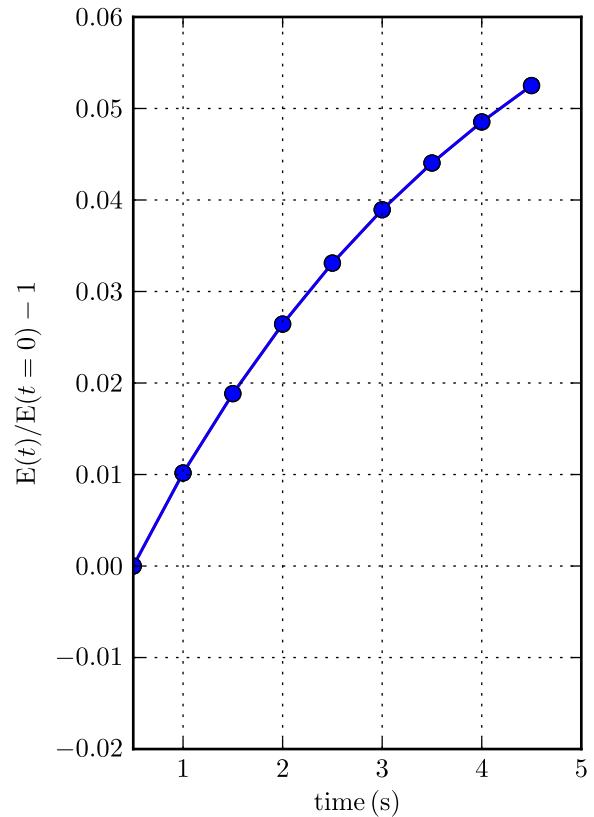
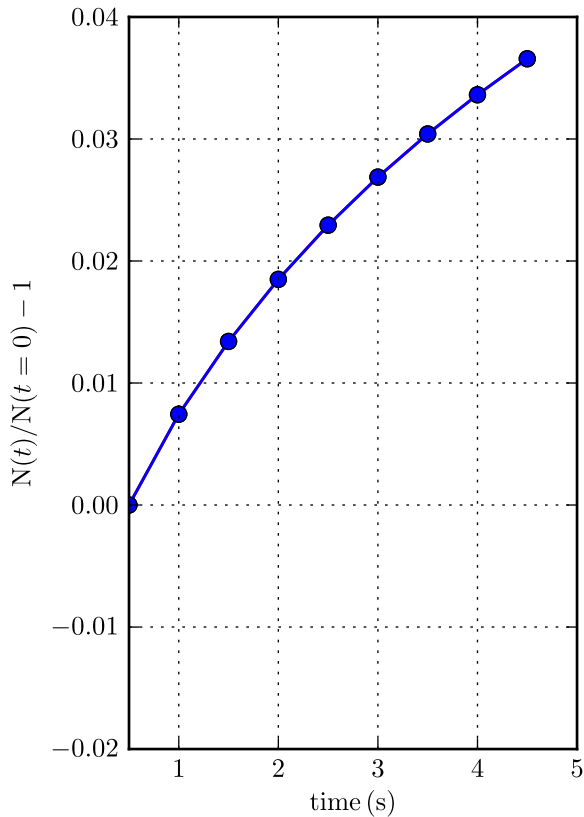
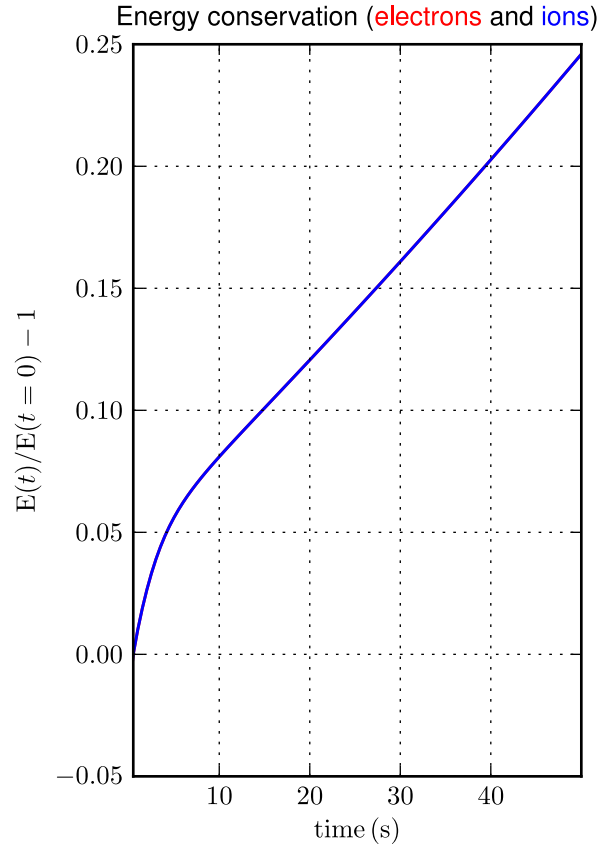
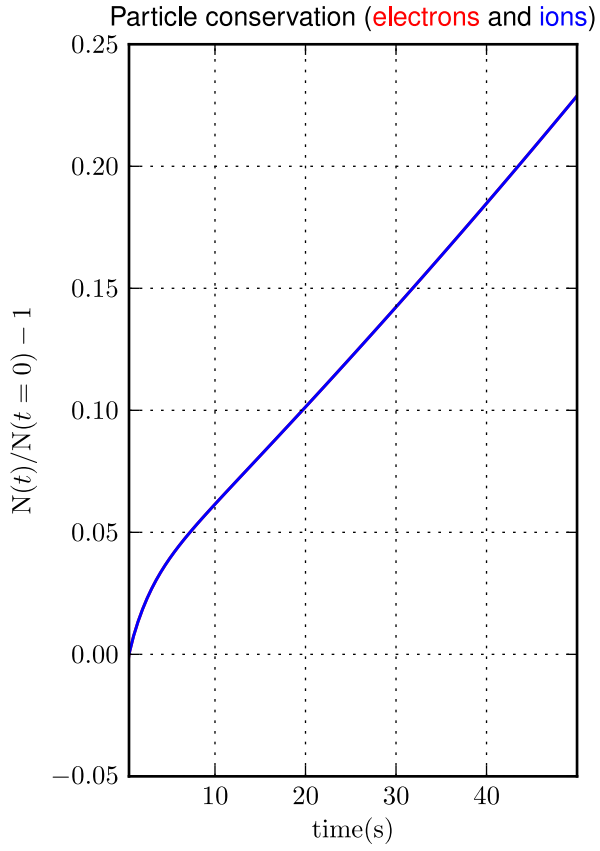
Comparison with initial solution - log scale; total time and zoom over time



Part. & Energy conservation

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 51$ ]

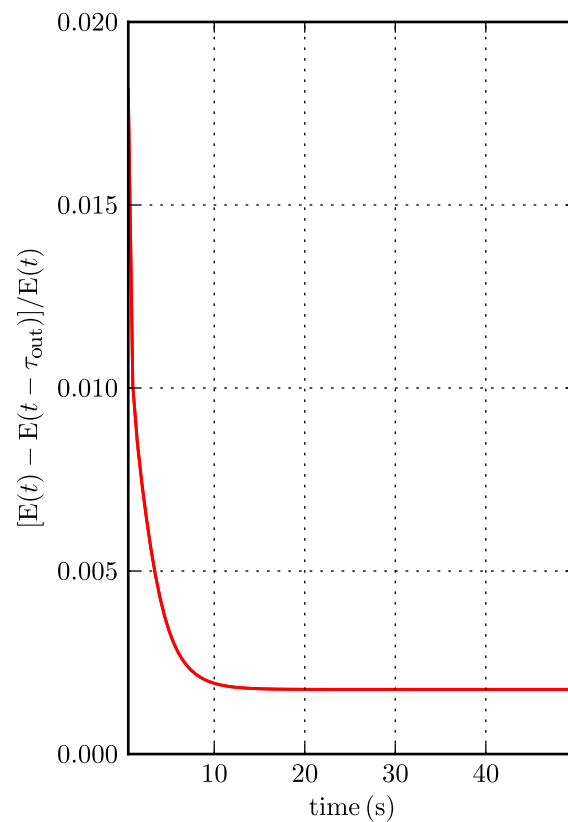
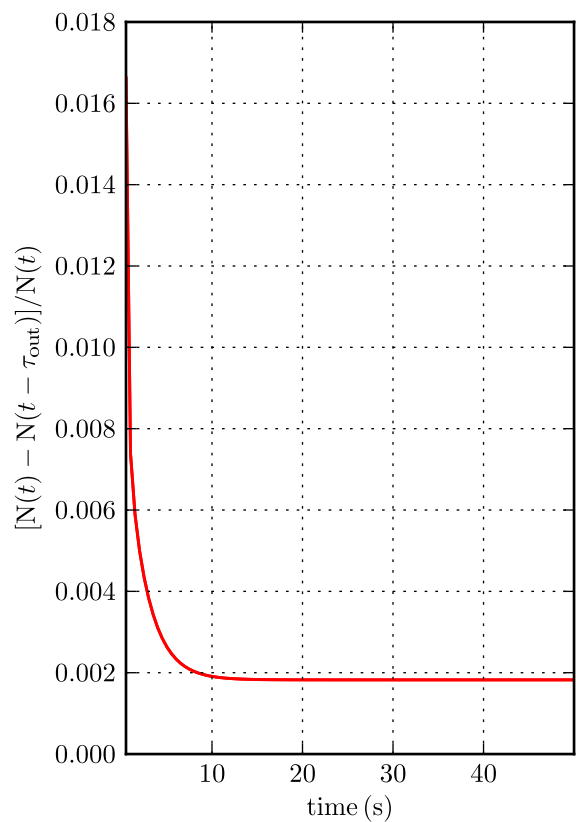
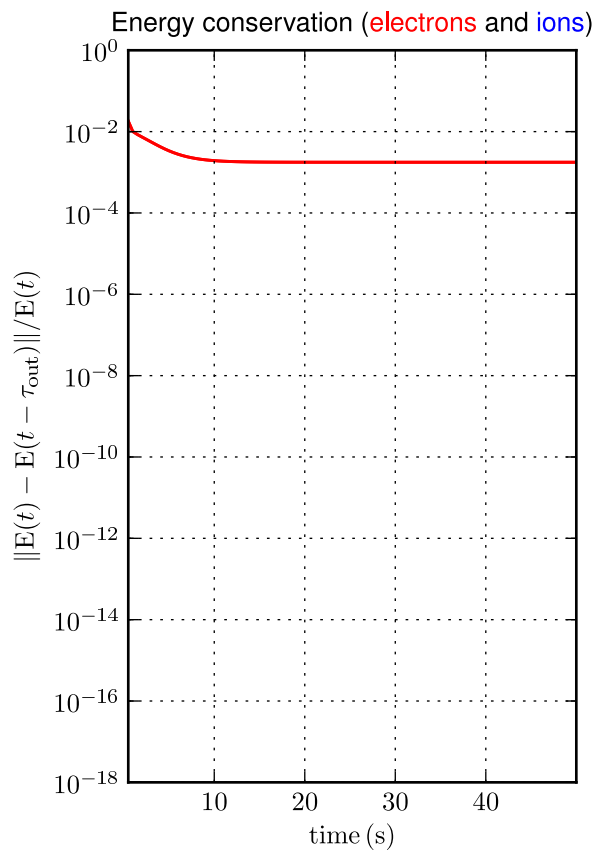
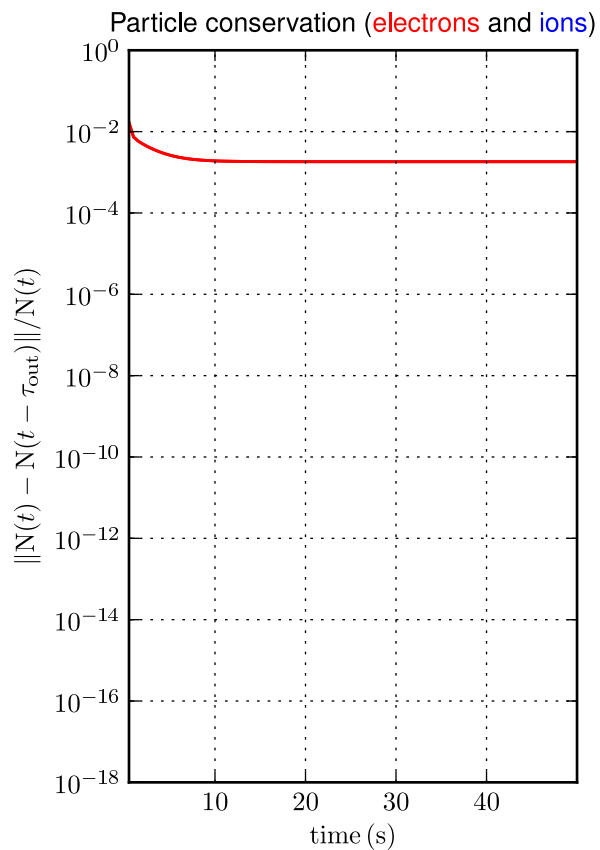
Comparison with initial solution - linear scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 51$ ]

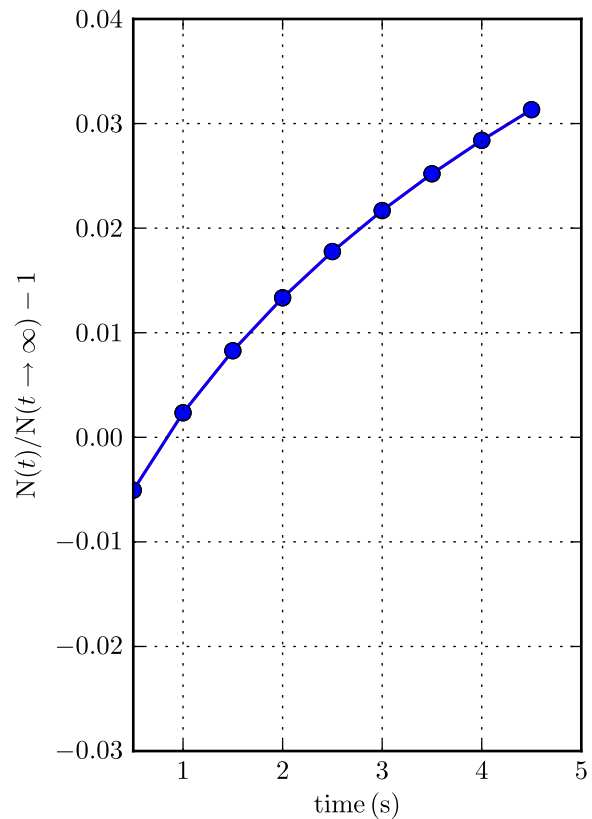
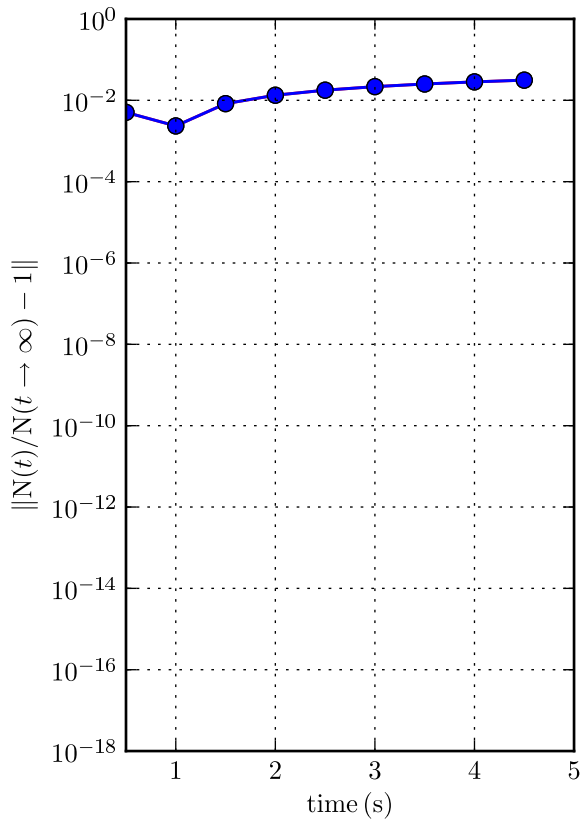
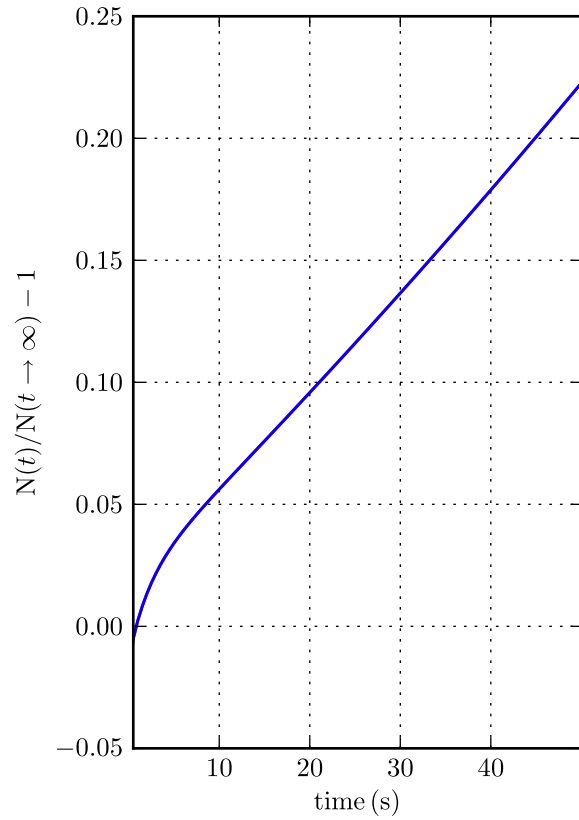
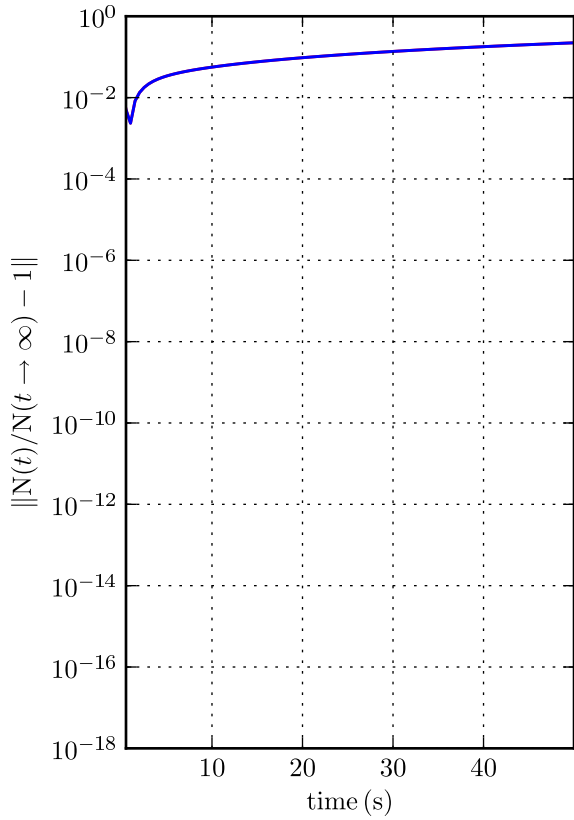
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

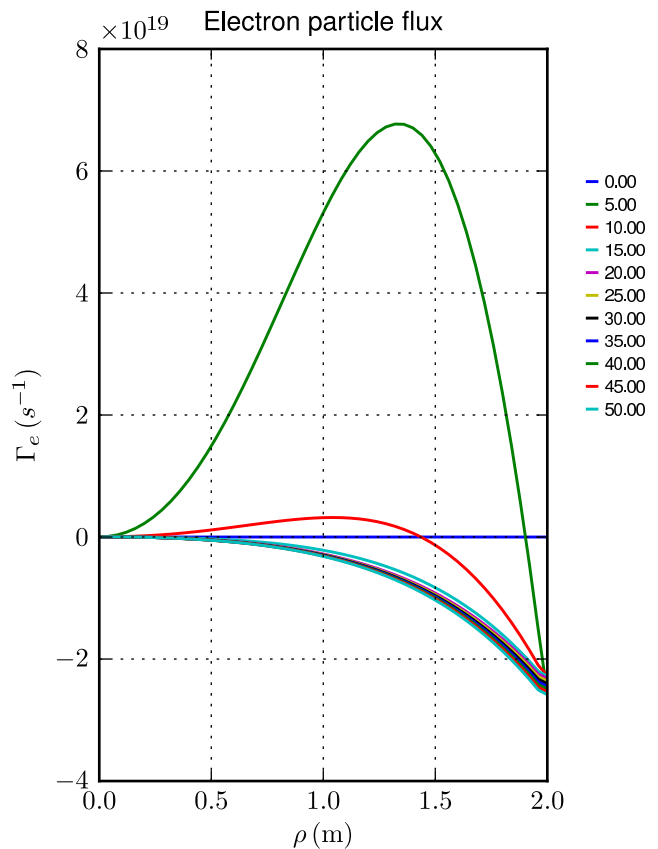
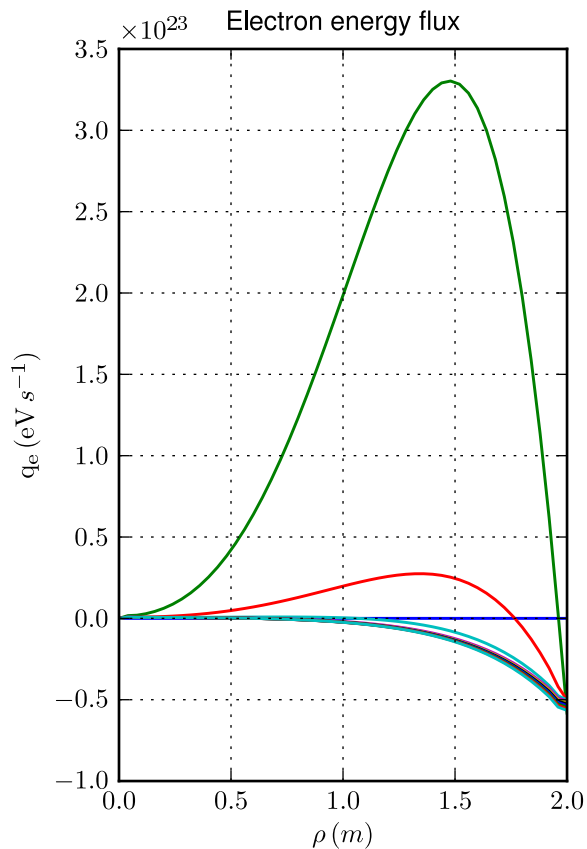
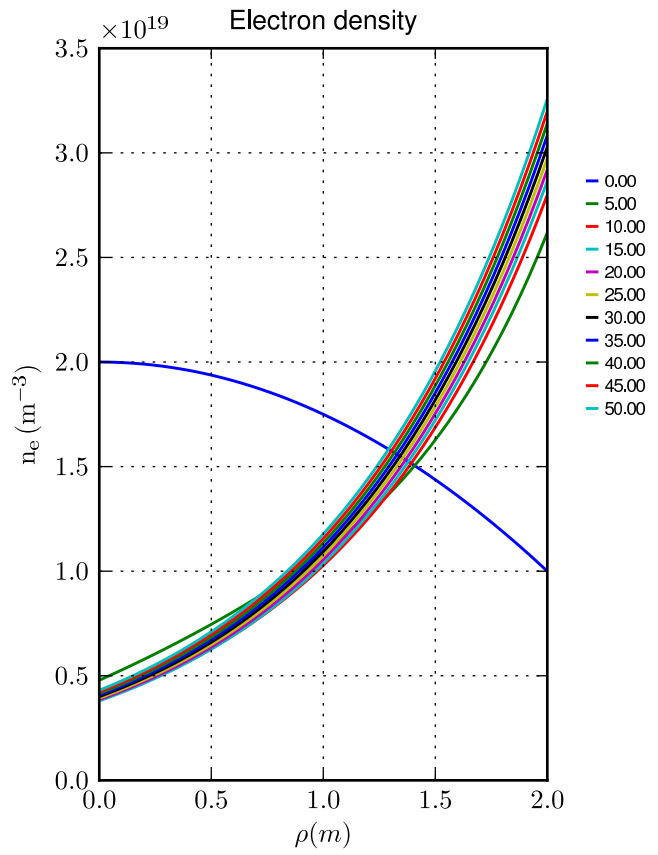
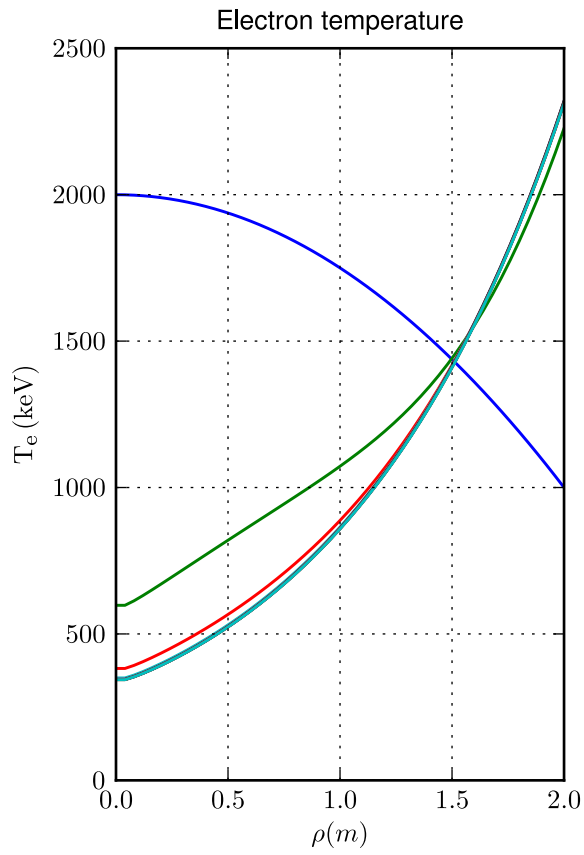
Comparison with asymptotic solution (electrons and ions); total time and zoom over time



### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Time sampling: total simulation time/10

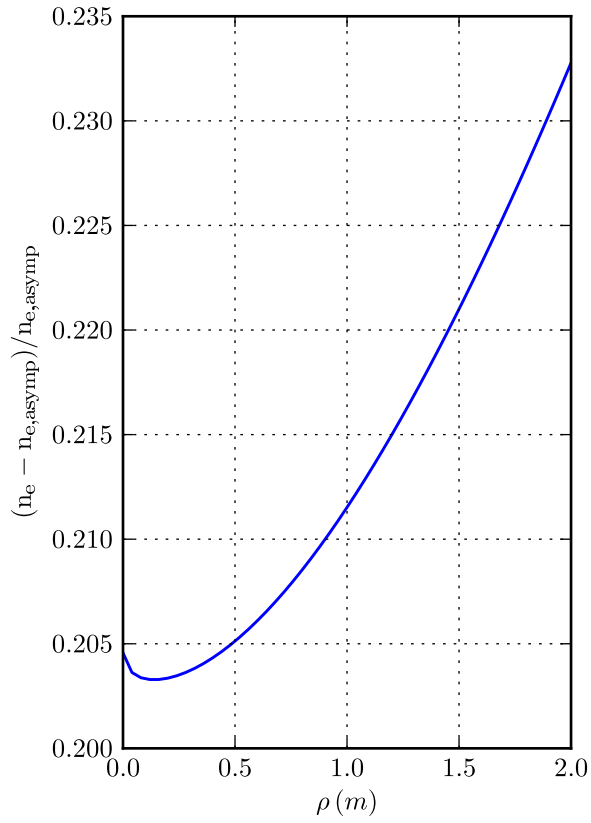


### Profiles

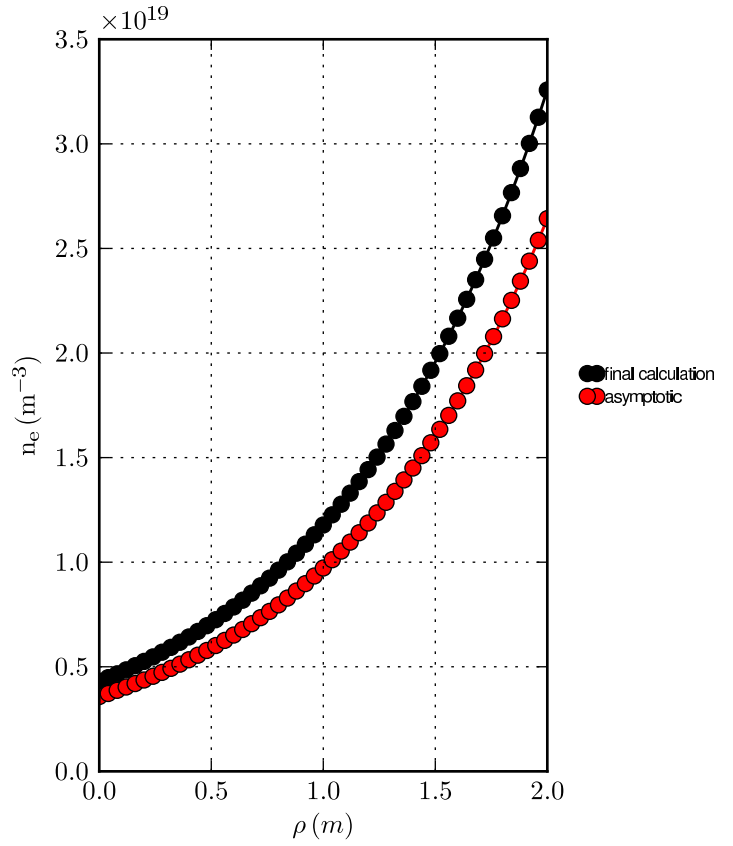
[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

### Comparison with asymptotic solution

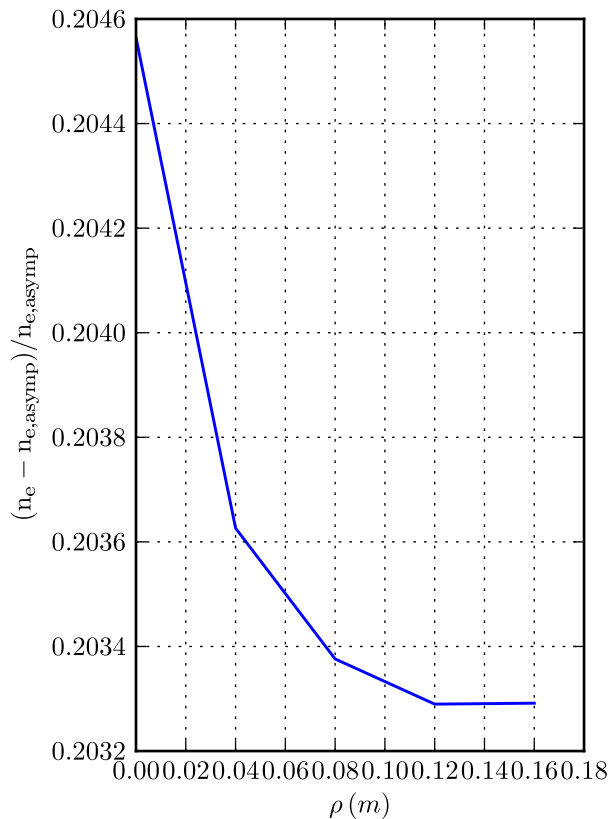
Electron density relative error



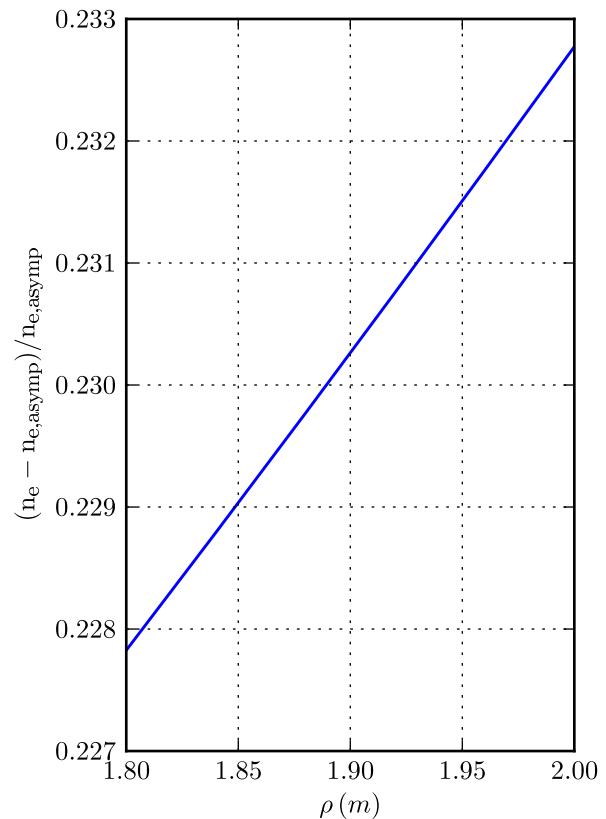
Electron density



Error: zoom over axis



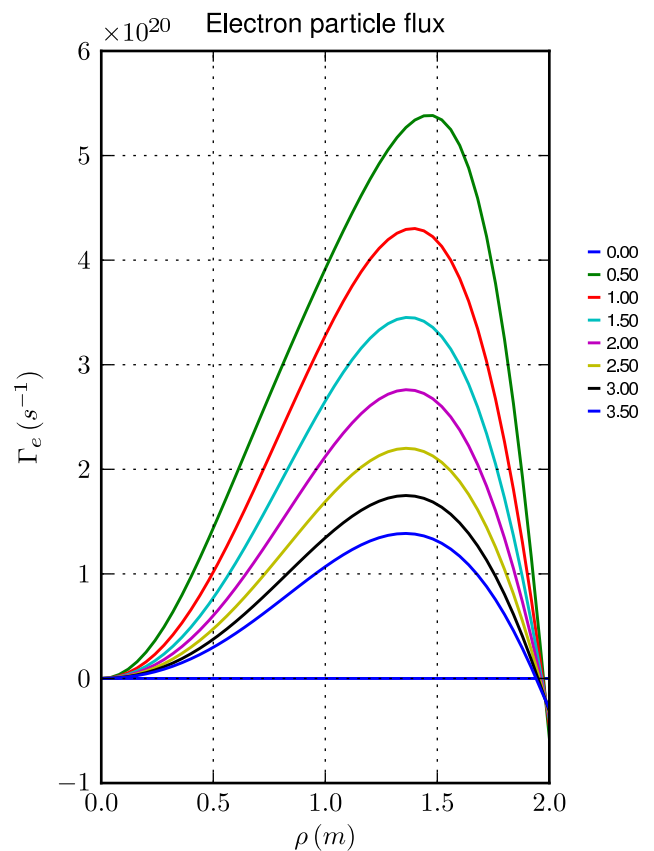
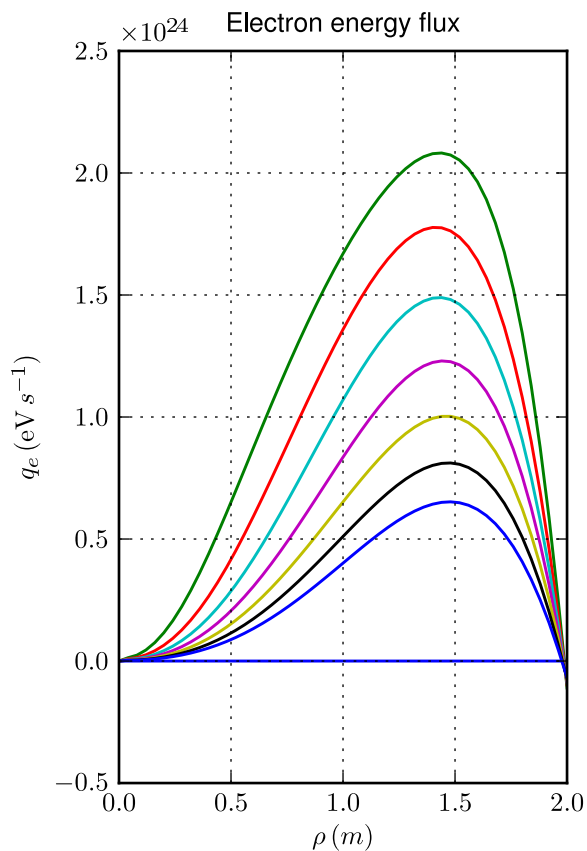
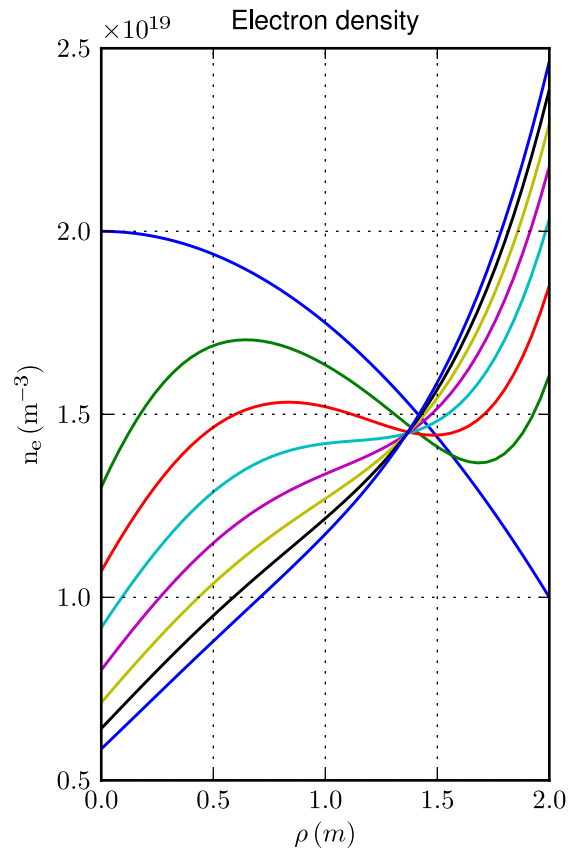
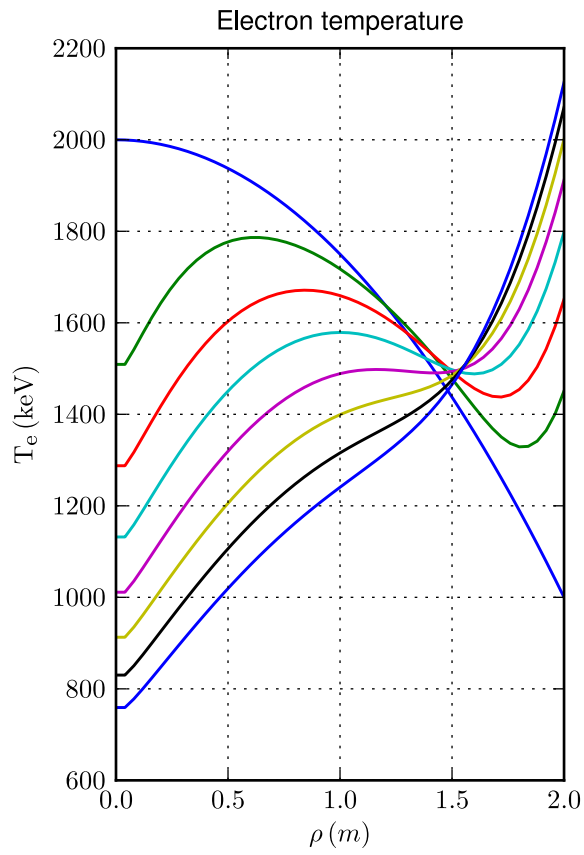
Error: zoom over edge



### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

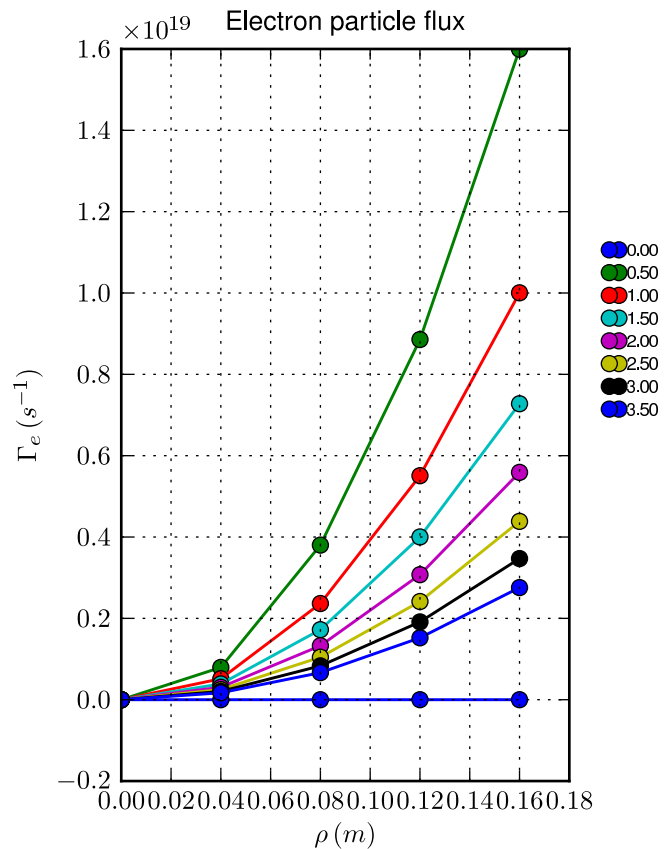
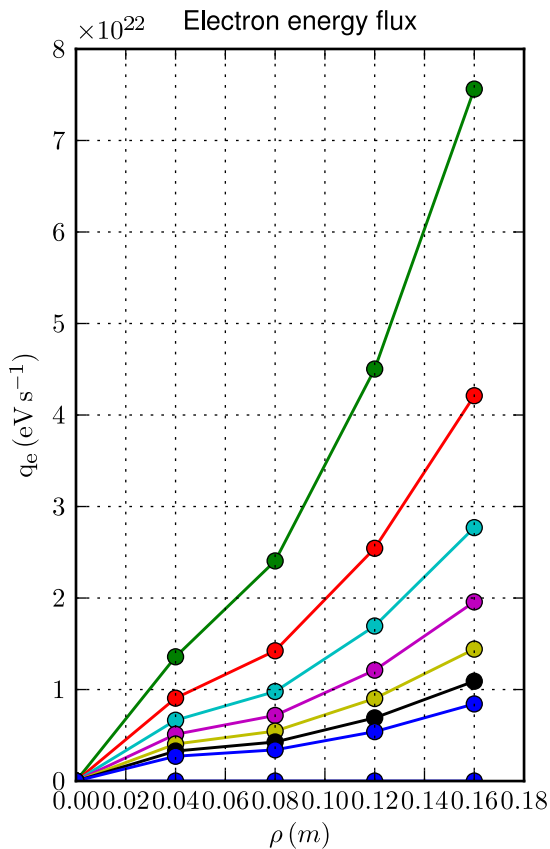
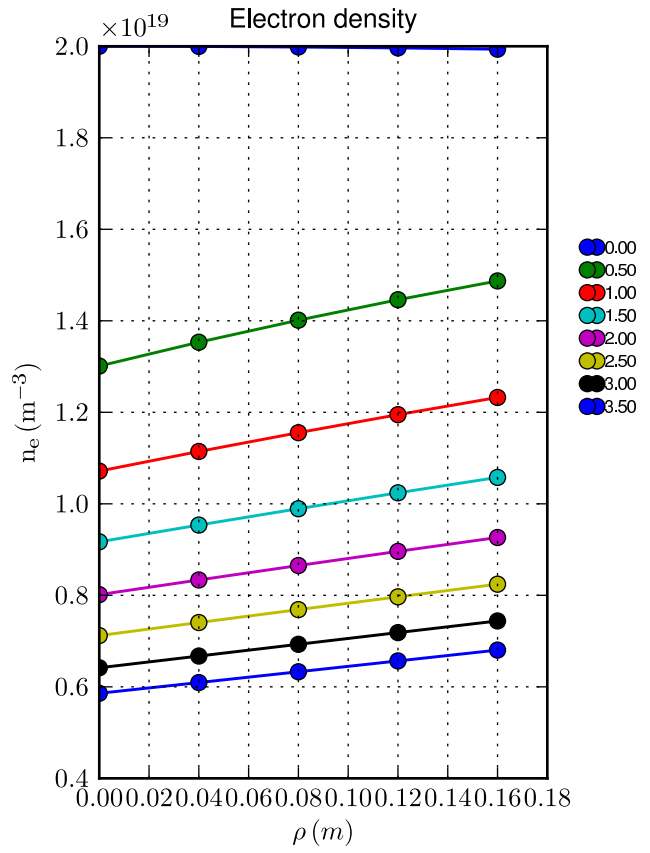
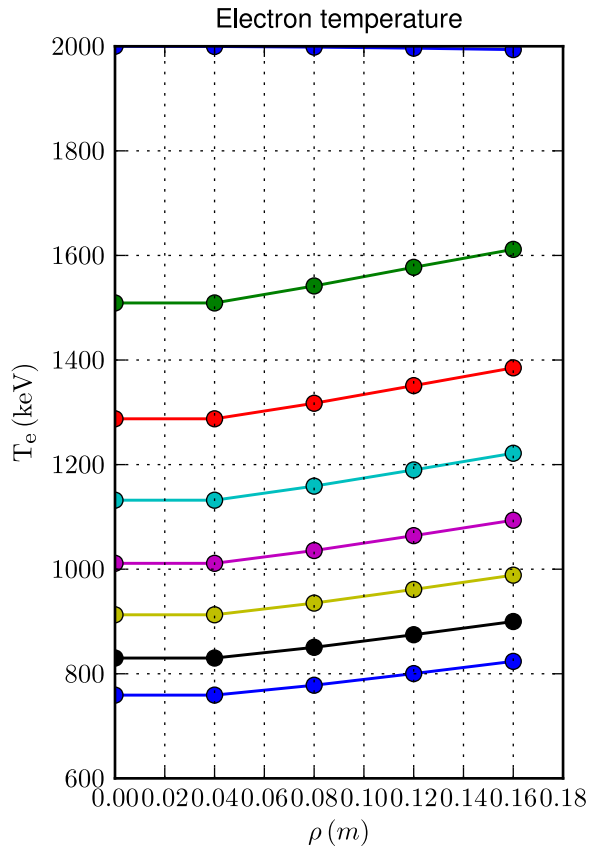


### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over magnetic axis

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



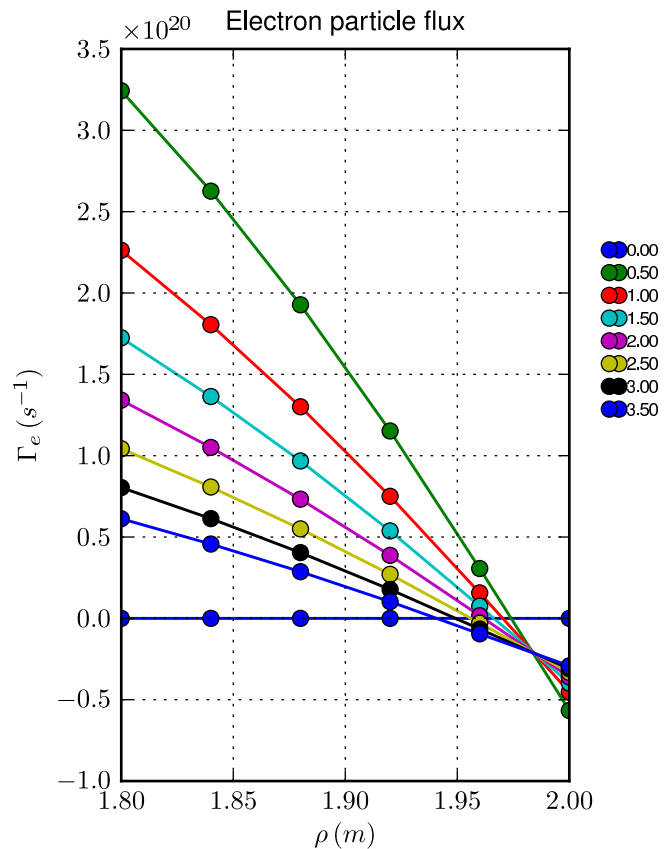
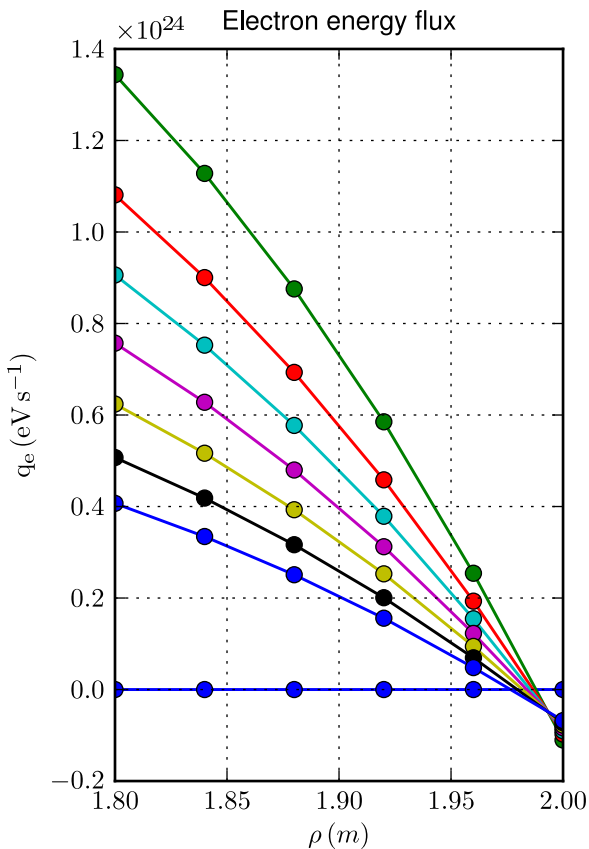
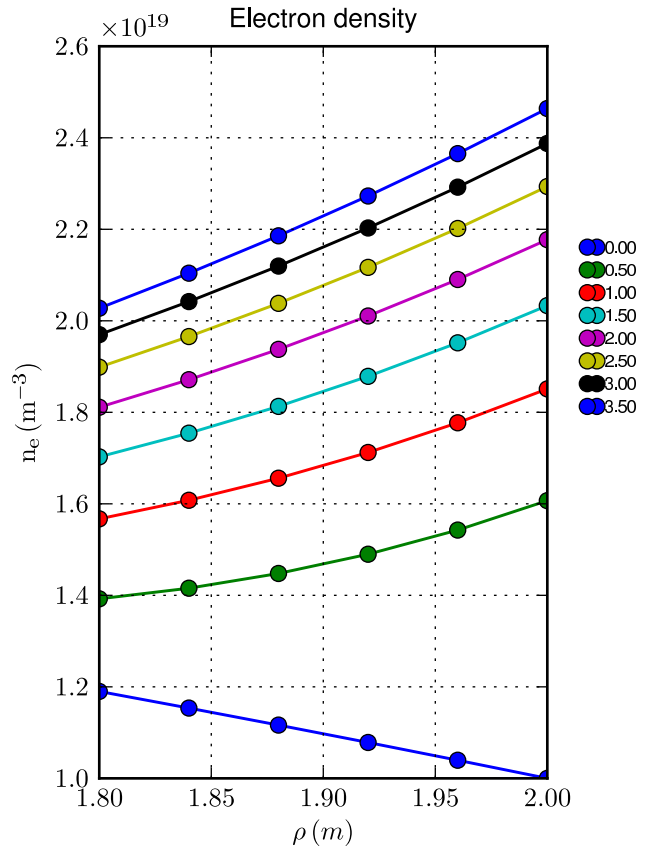
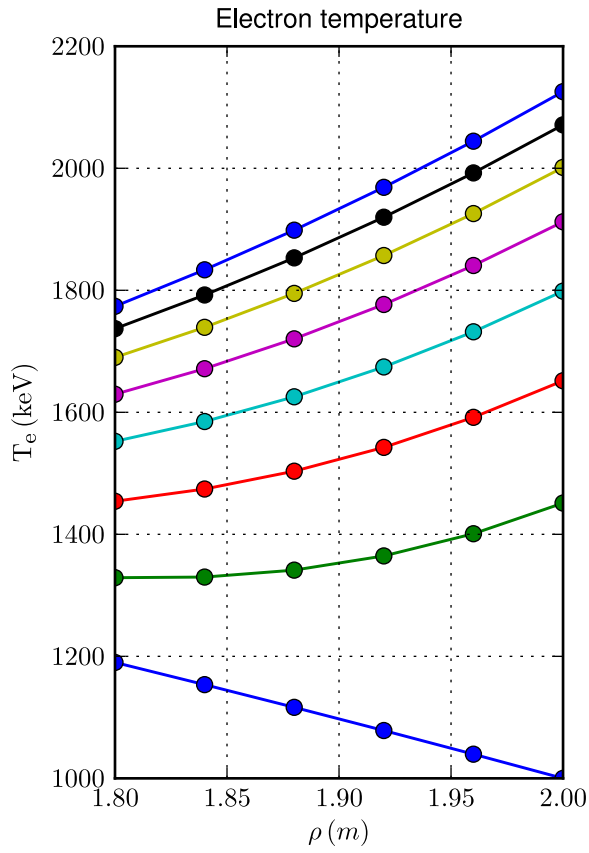


### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over edge

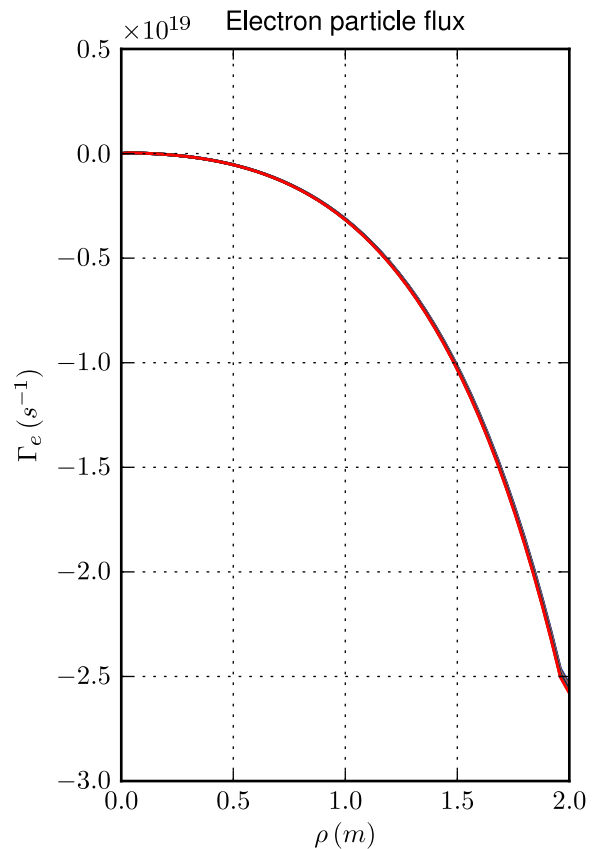
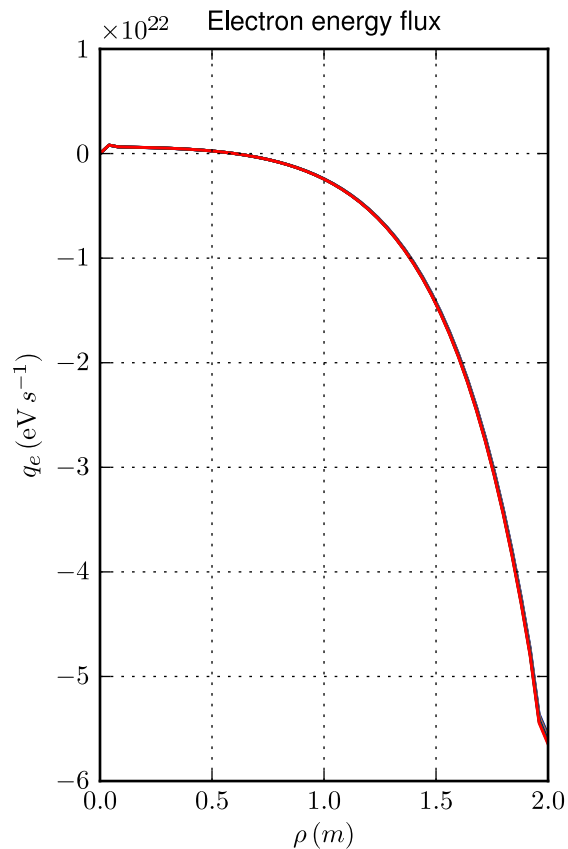
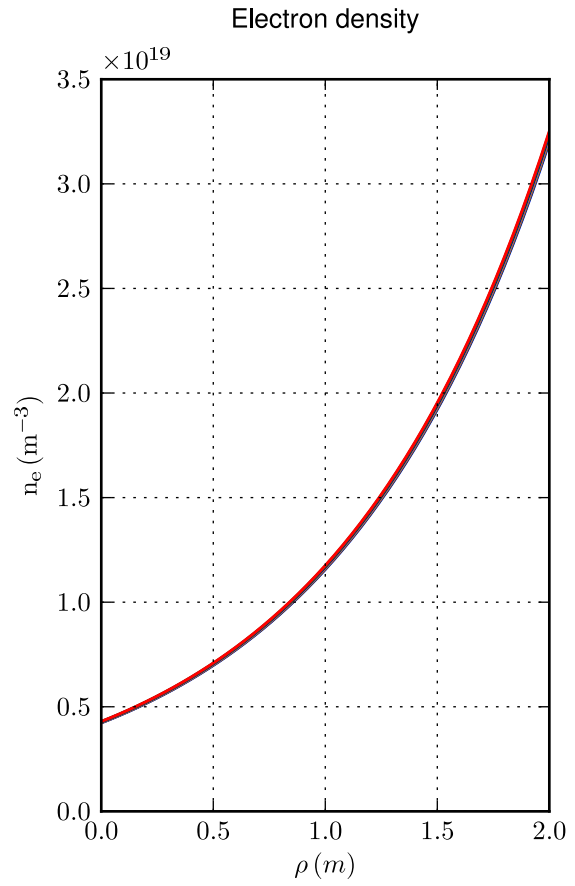
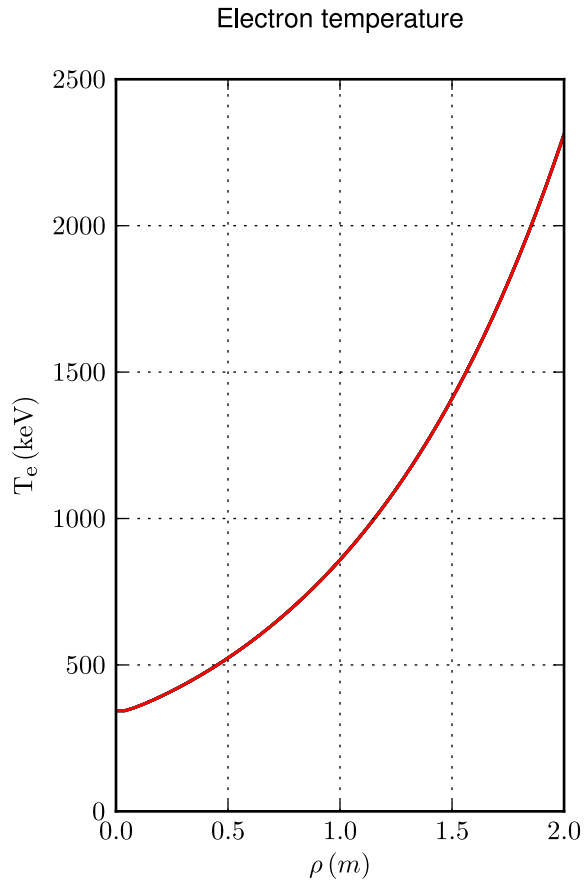
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$



### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Time sampling: last 10 time slices

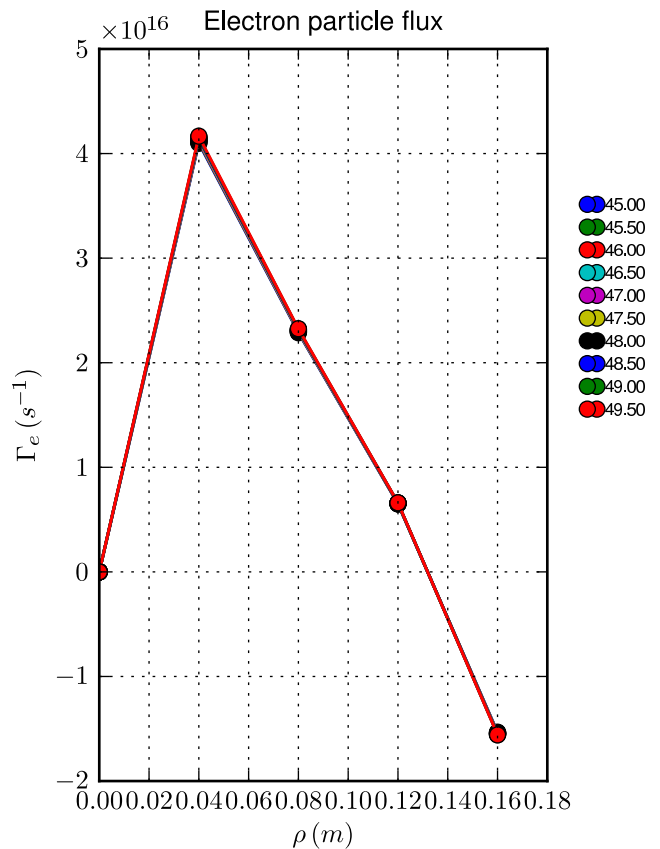
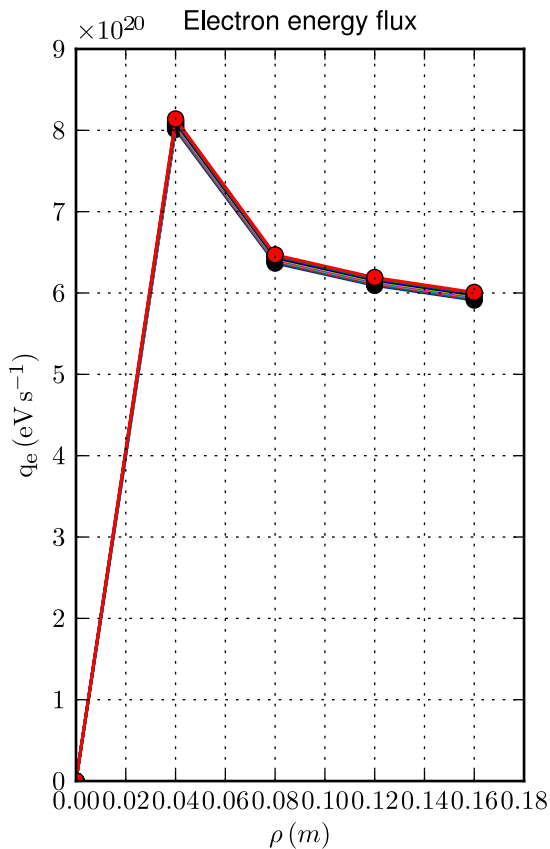
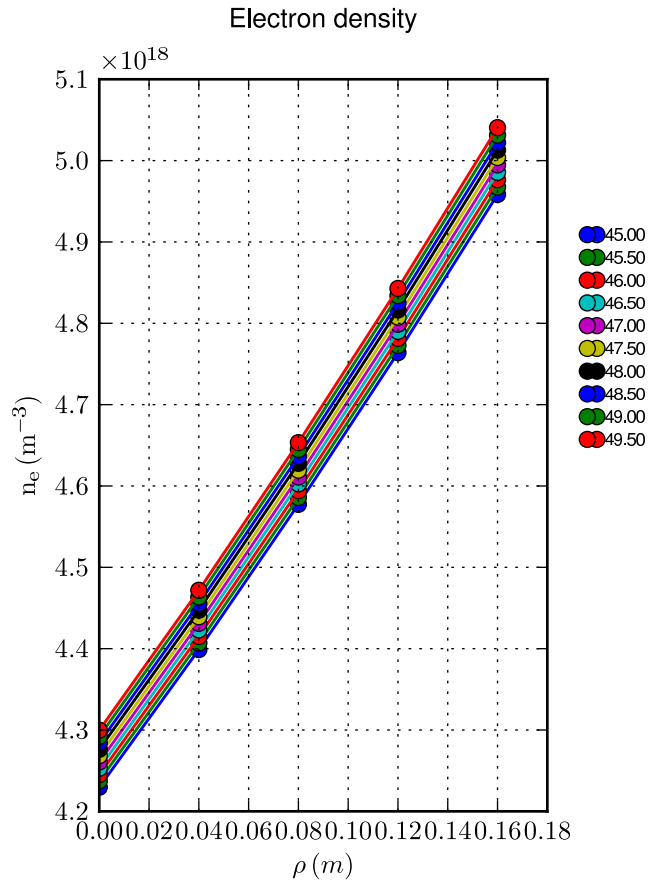
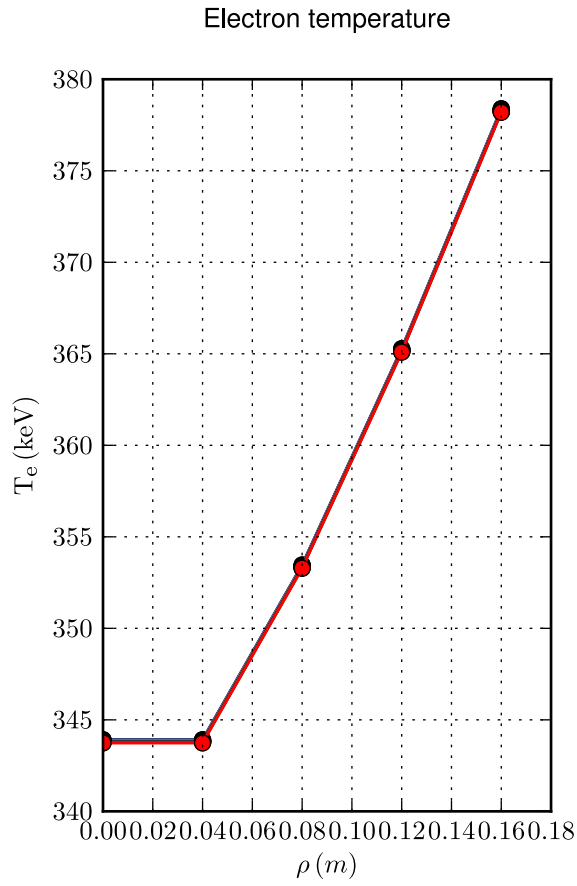


- 45.00
- 45.50
- 46.00
- 46.50
- 47.00
- 47.50
- 48.00
- 48.50
- 49.00
- 49.50

### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

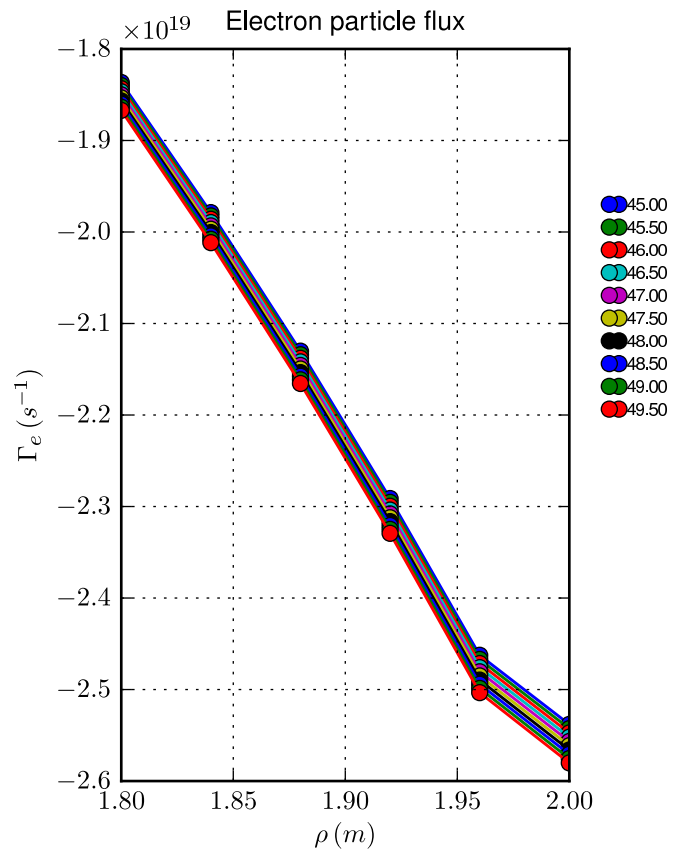
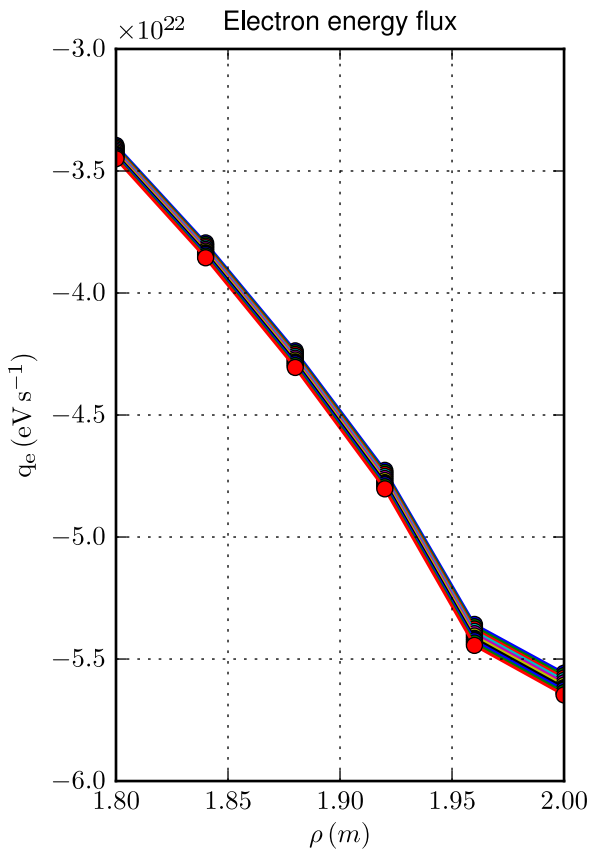
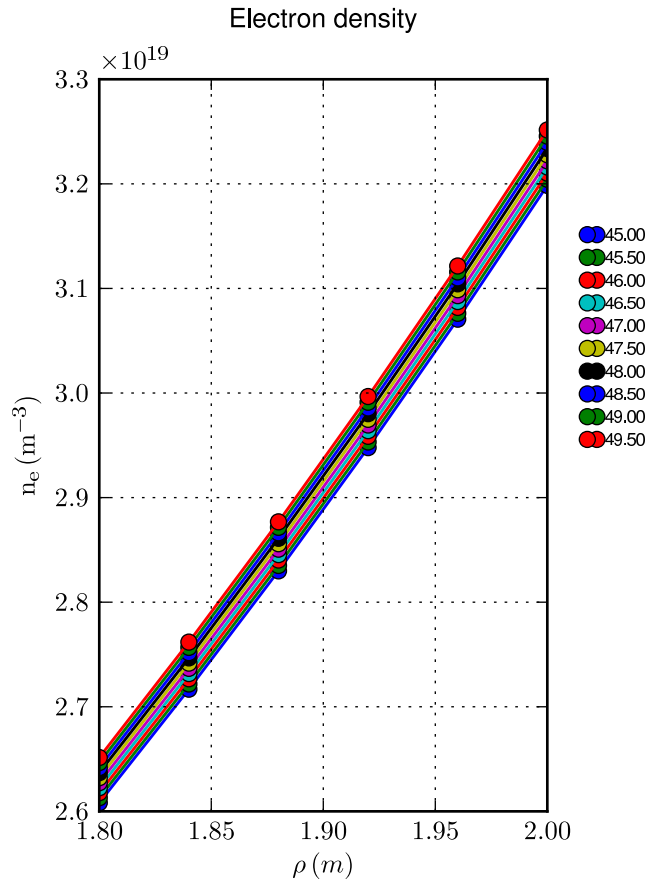
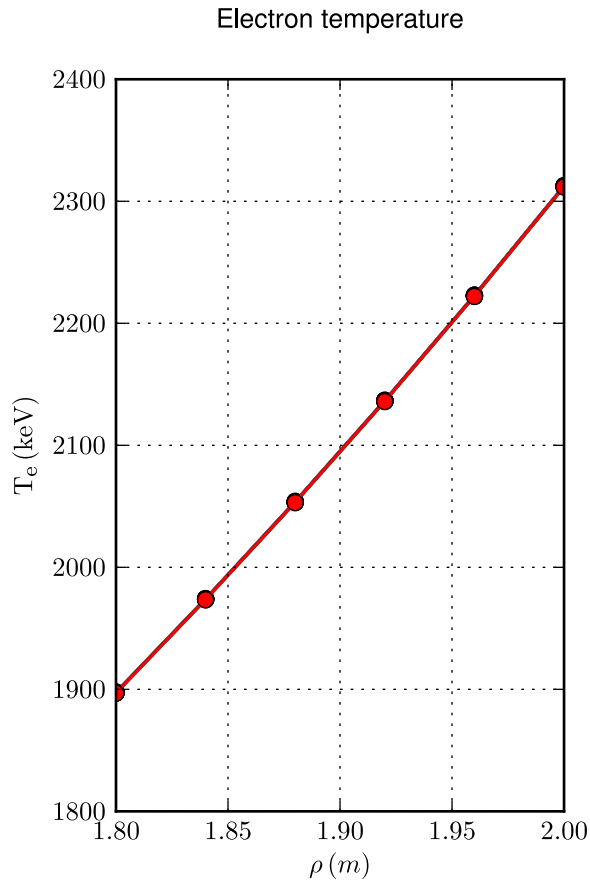
Spatial zoom over magnetic axis; time sampling: last 10 time slices



### Profiles

[Case: I.1.5.a, Solver: 3,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

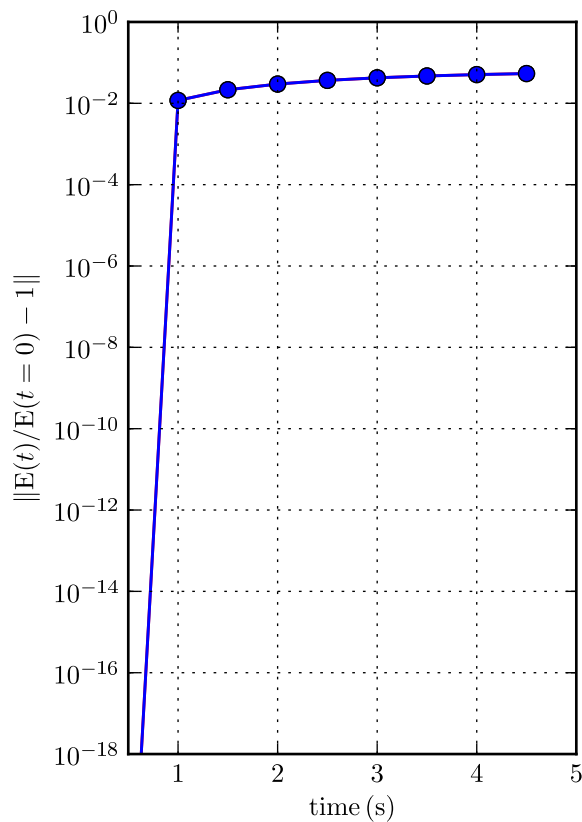
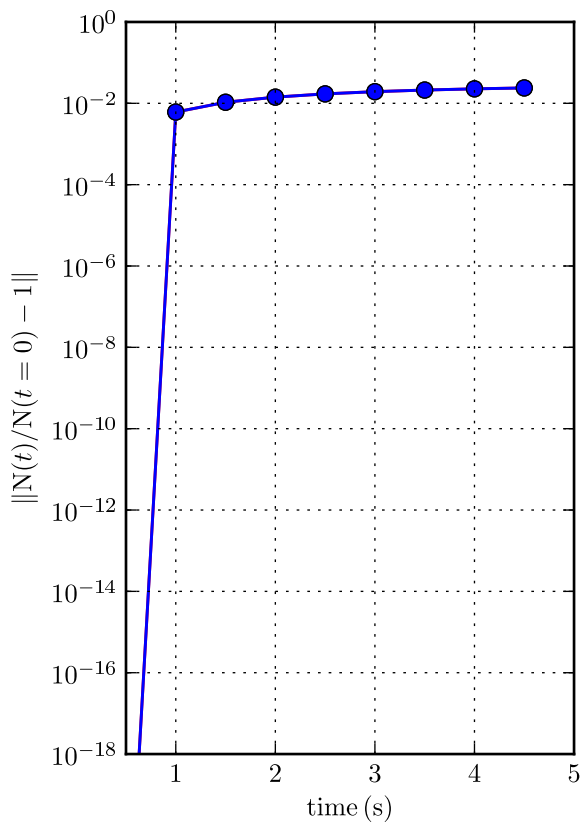
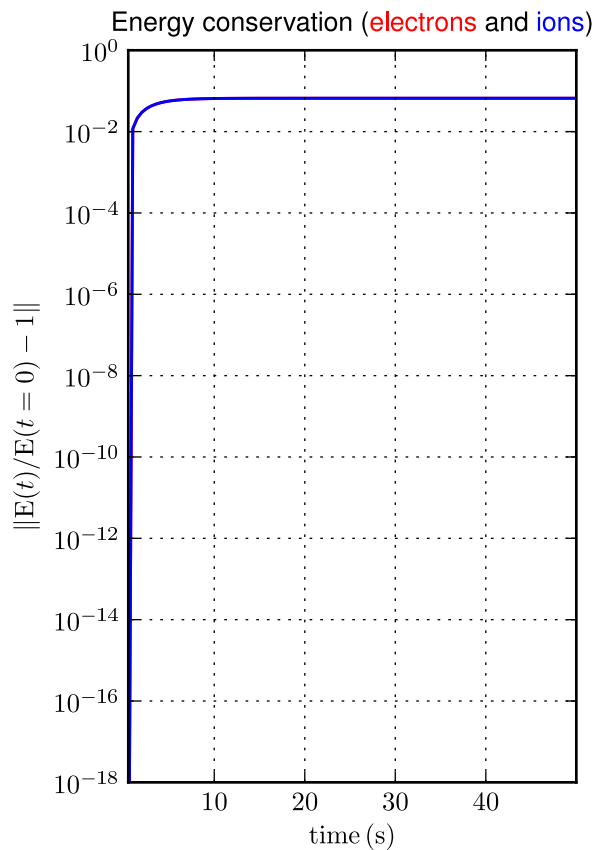
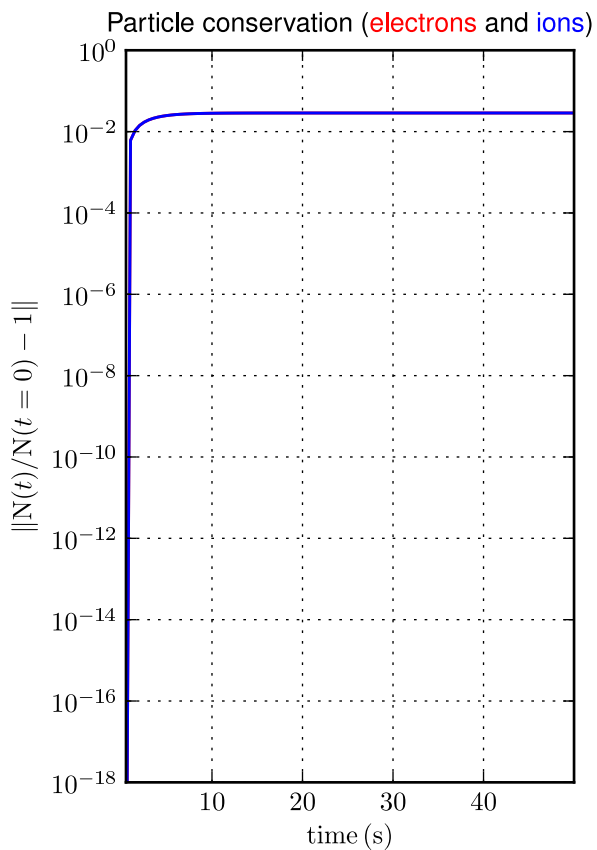
Spatial zoom over edge; time sampling: last 10 time slices



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

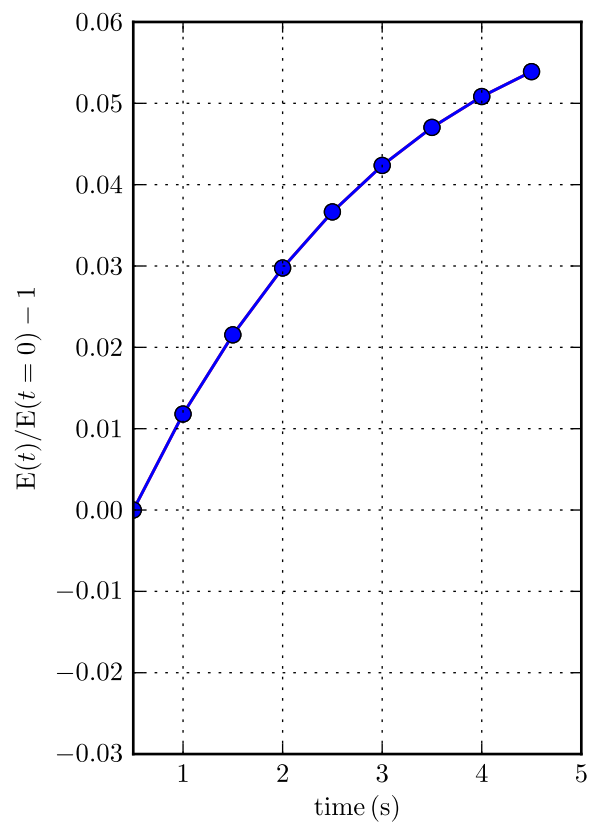
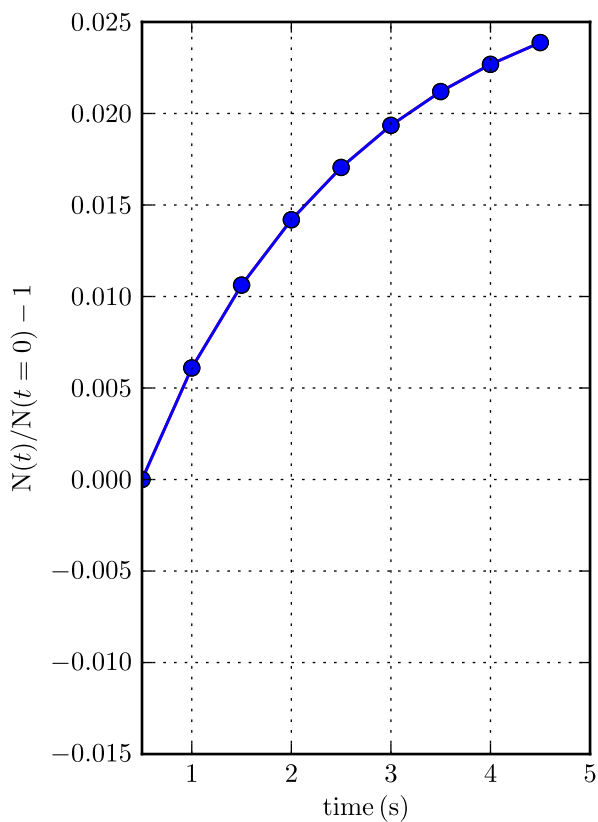
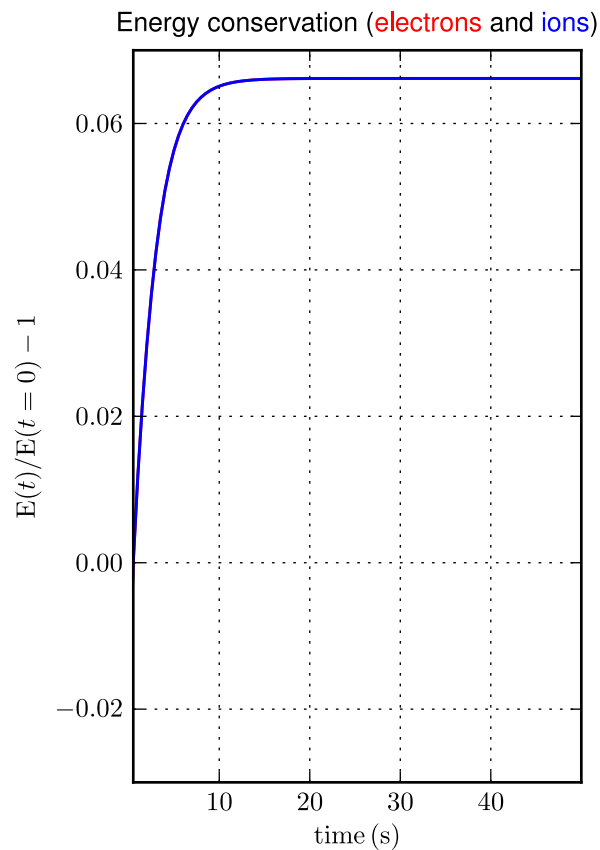
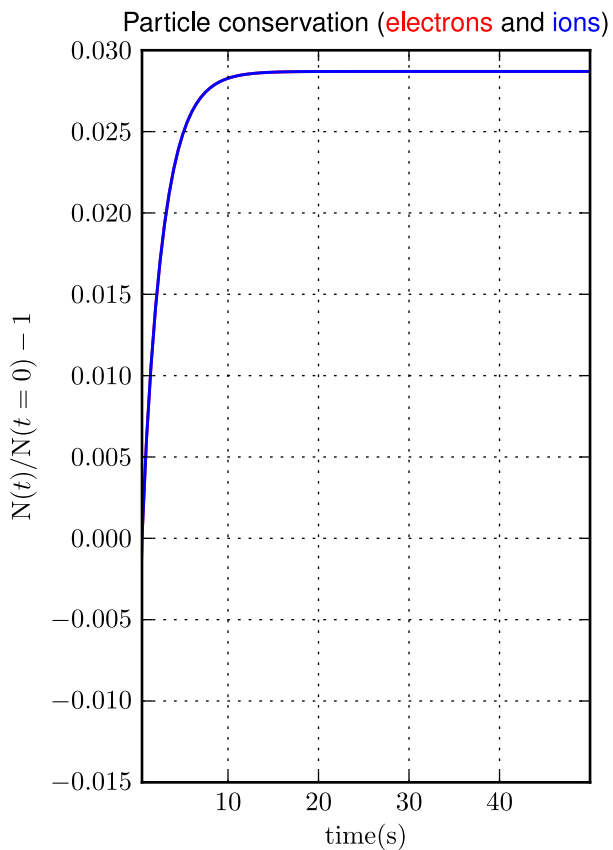
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

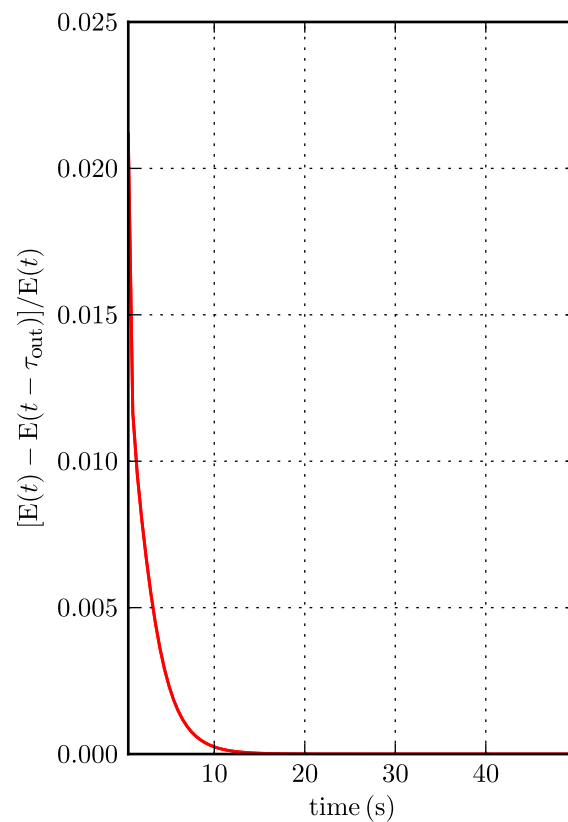
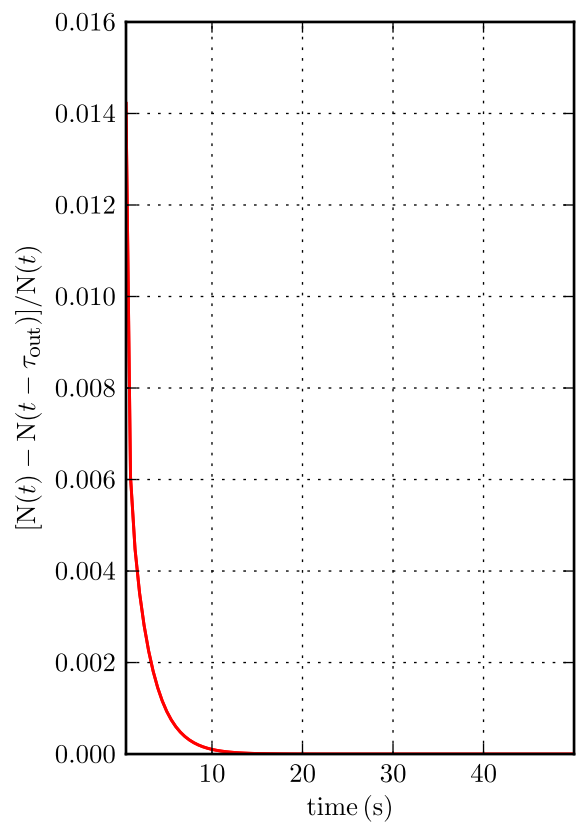
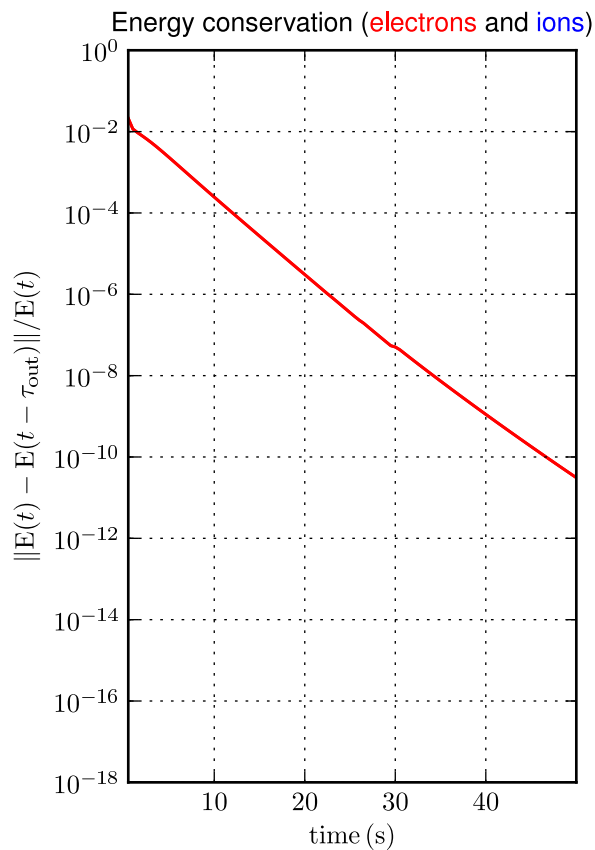
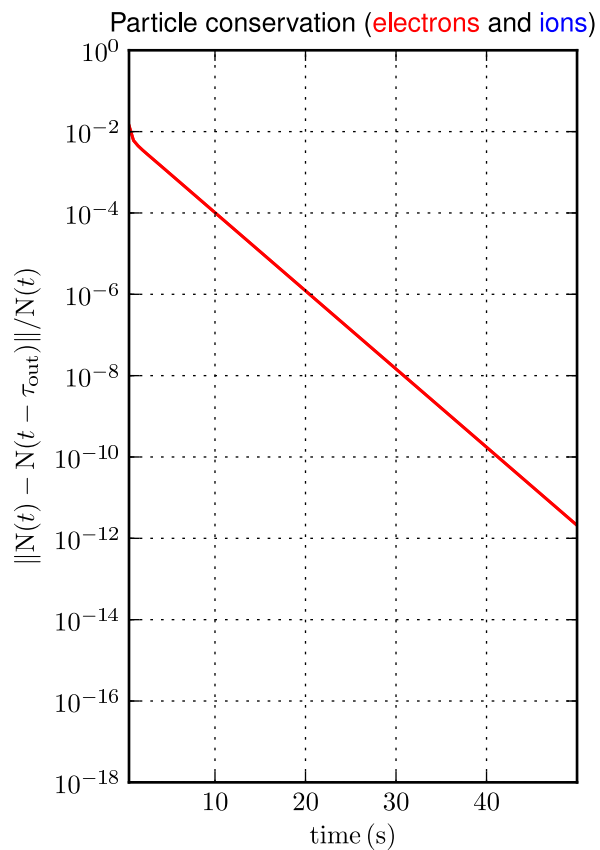
Comparison with initial solution - linear scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

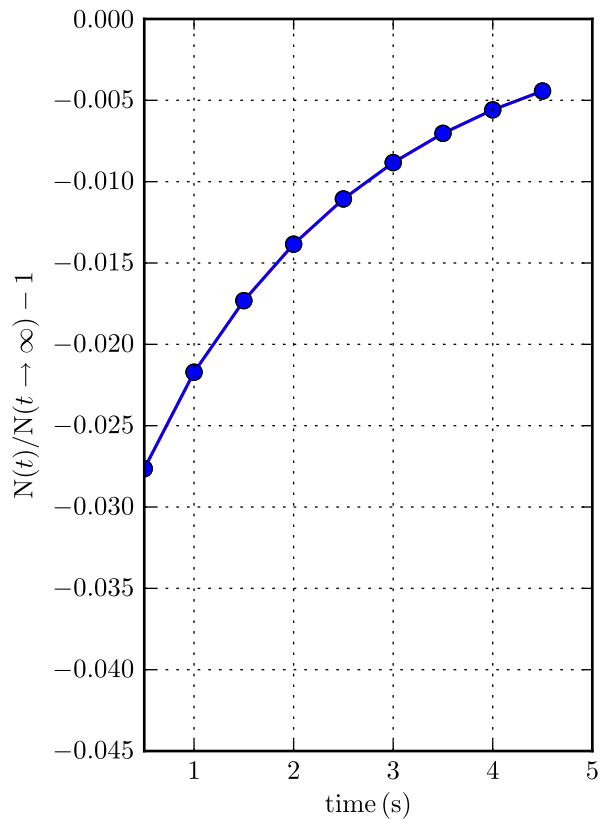
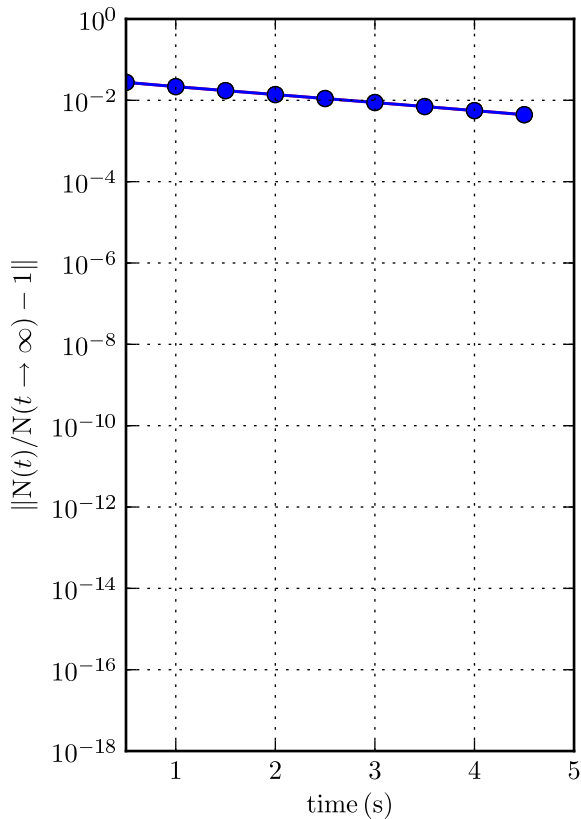
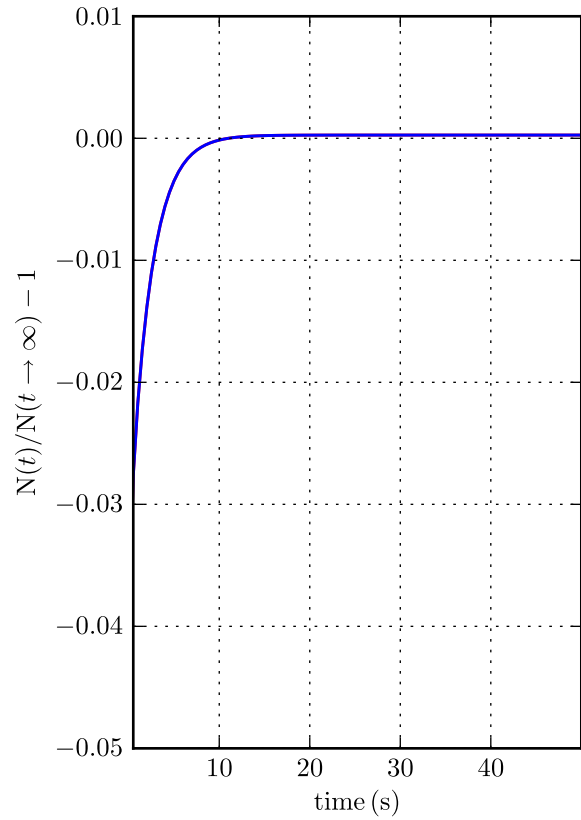
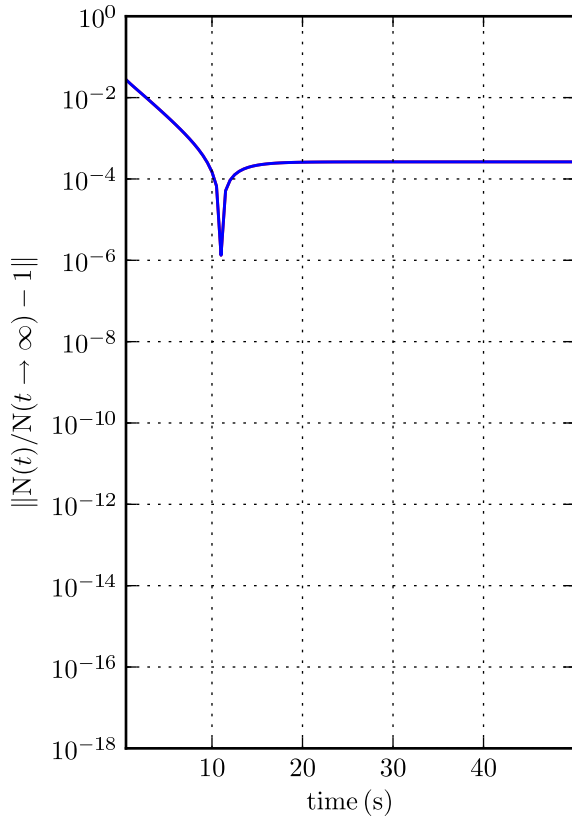
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

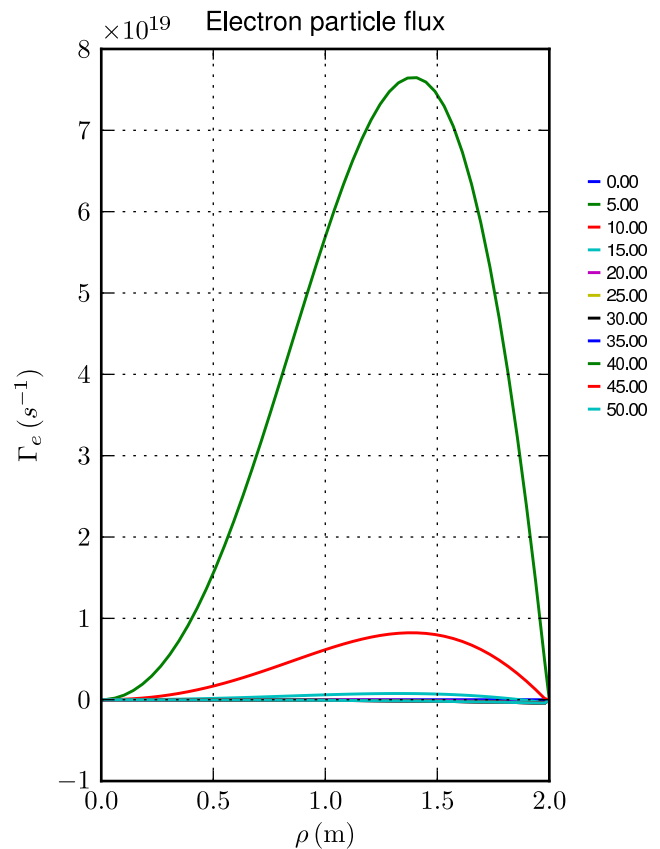
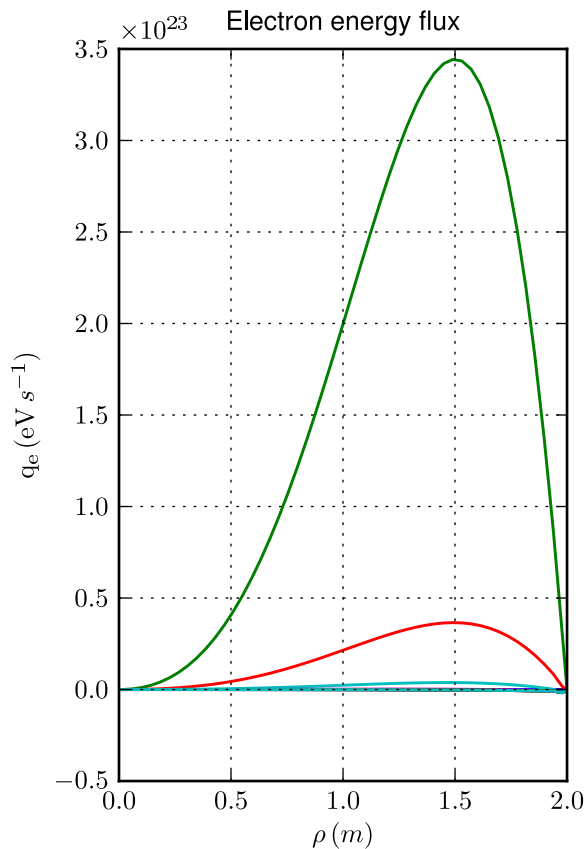
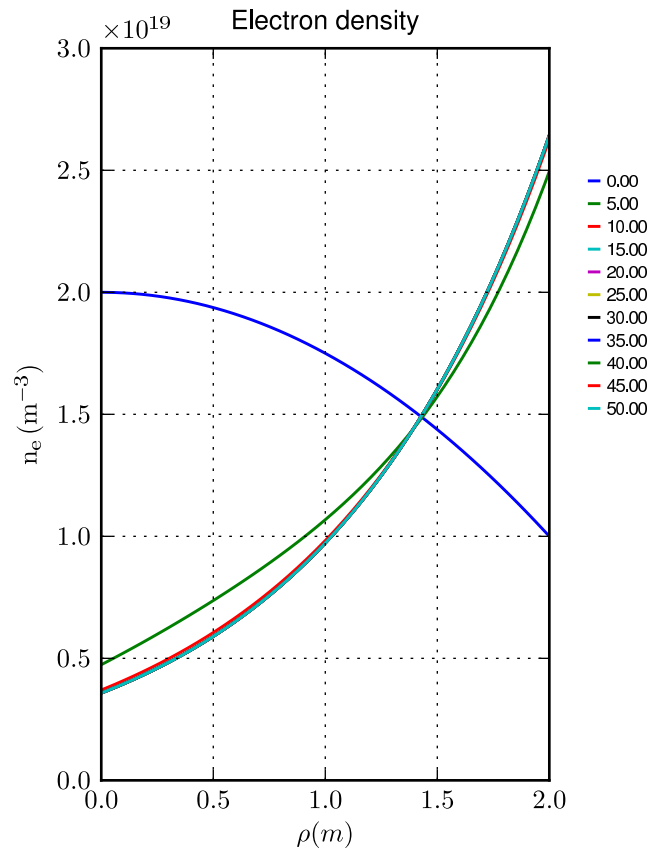
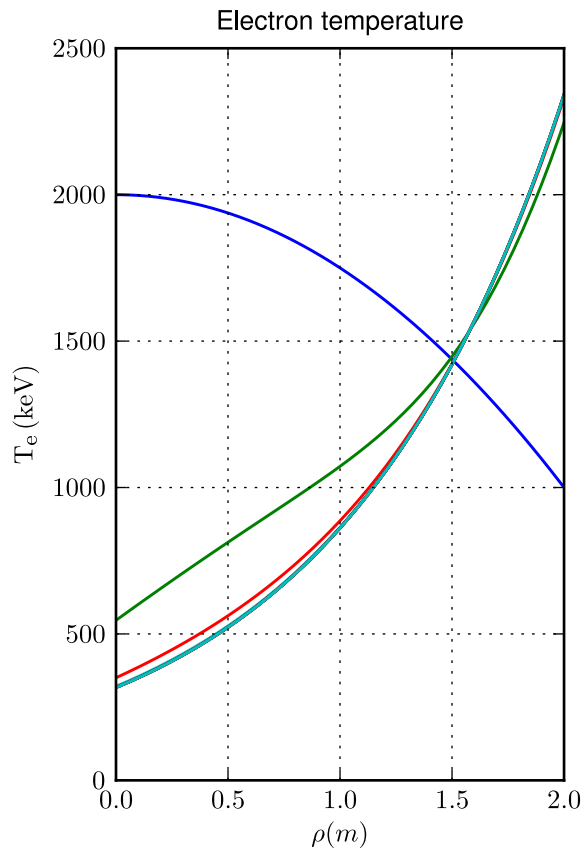




### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Time sampling: total simulation time/10

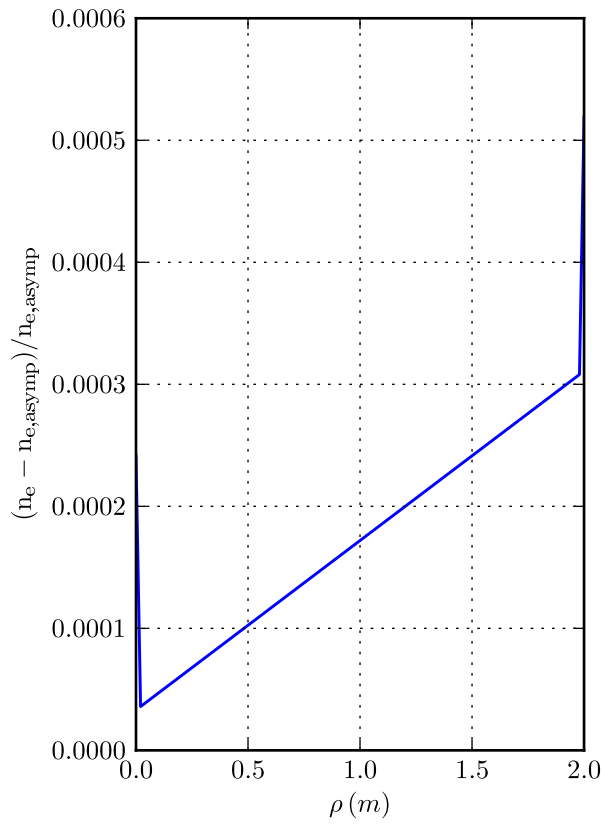


### Profiles

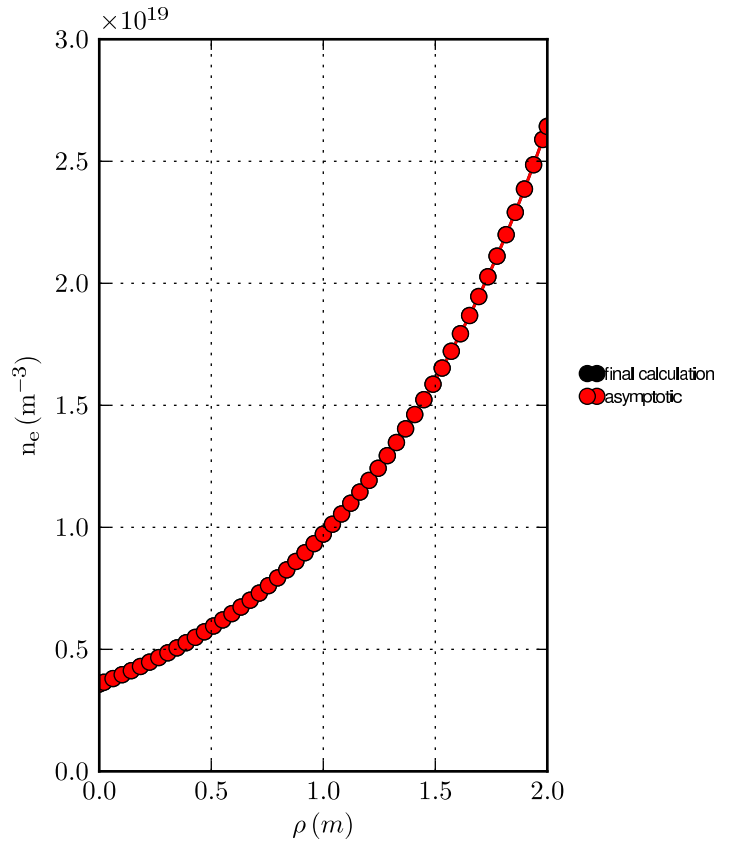
[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

### Comparison with asymptotic solution

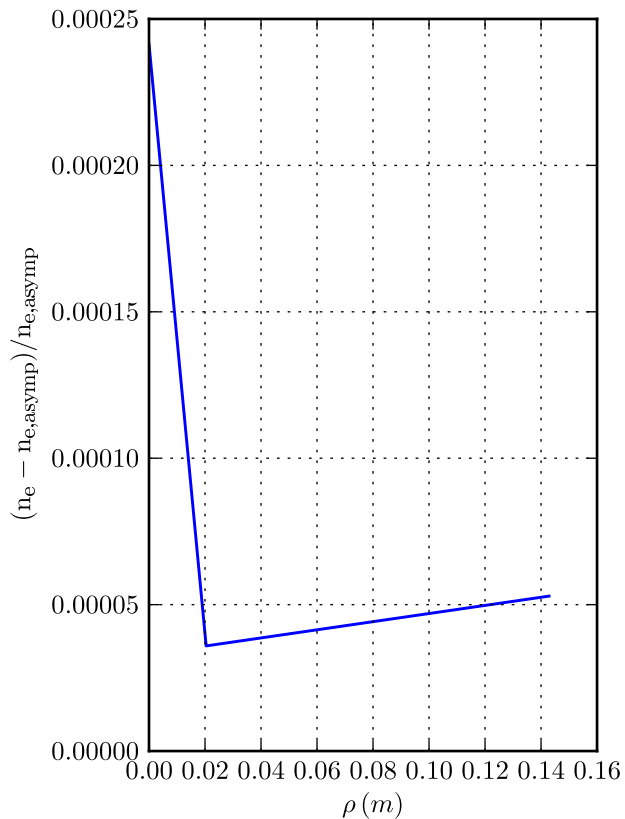
Electron density relative error



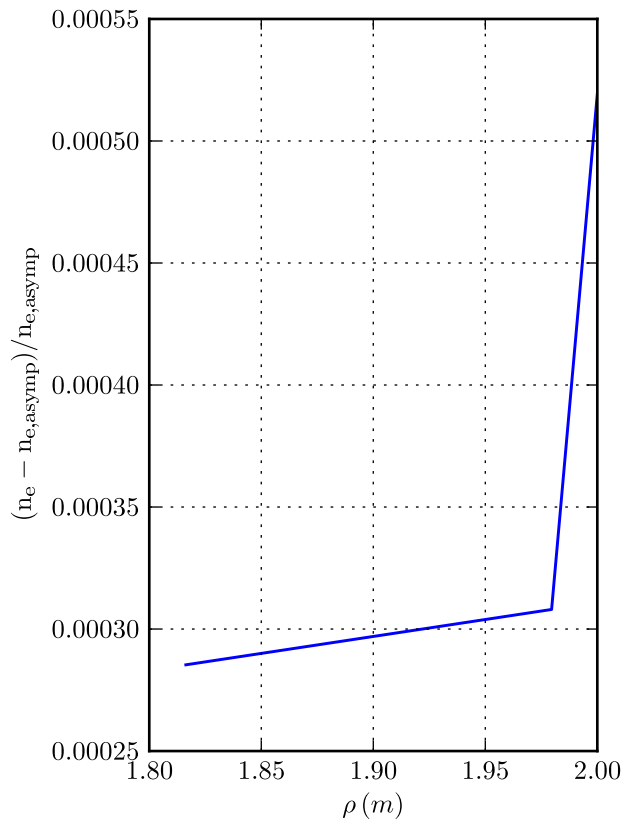
Electron density



Error: zoom over axis



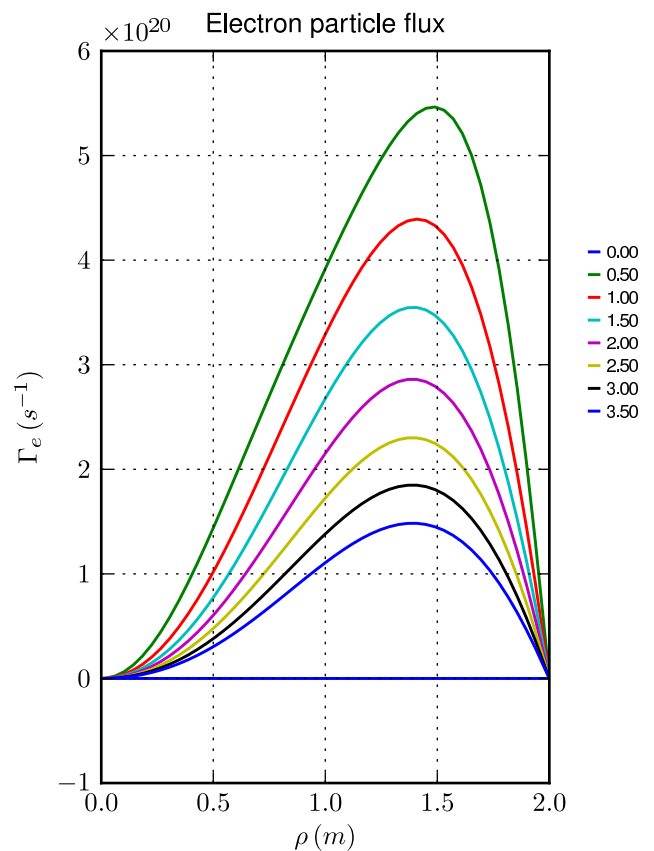
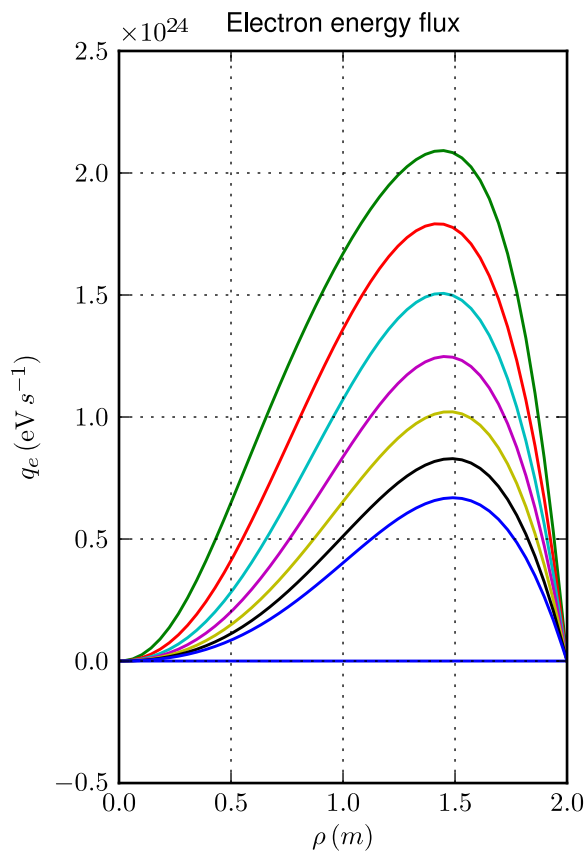
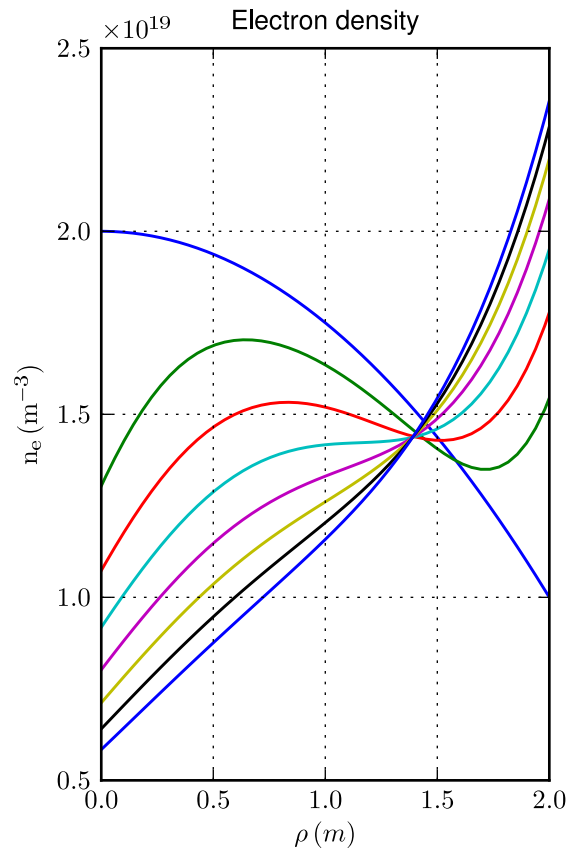
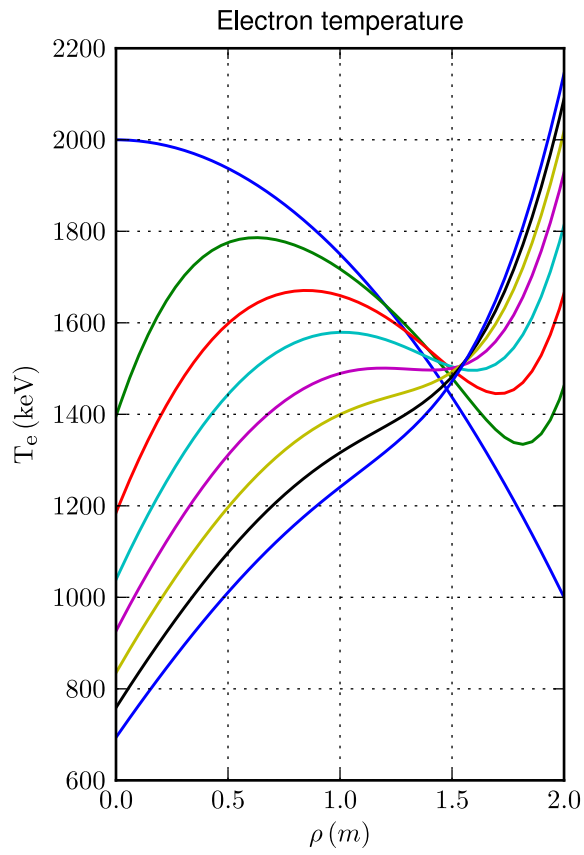
Error: zoom over edge



### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

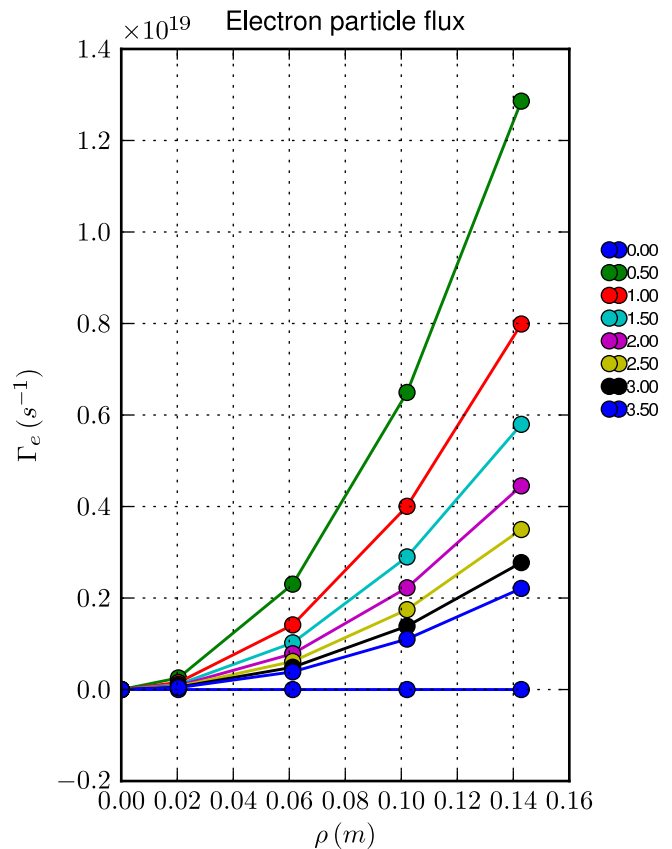
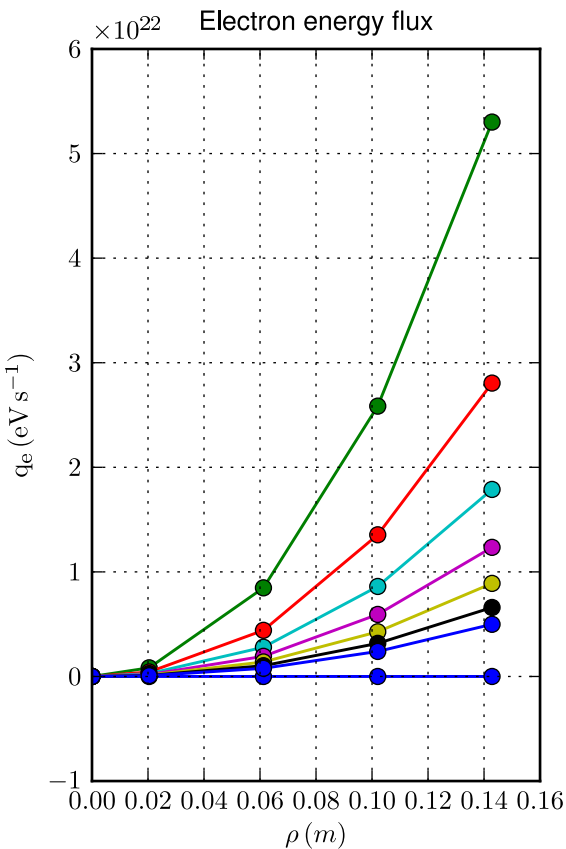
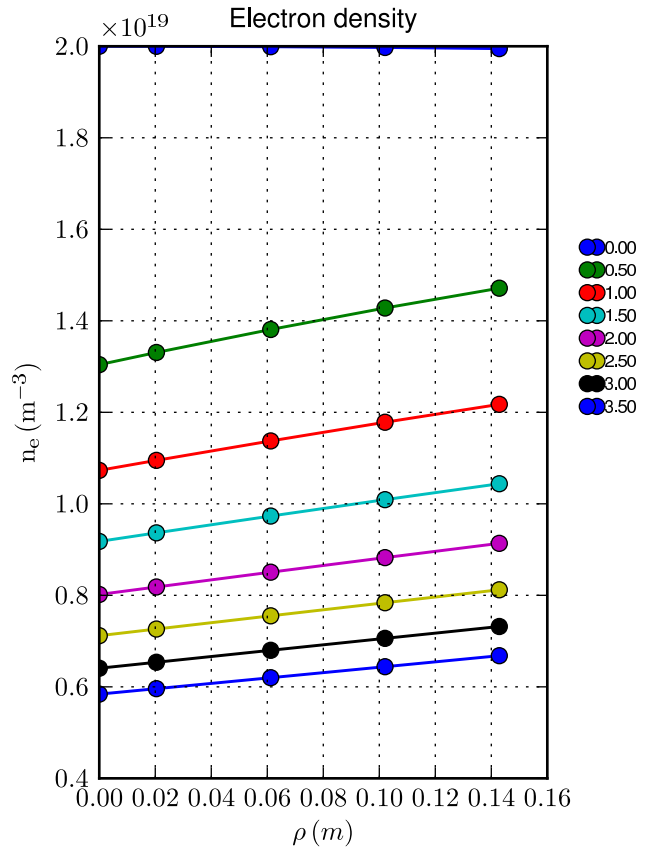
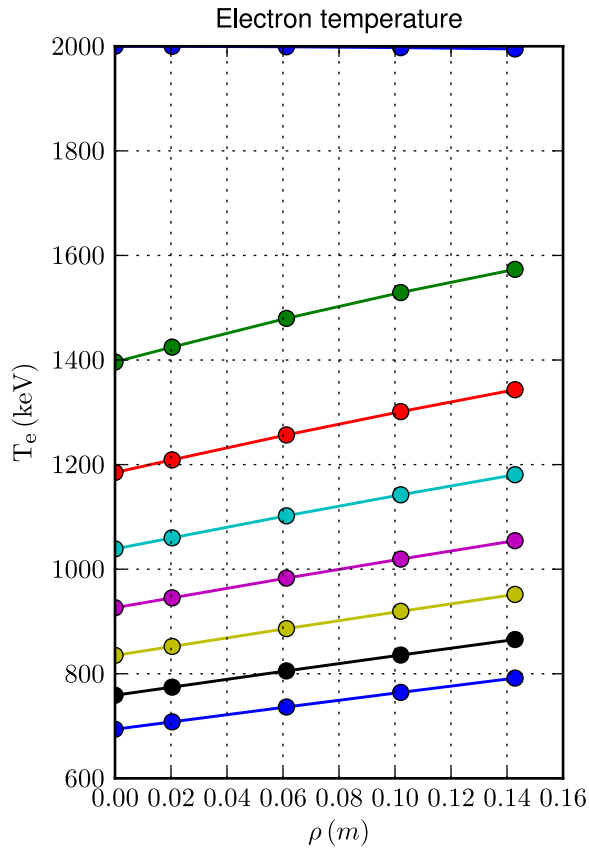


### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over magnetic axis

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

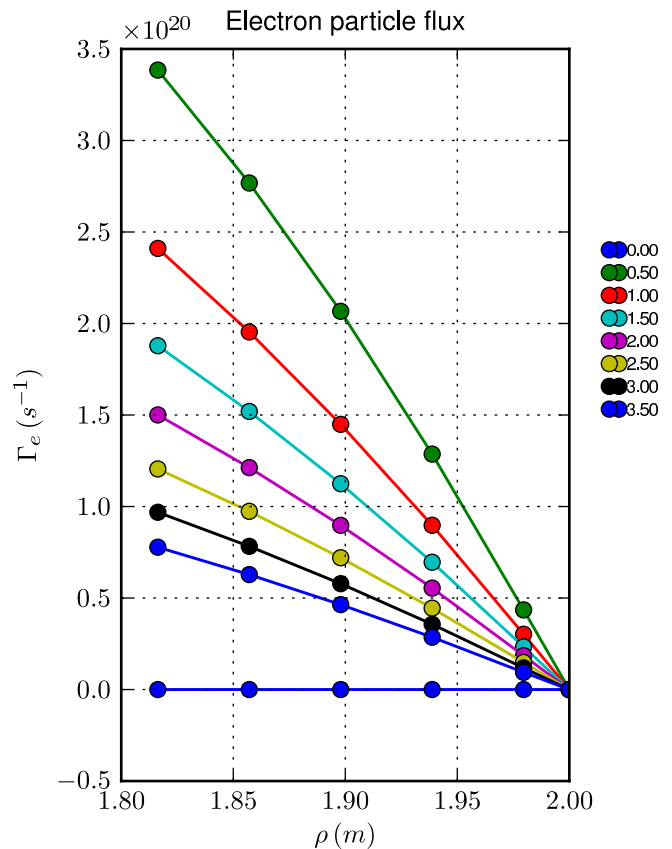
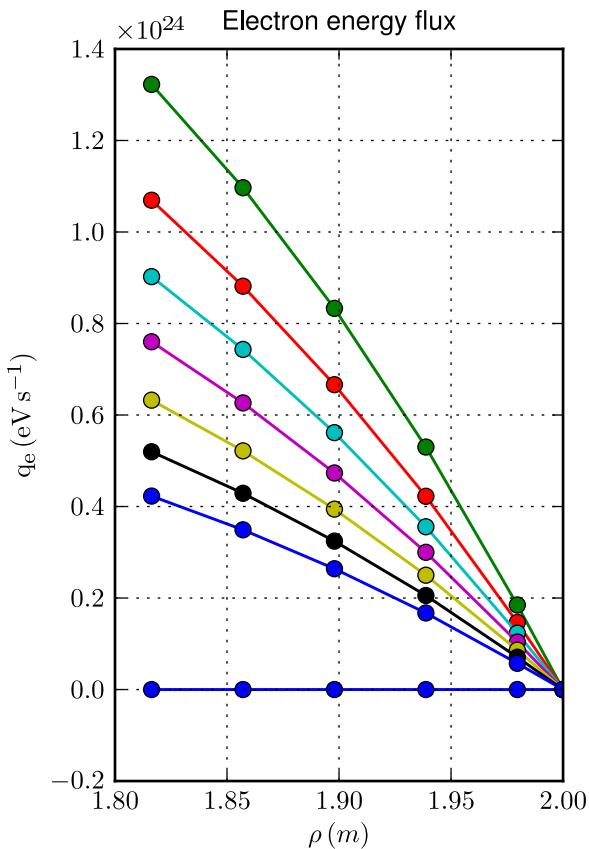
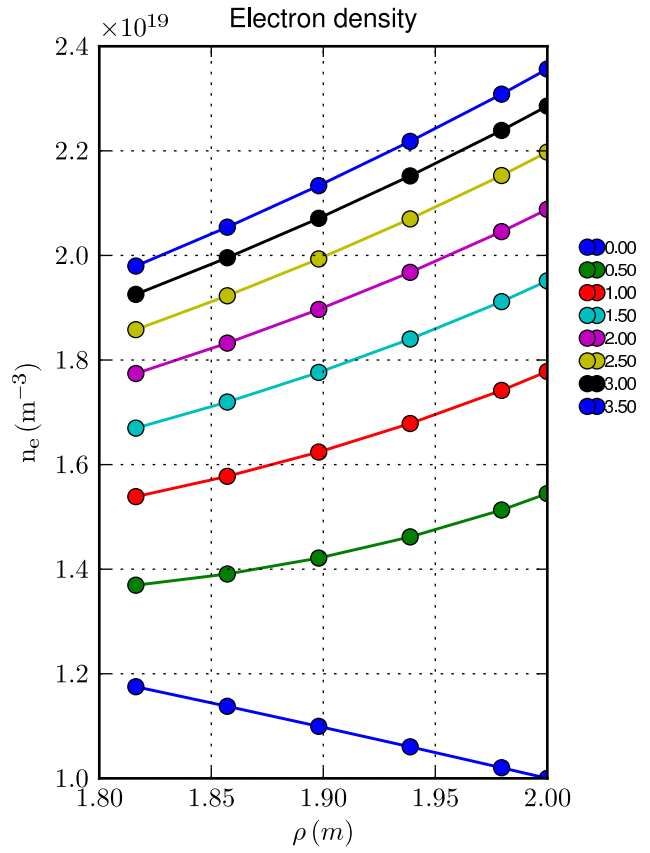
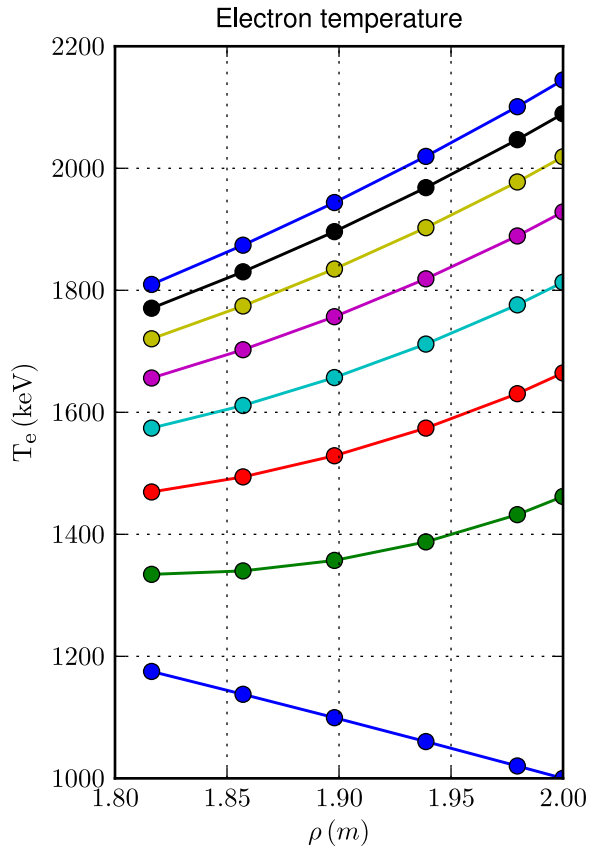


### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over edge

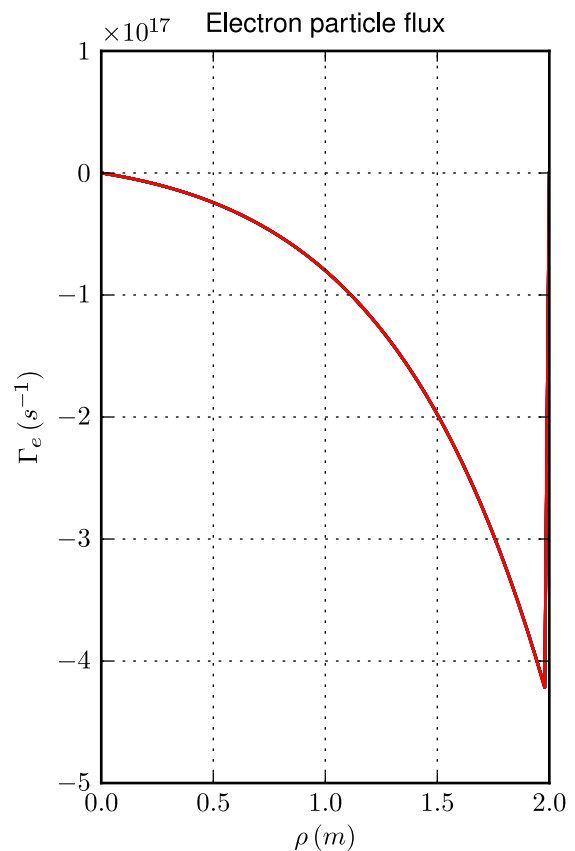
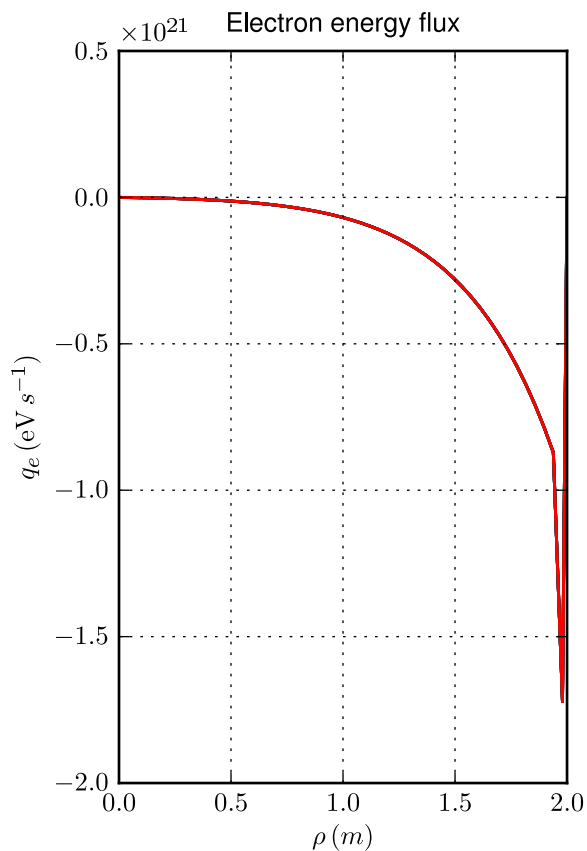
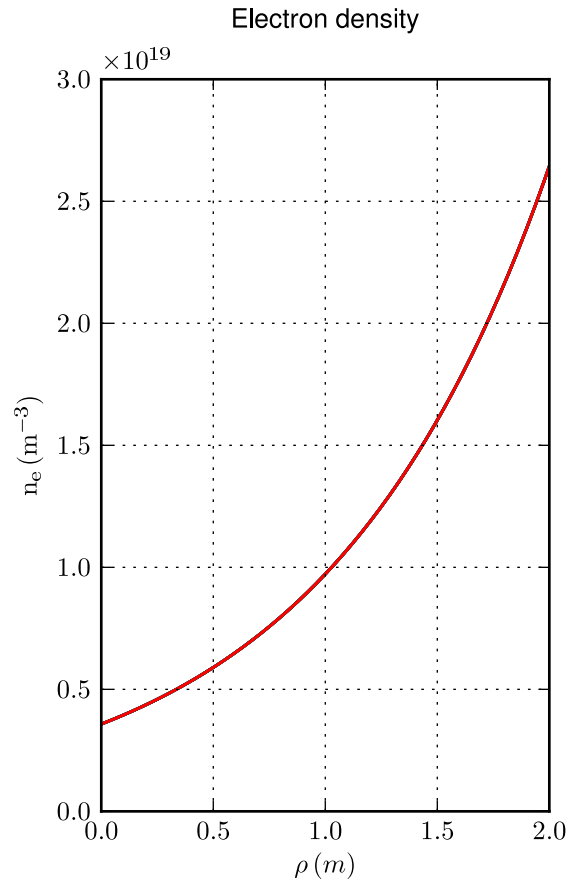
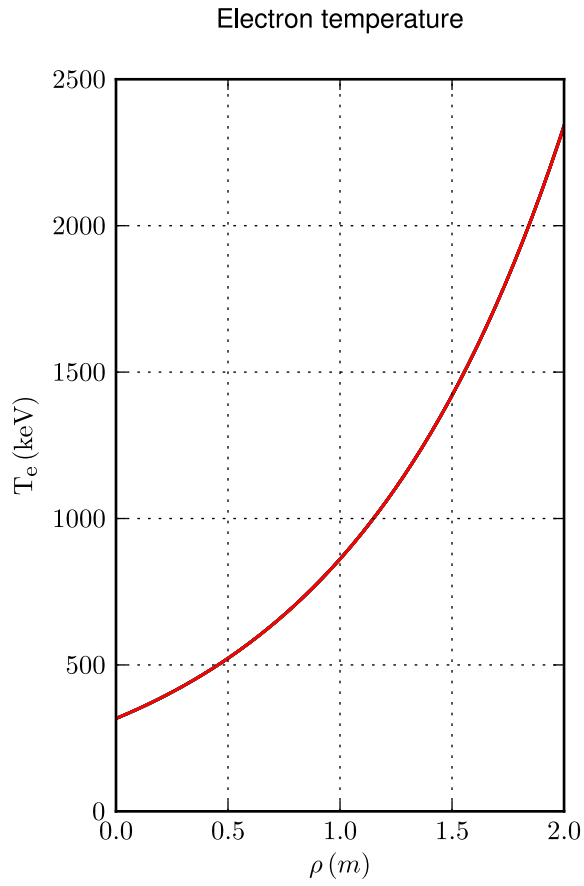
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$



### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Time sampling: last 10 time slices

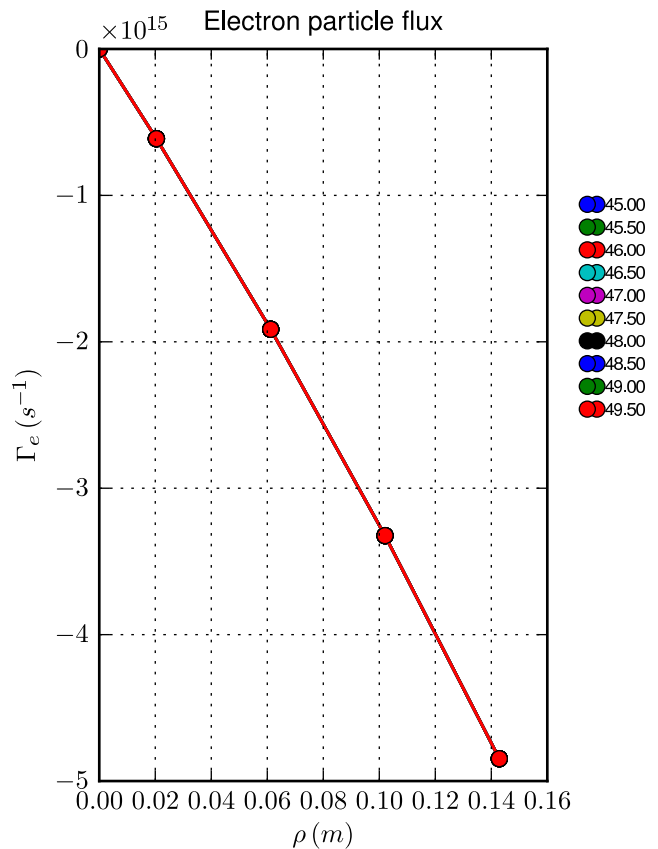
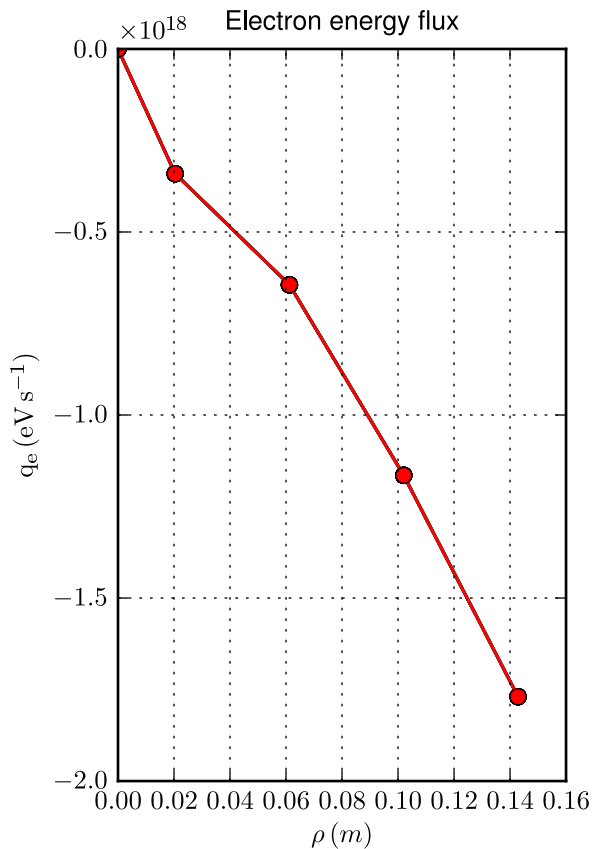
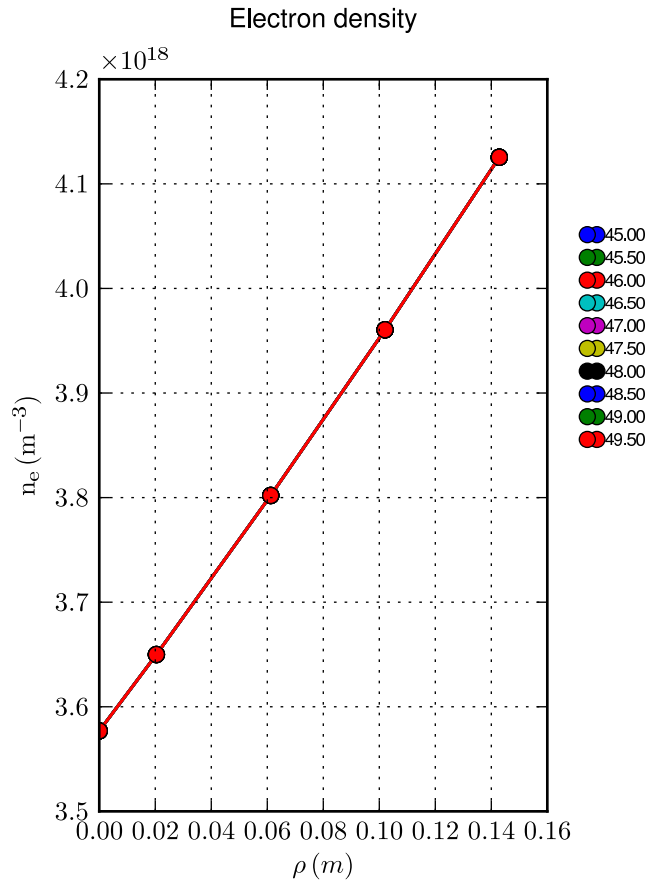
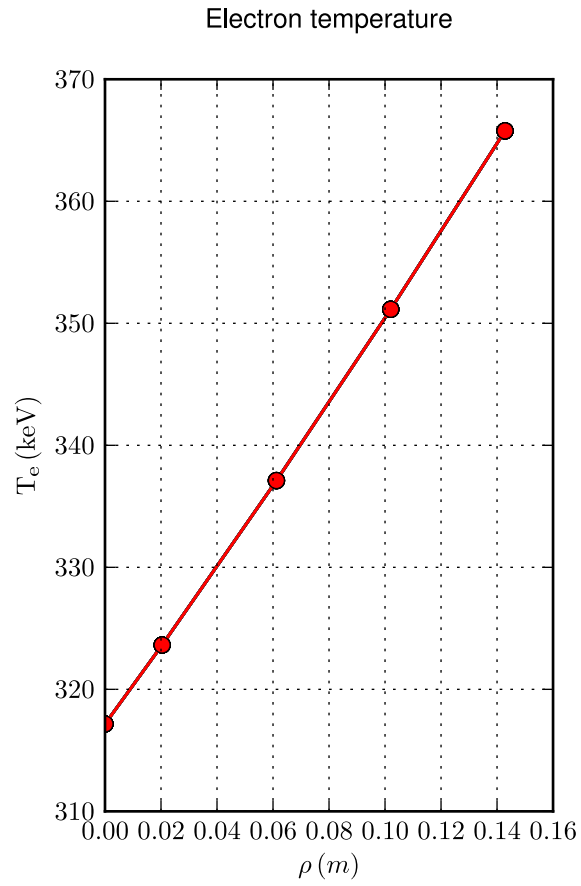


- 45.00
- 45.50
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- 47.50
- 48.00
- 48.50
- 49.00
- 49.50

### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

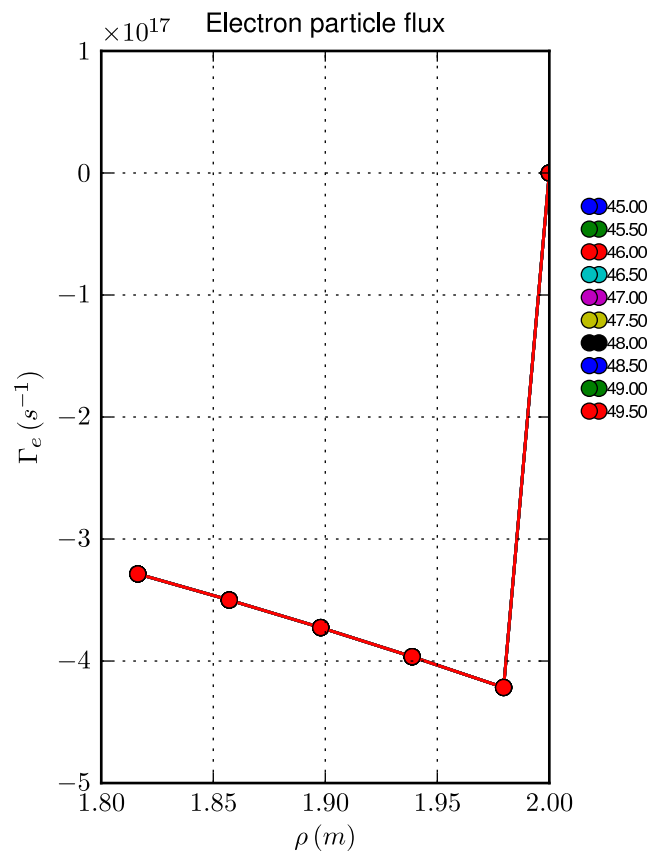
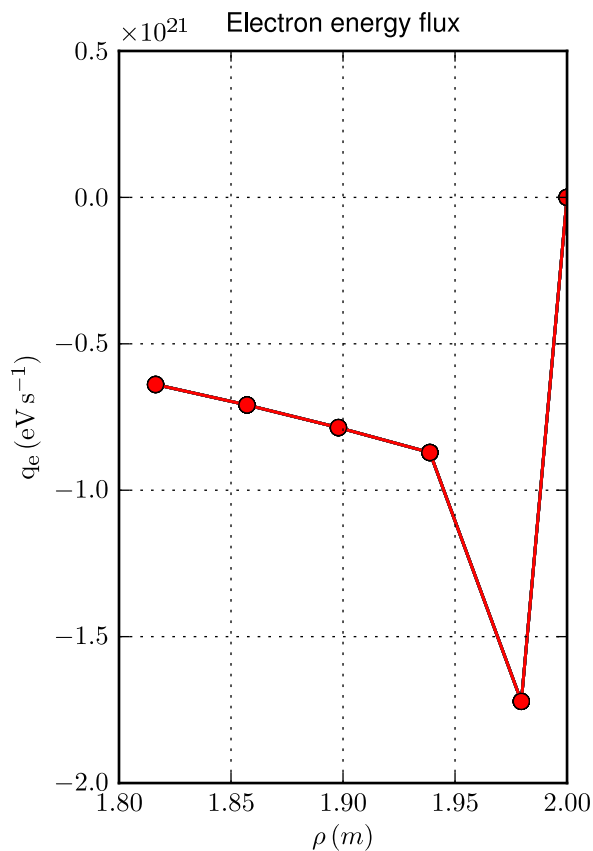
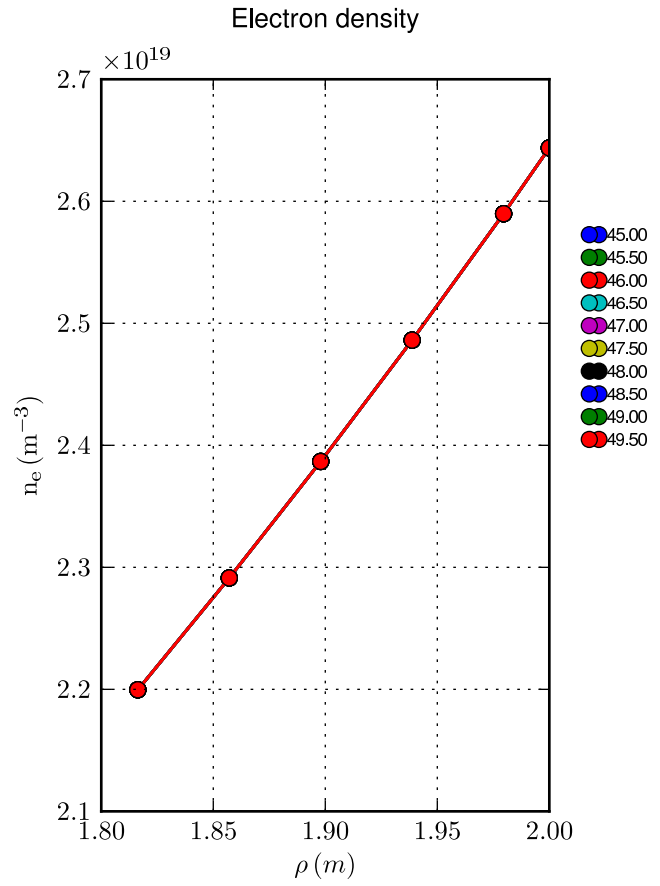
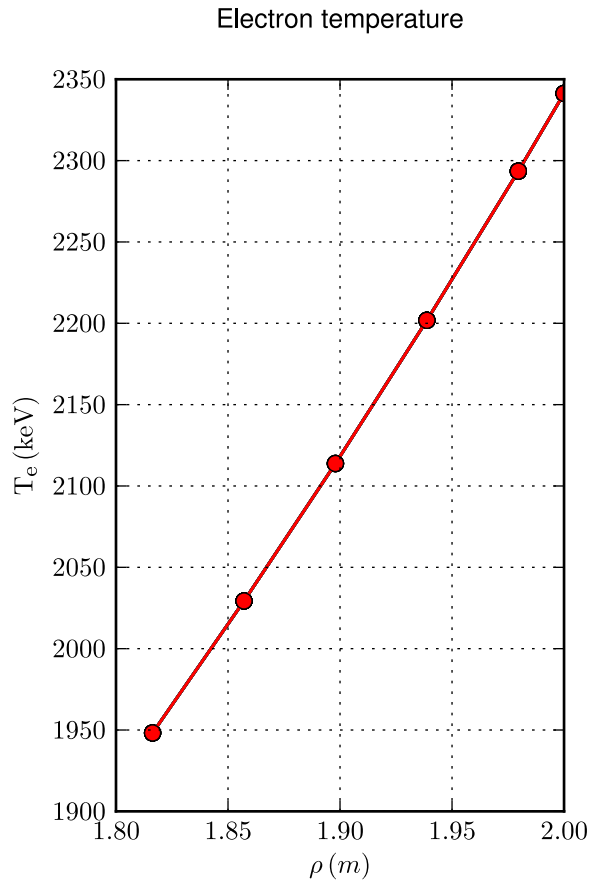
Spatial zoom over magnetic axis; time sampling: last 10 time slices



### Profiles

[Case: I.1.5.a, Solver: 4,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

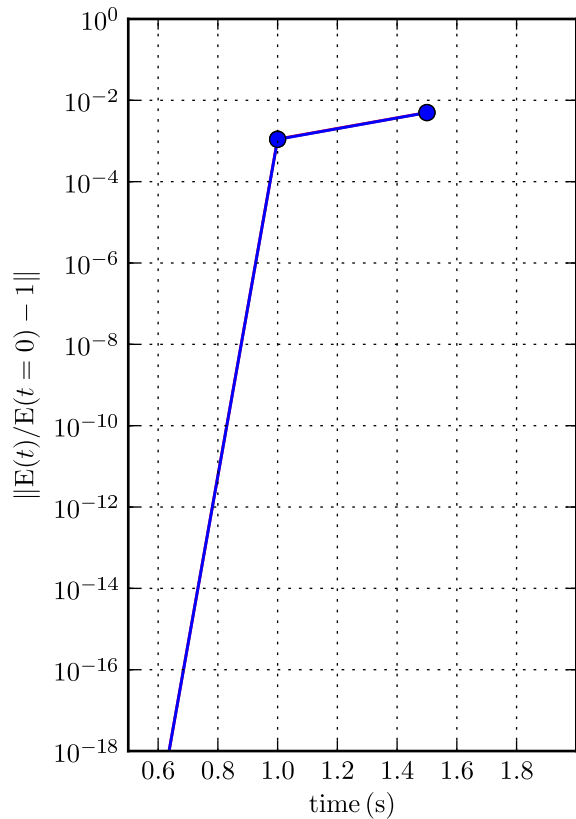
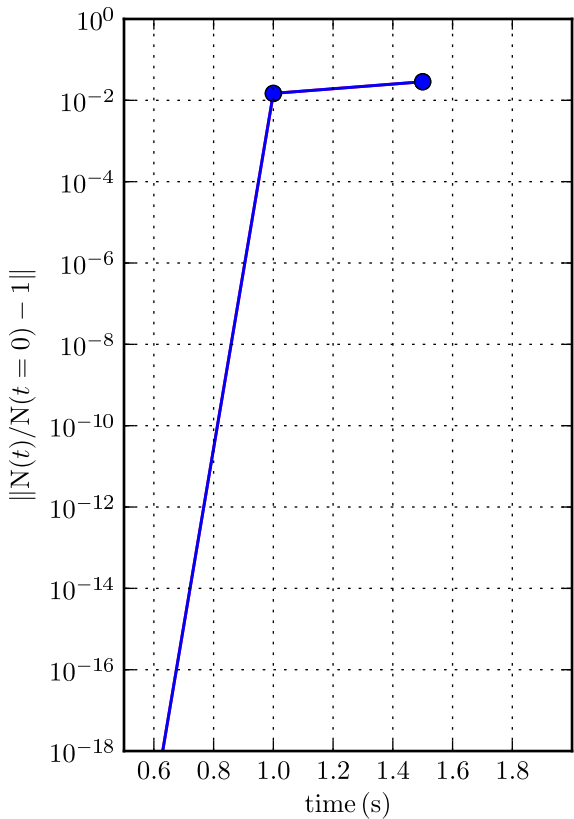
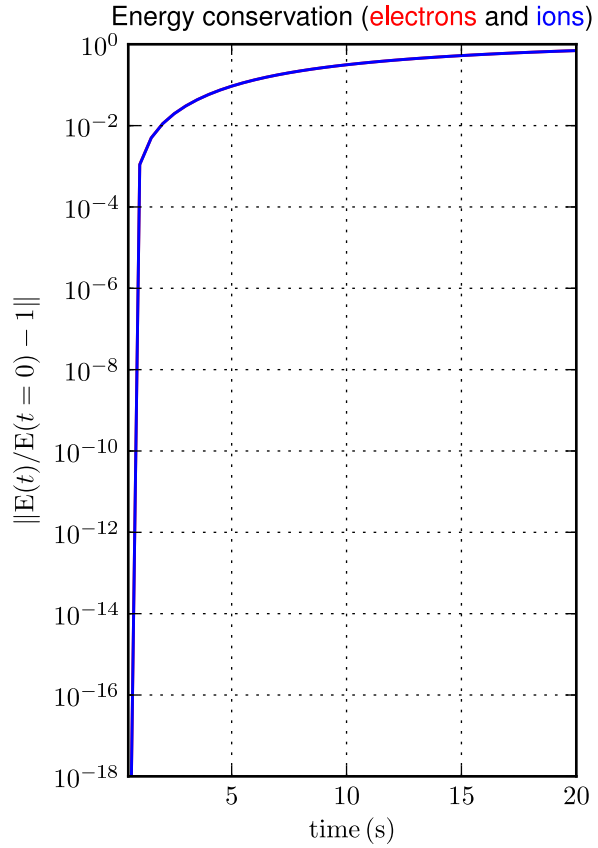
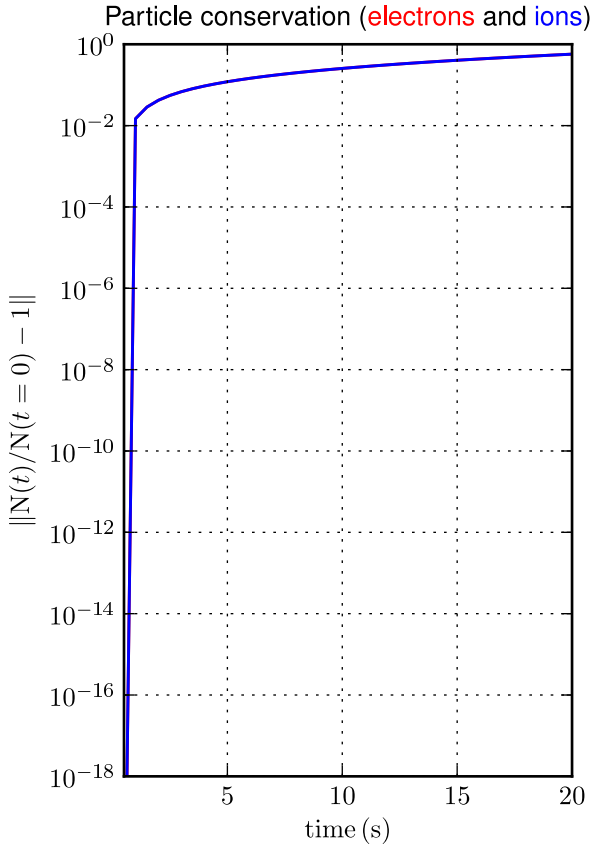




Part. & Energy conservation

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

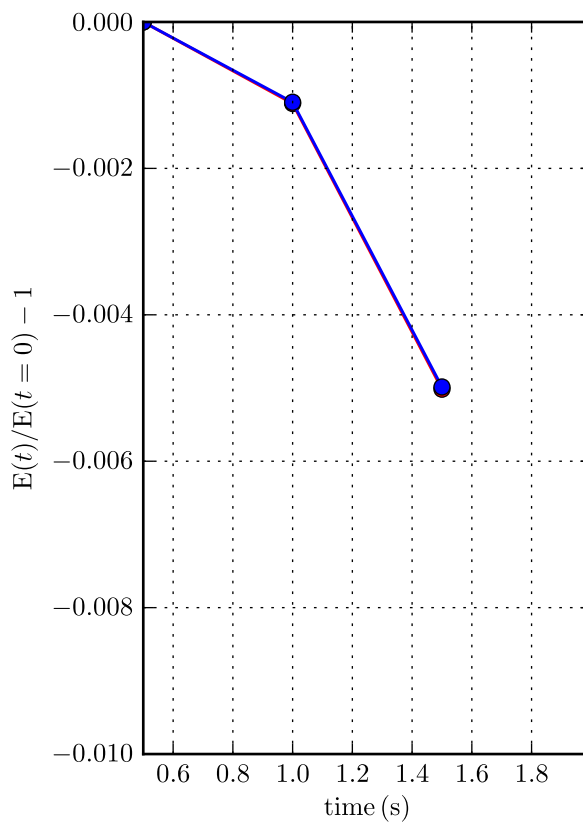
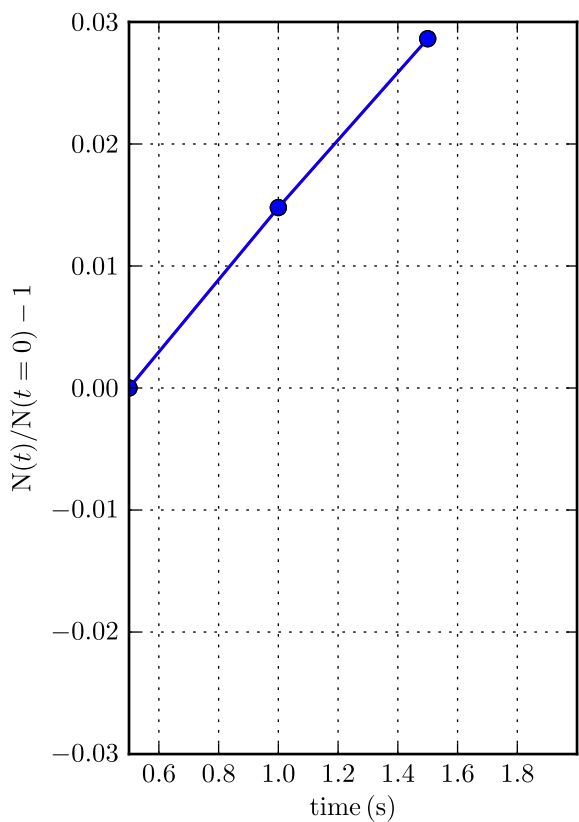
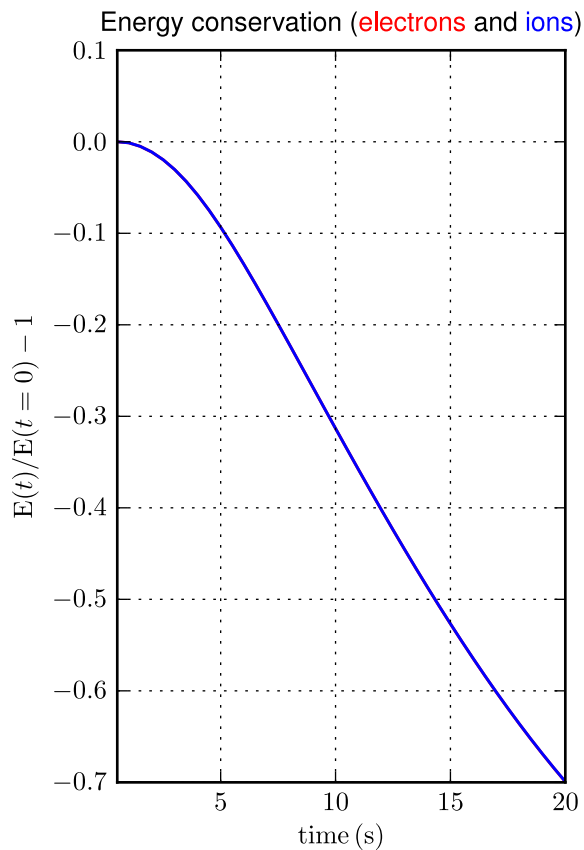
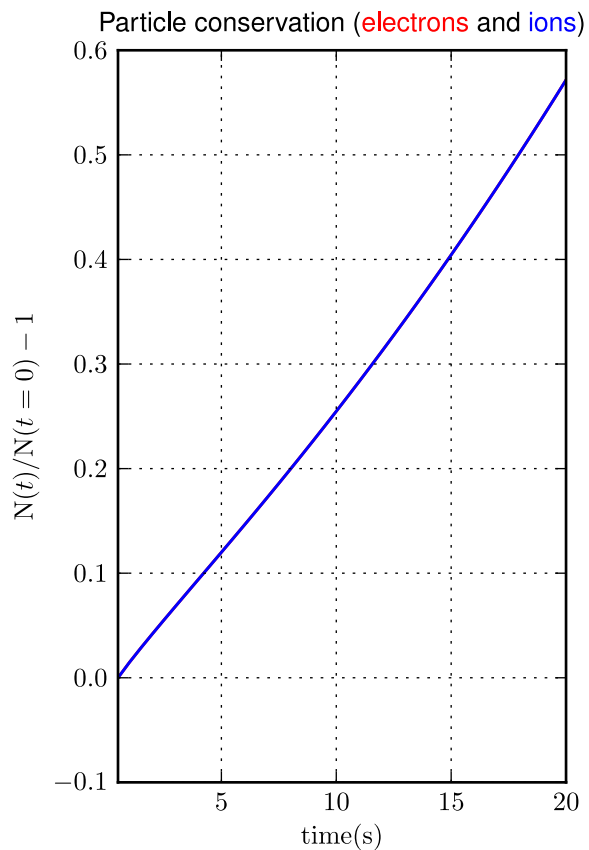
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

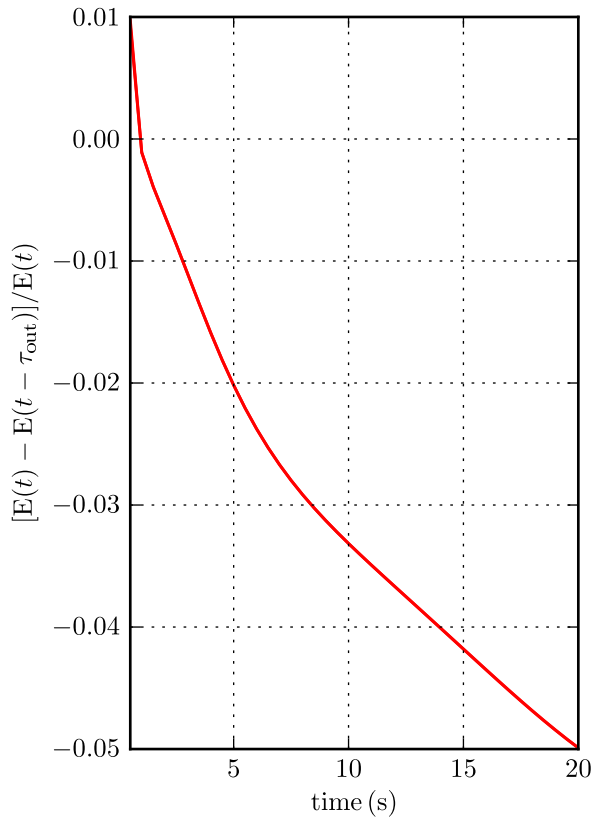
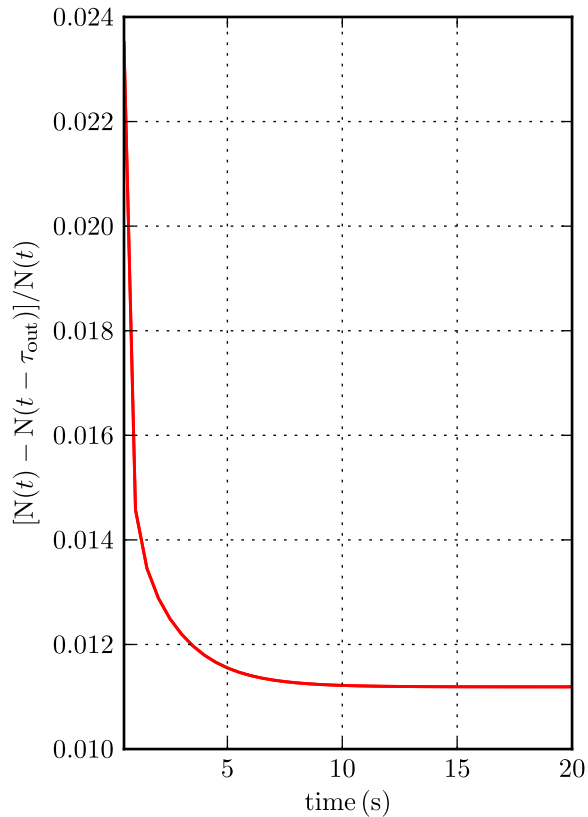
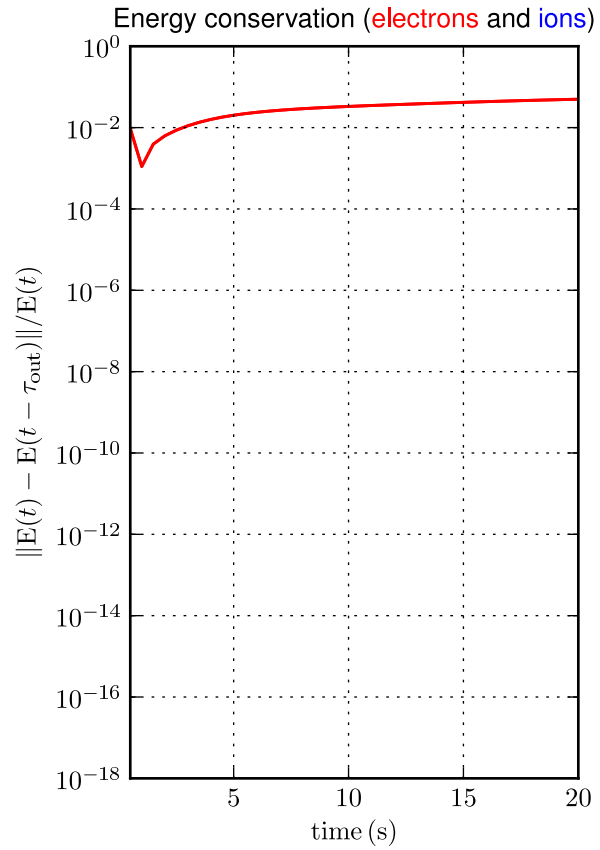
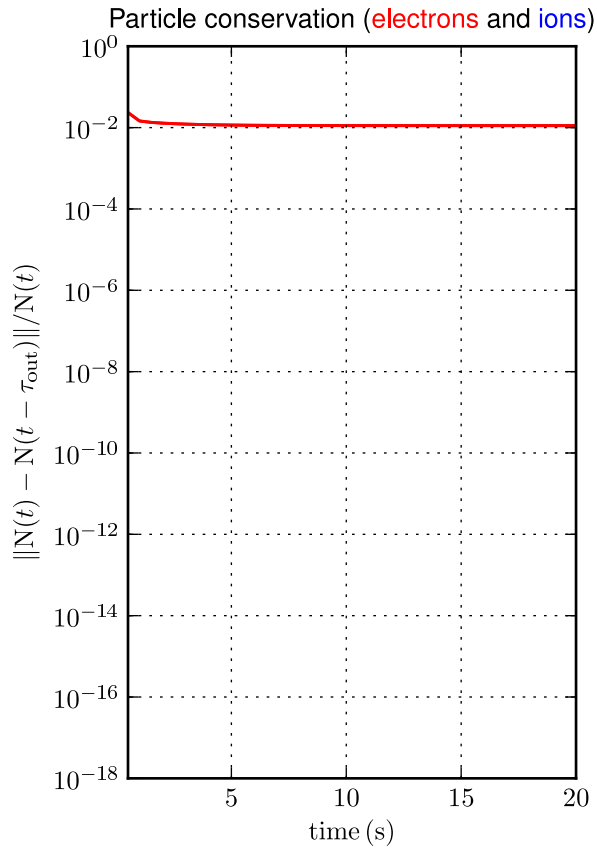
Comparison with initial solution - linear scale; total time and zoom over time



Part. & Energy conservation

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_p = 51$ ]

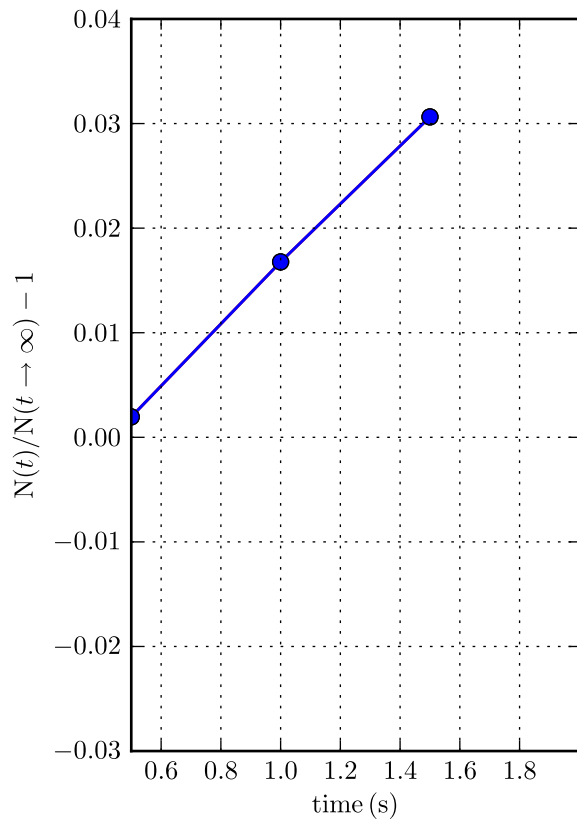
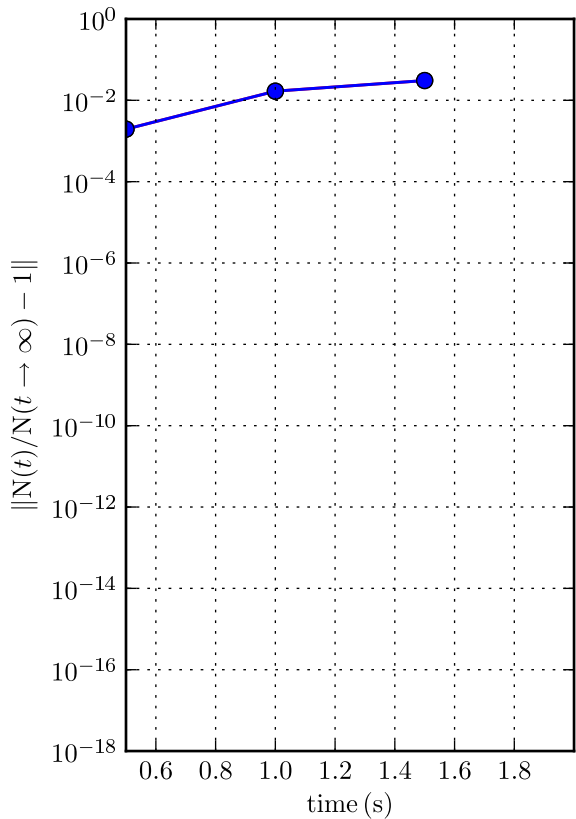
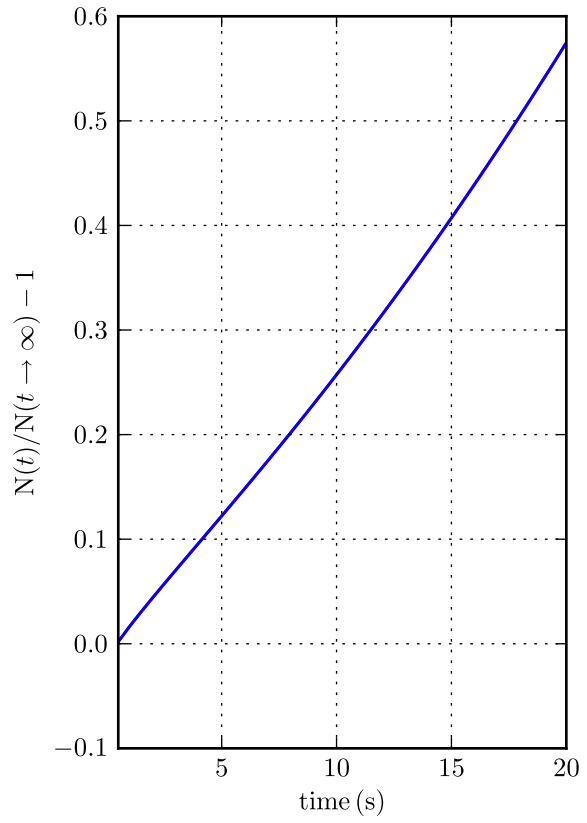
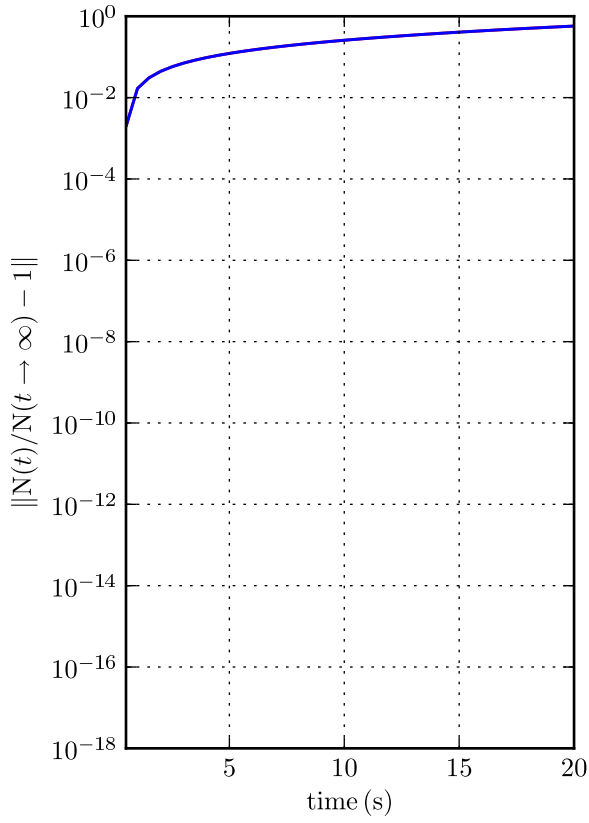
Comparison with previous time-sampled ( $\tau_{\text{out}}$ ) solution - log and linear scales



### Particle conservation

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

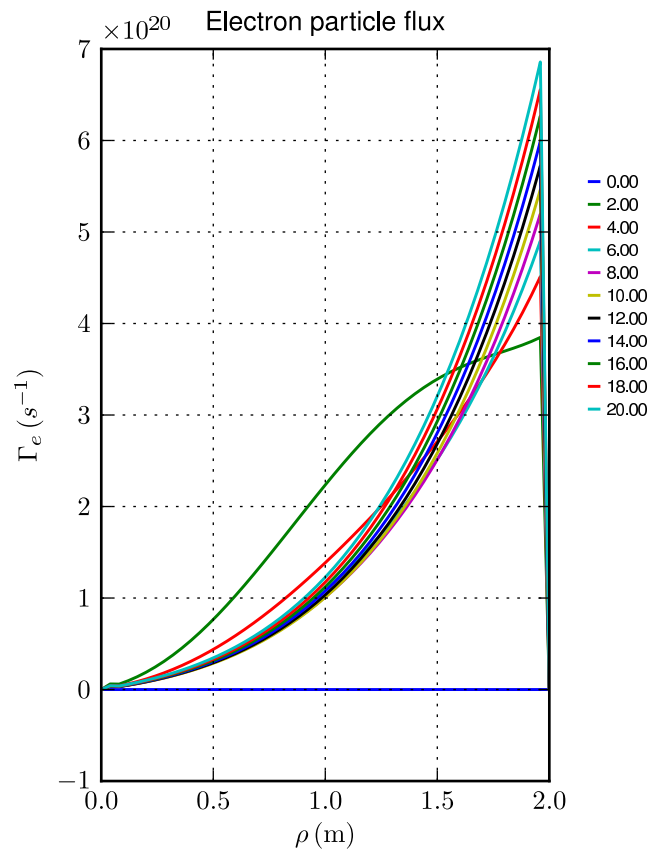
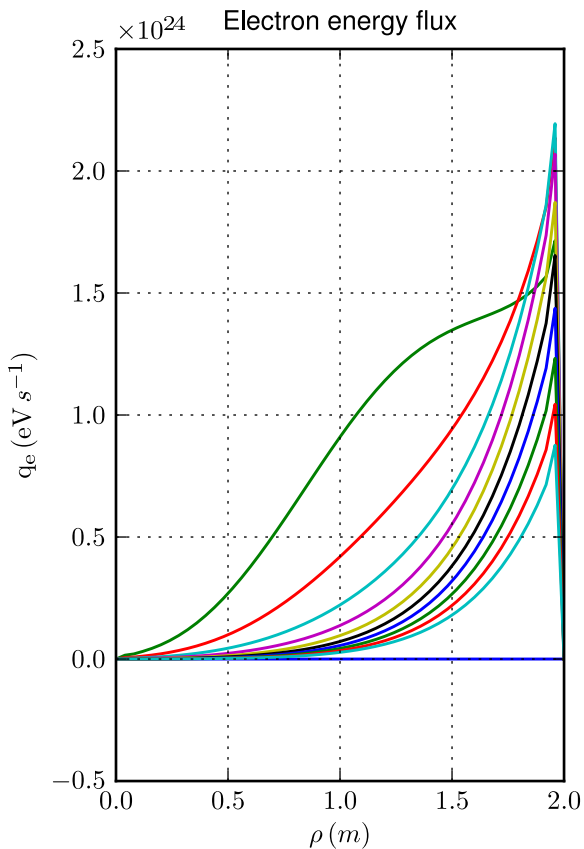
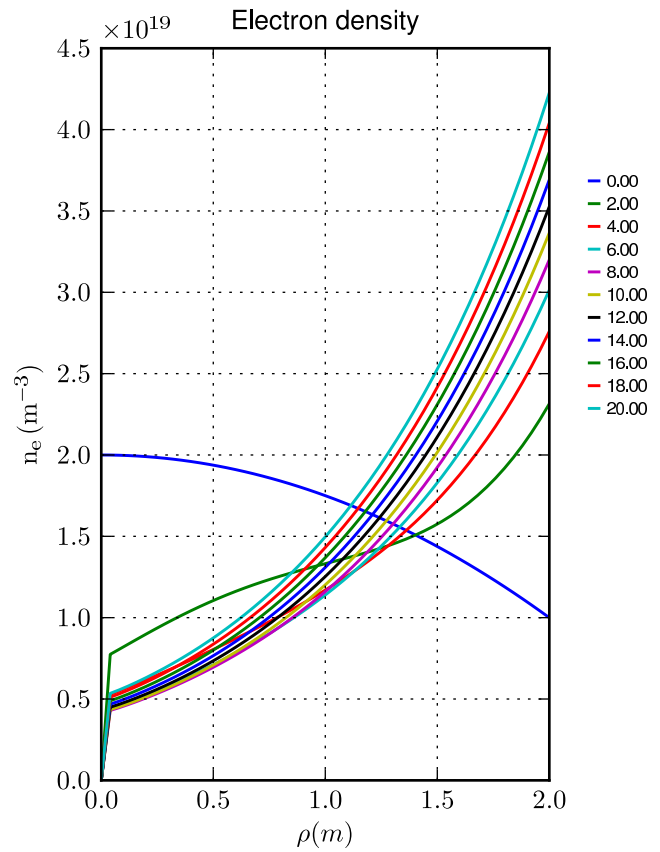
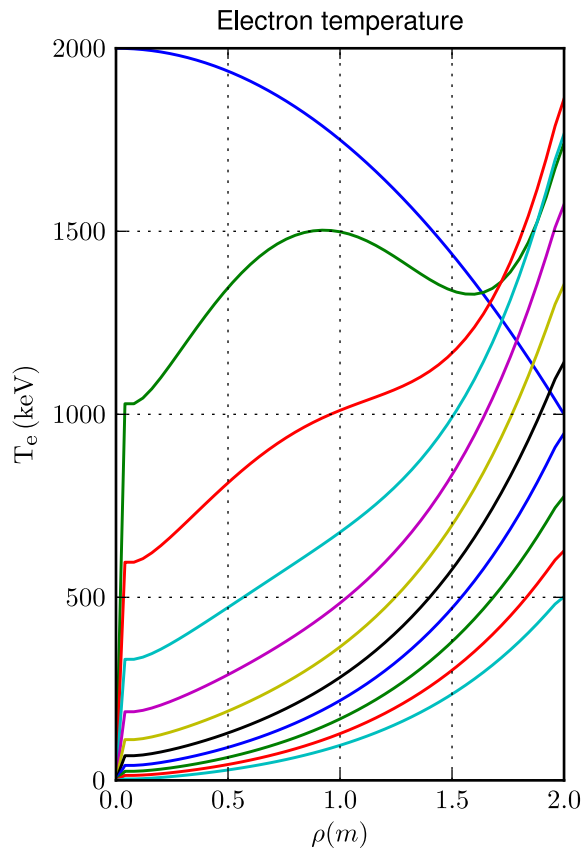
Comparison with asymptotic solution (electrons and ions); total time and zoom over time



### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

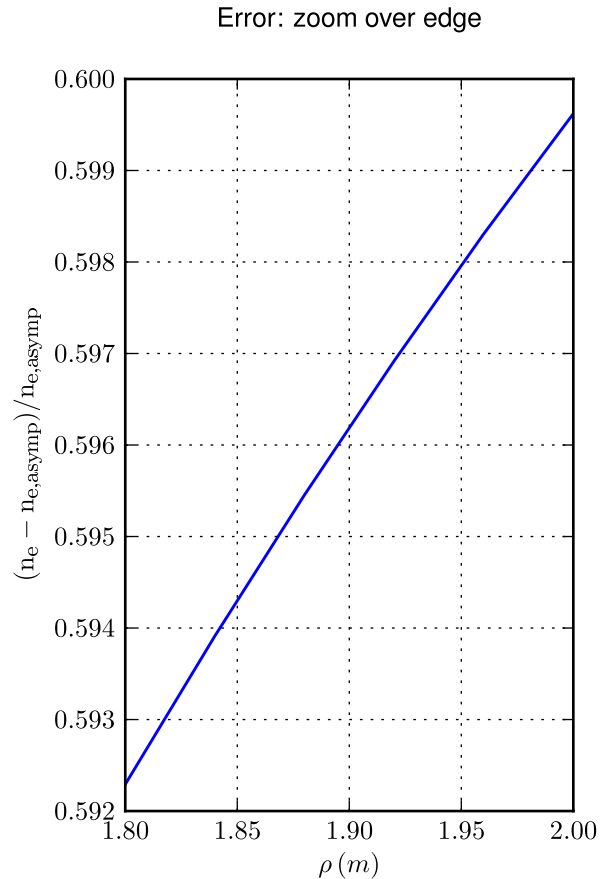
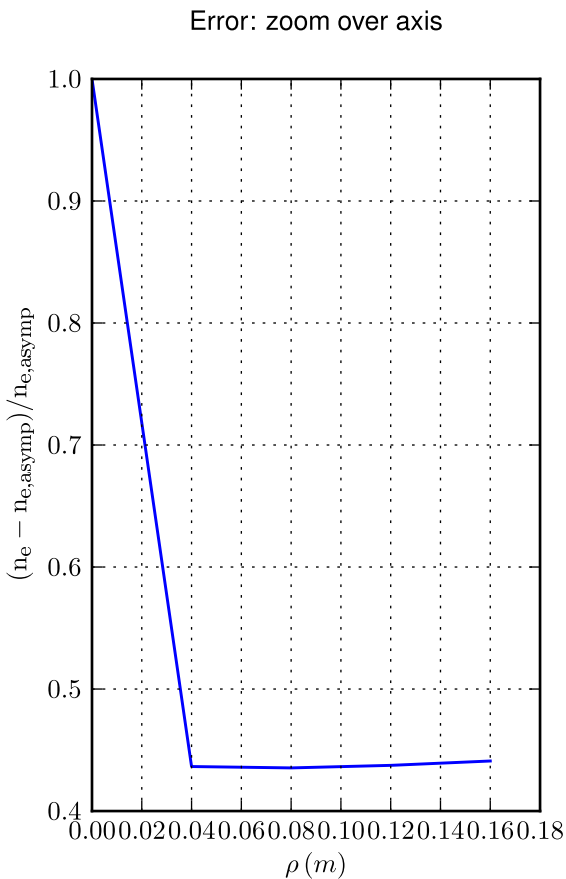
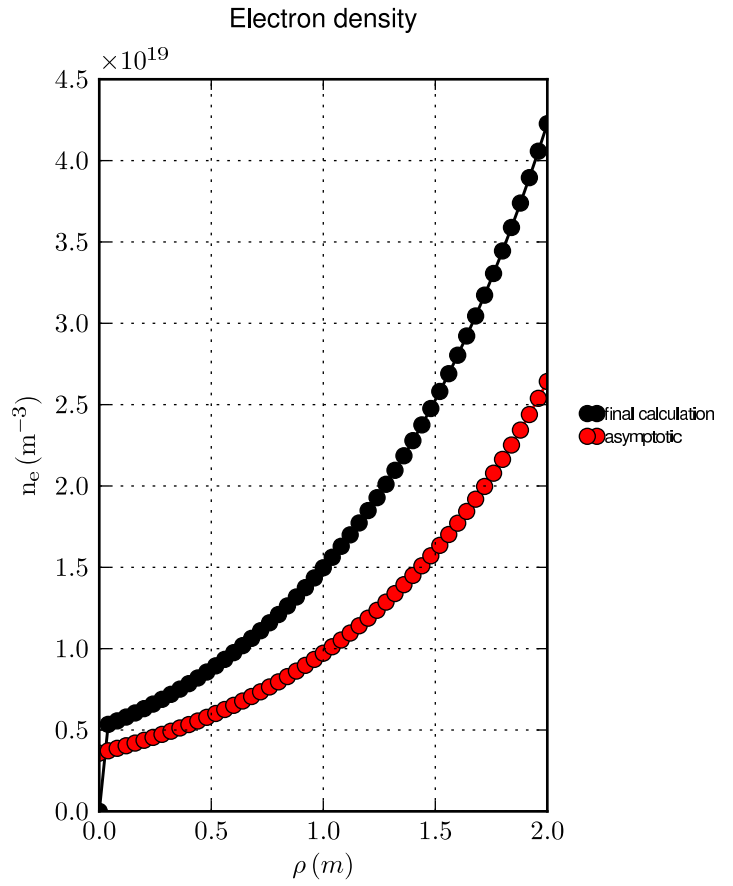
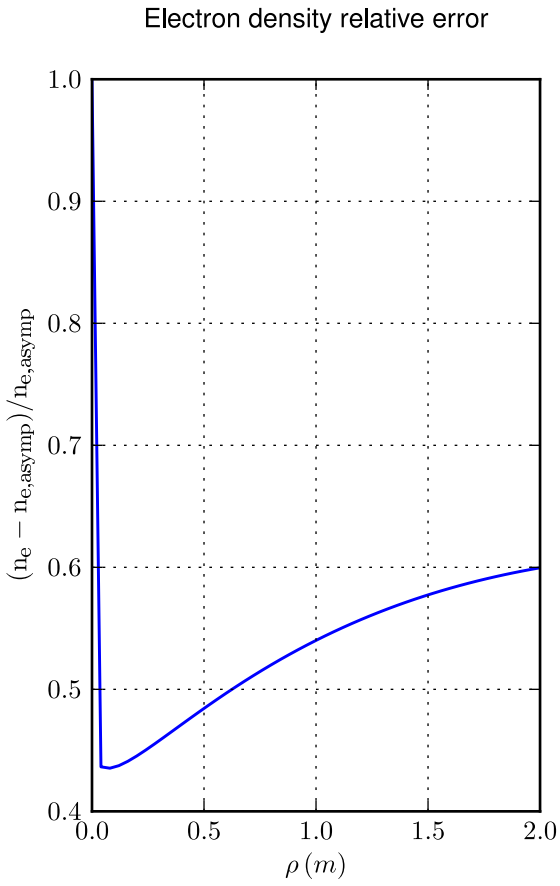
Time sampling: total simulation time/10



### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

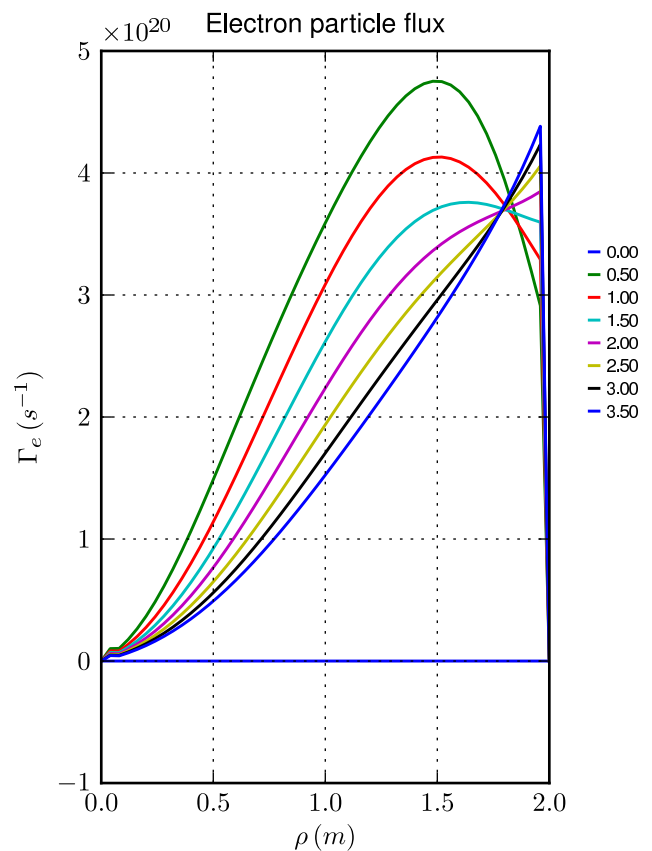
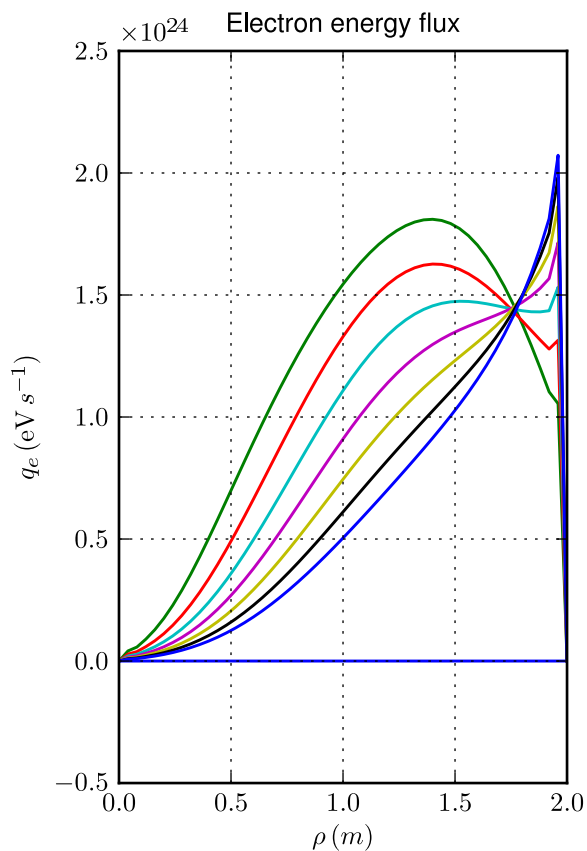
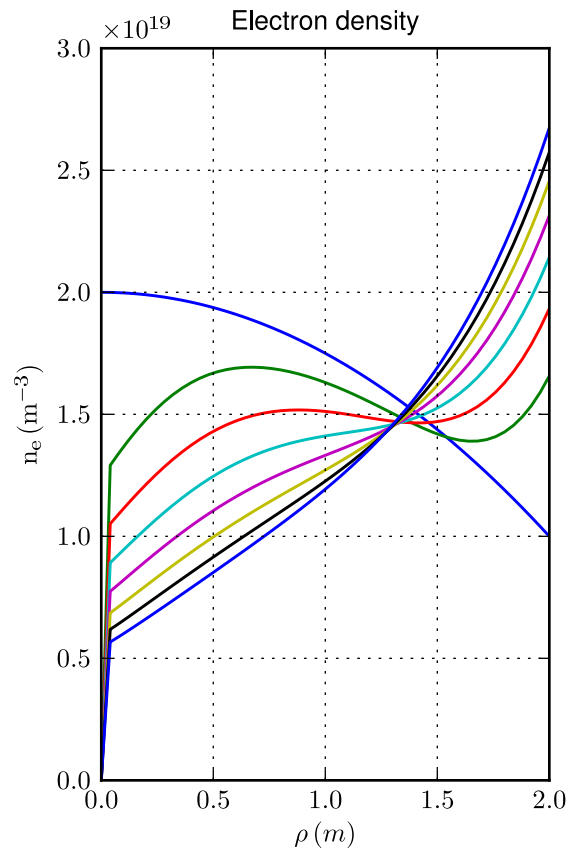
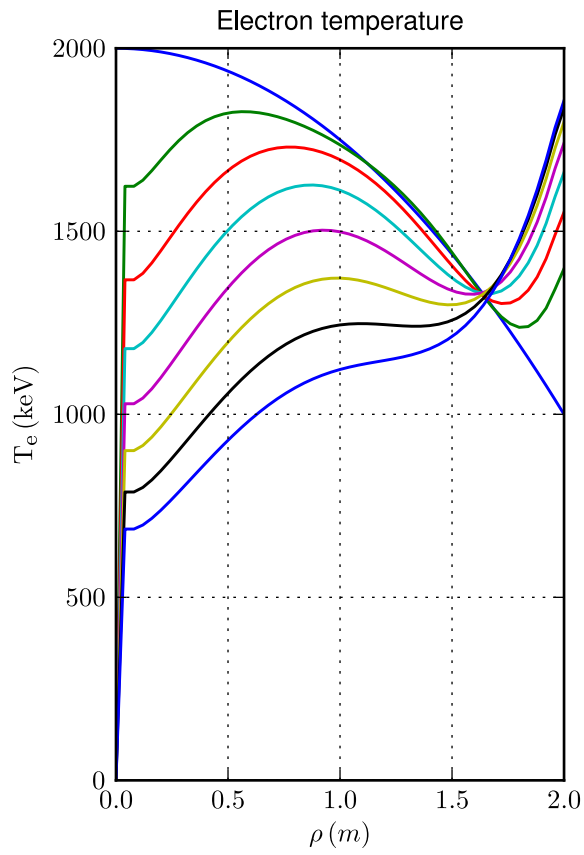
Comparison with asymptotic solution



### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

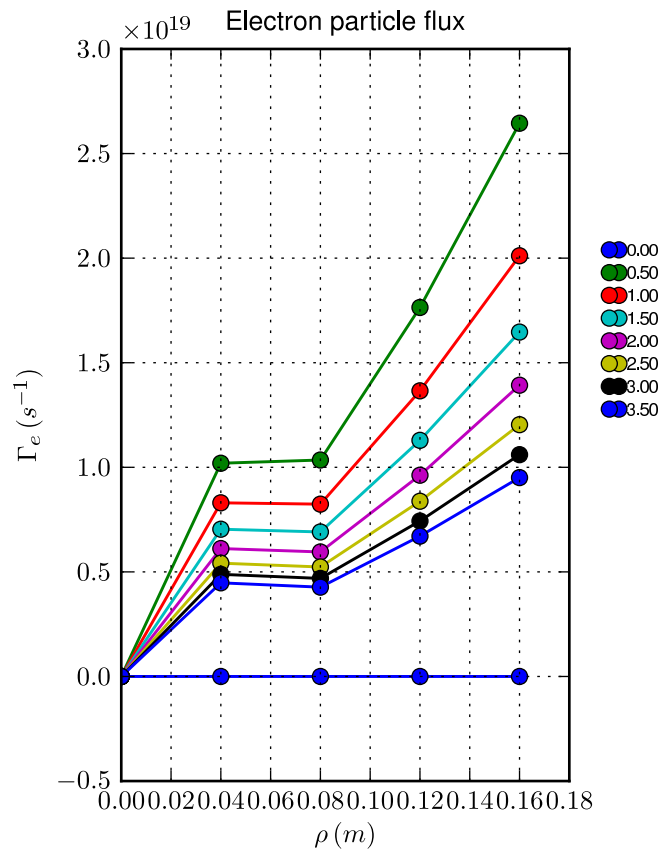
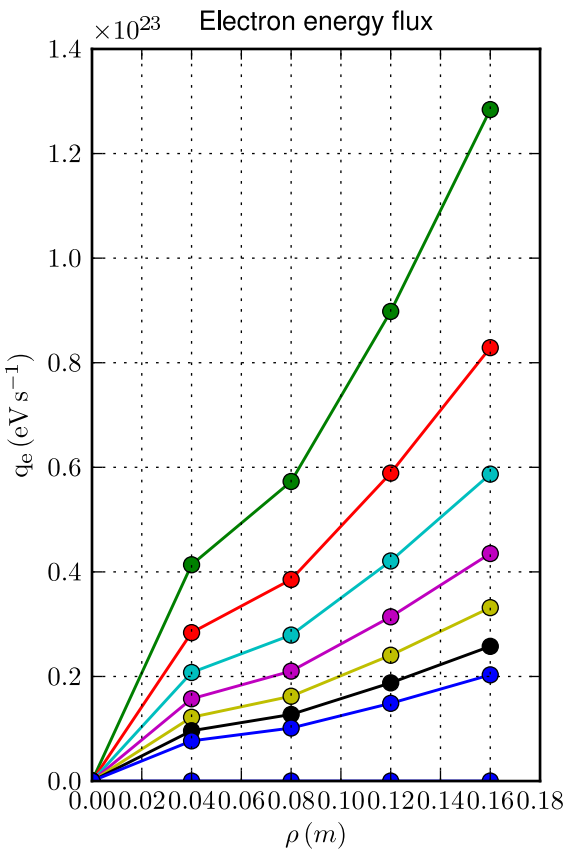
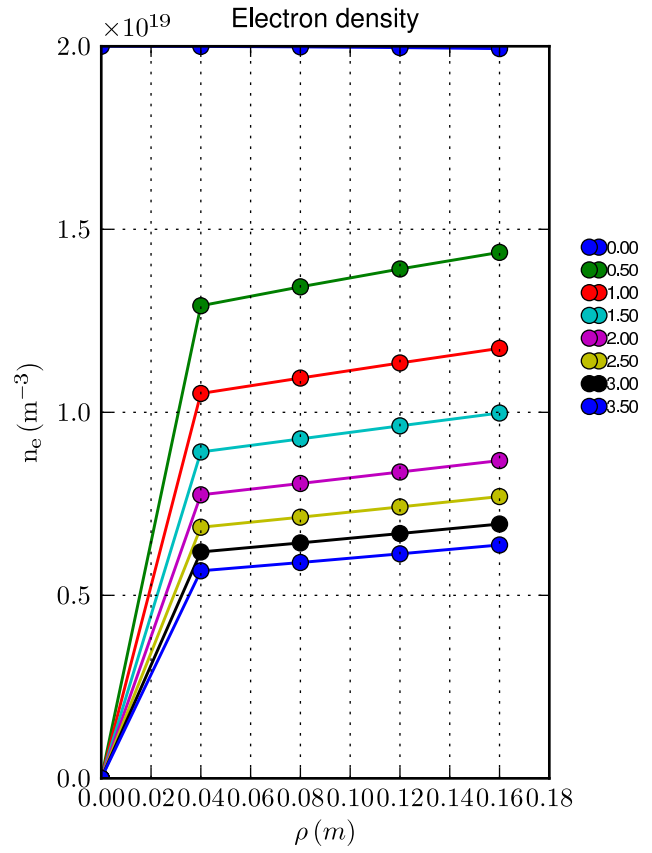
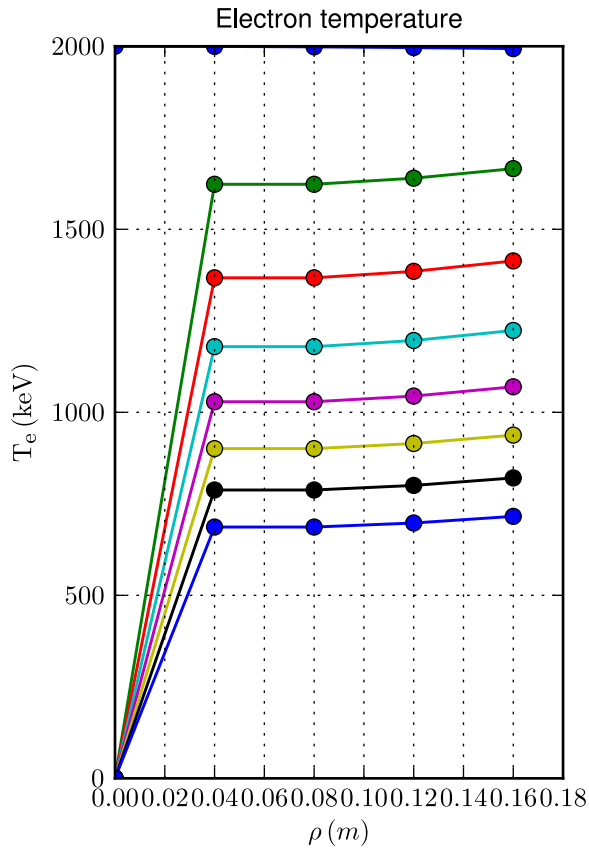


### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over magnetic axis

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



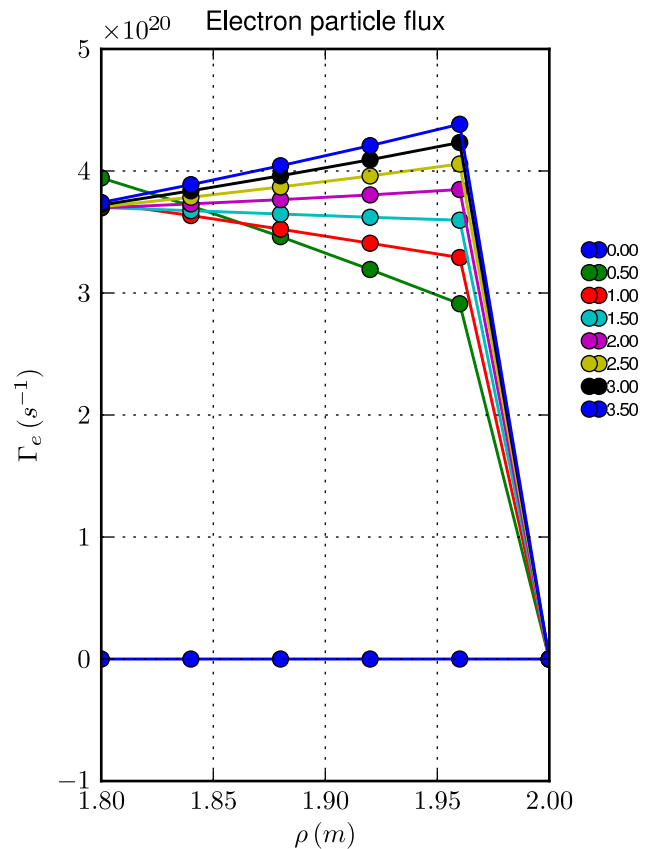
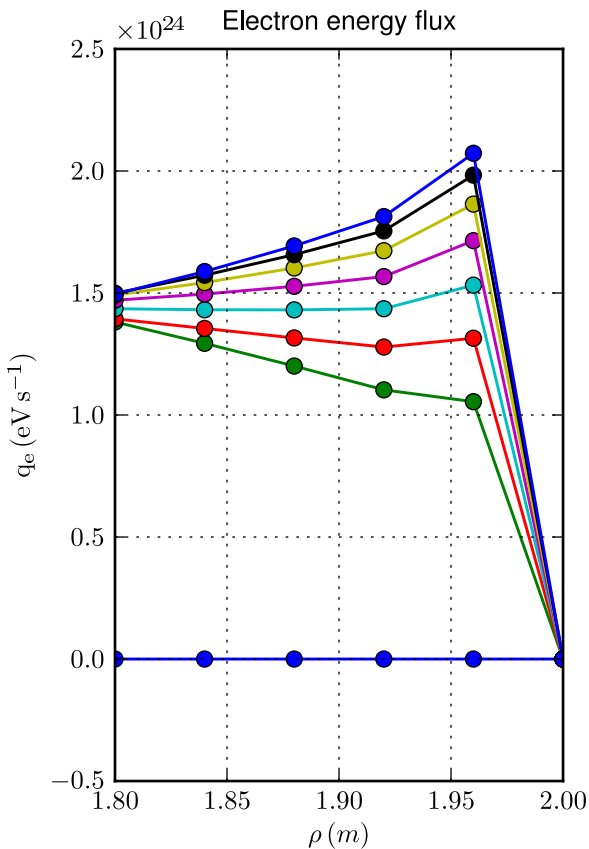
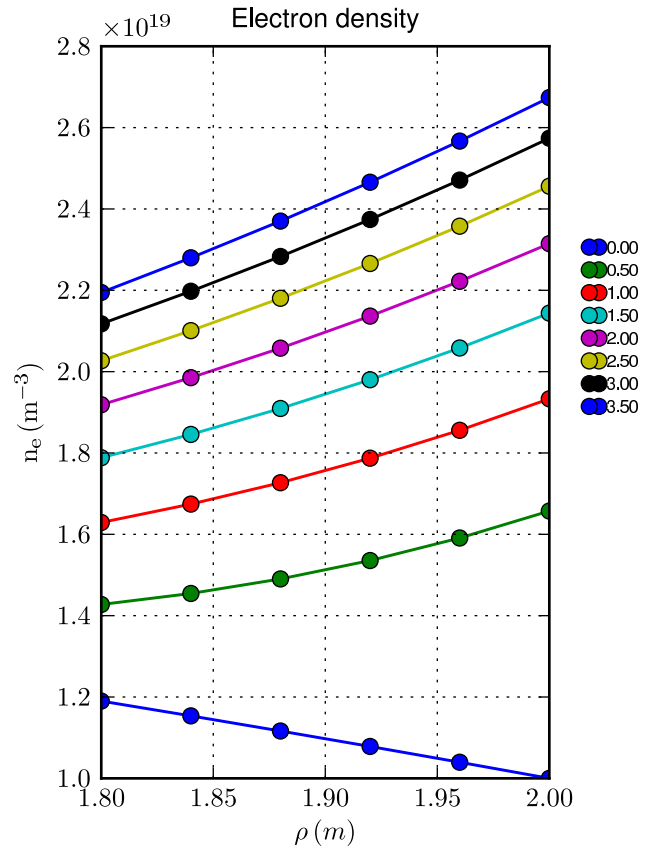
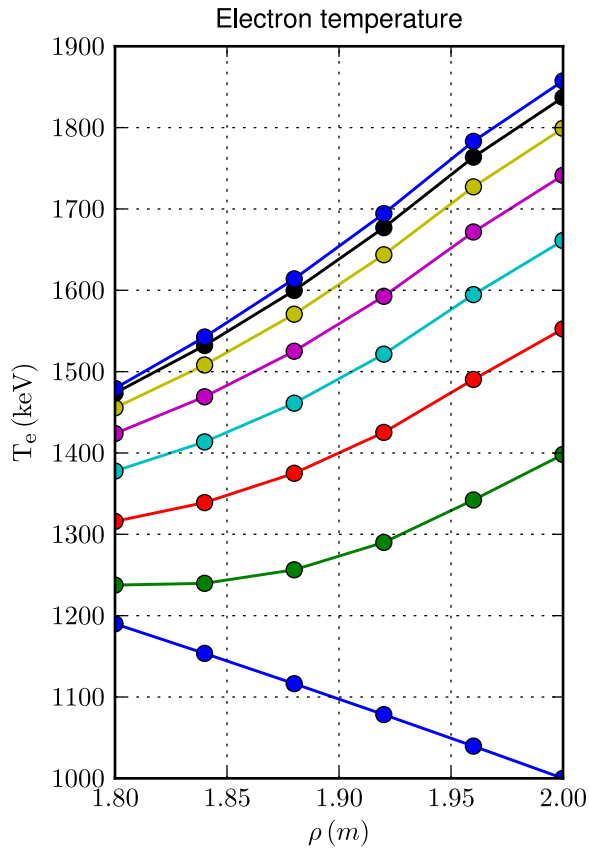


### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over edge

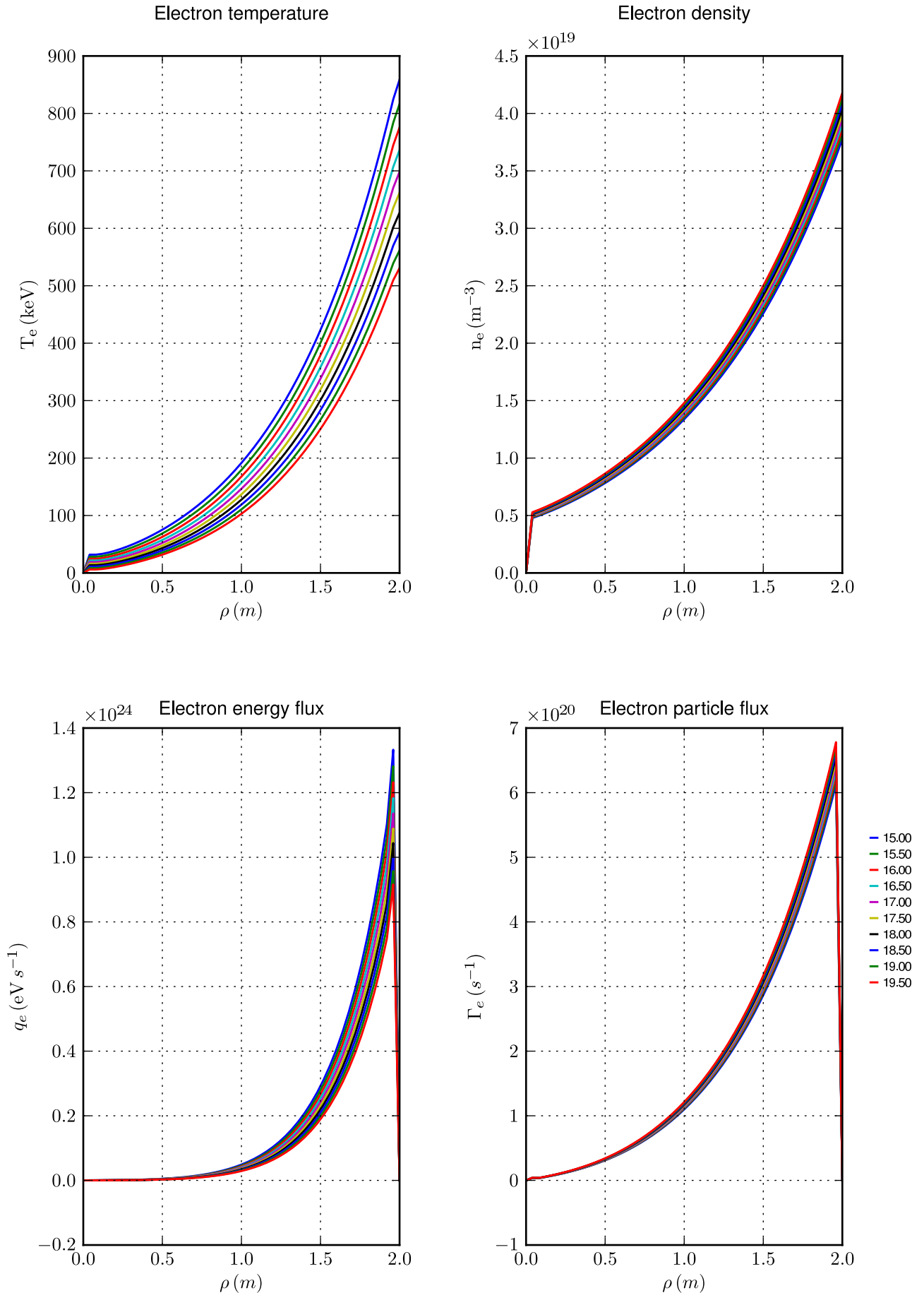
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$



### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

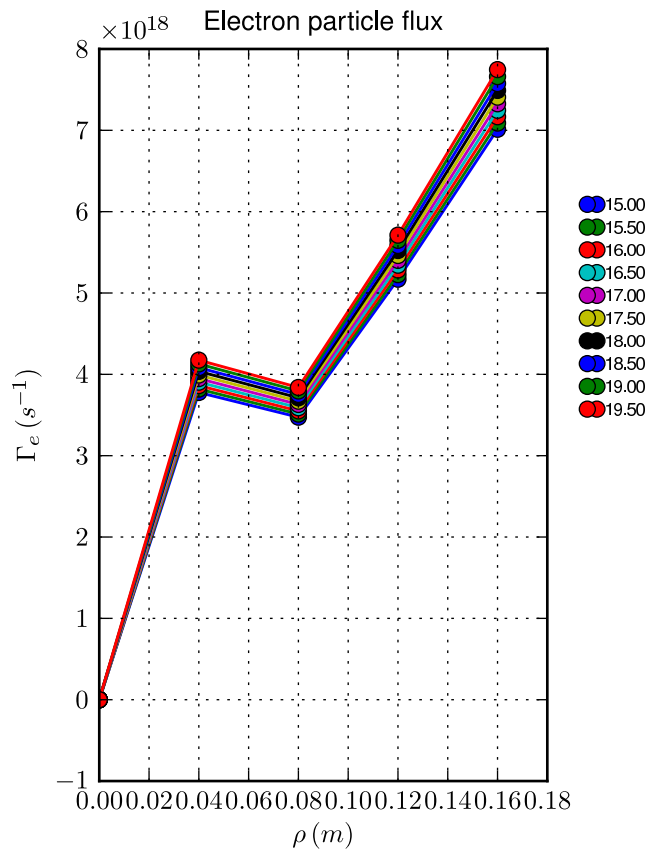
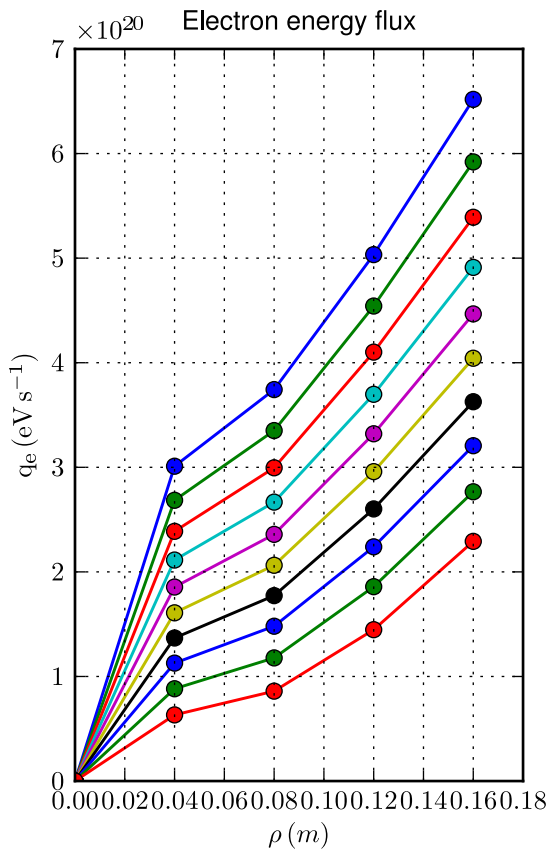
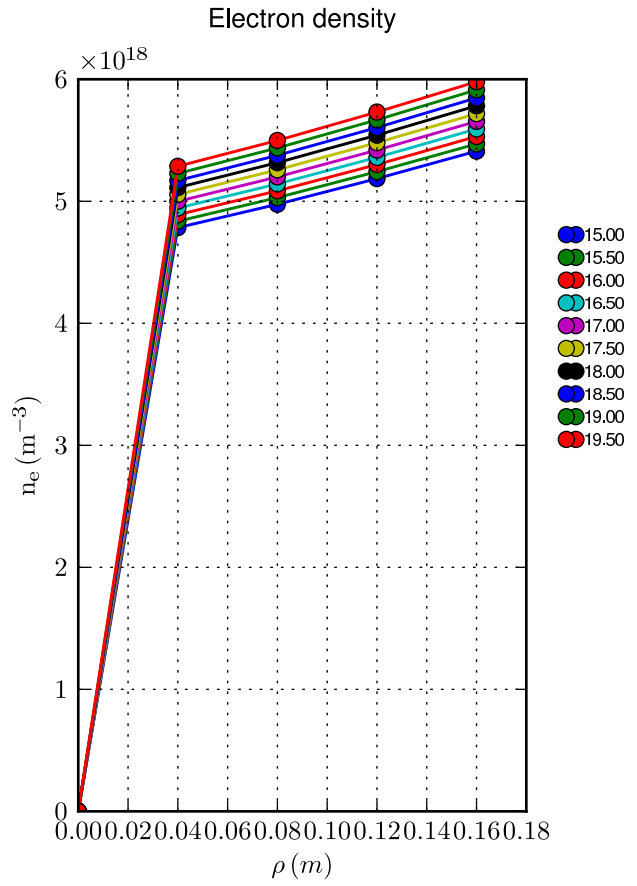
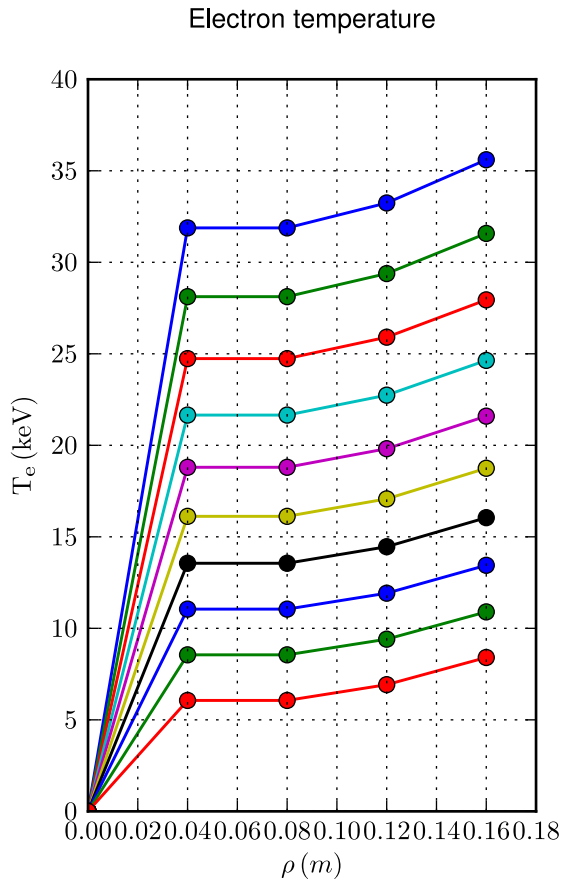
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

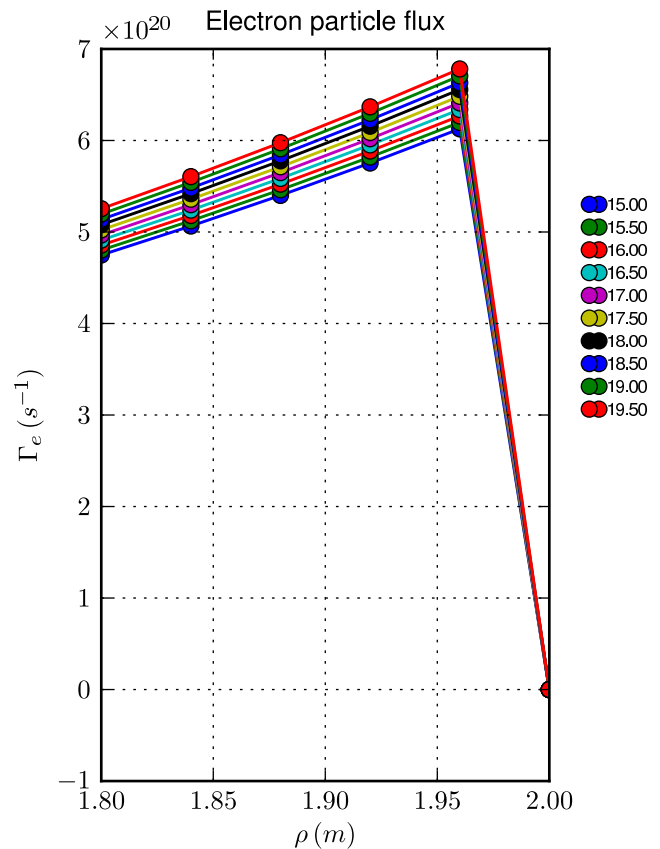
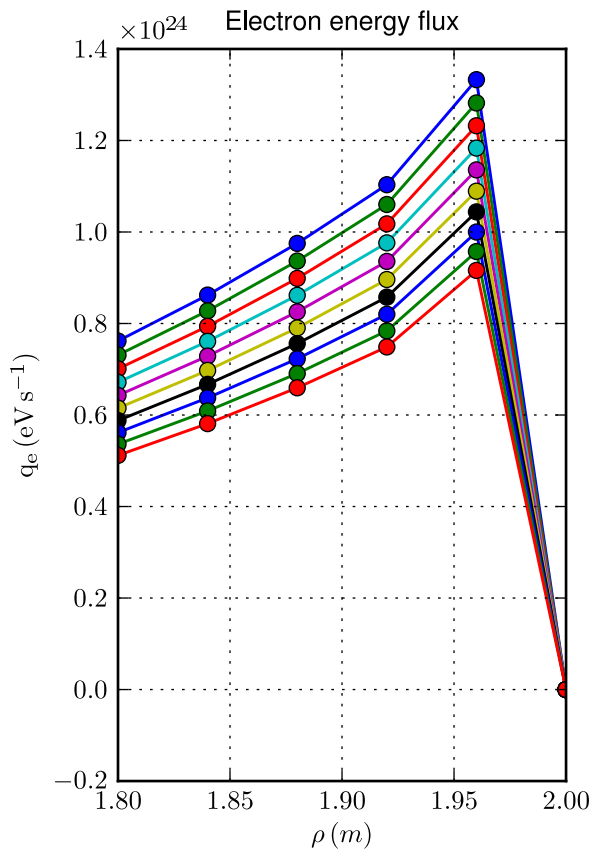
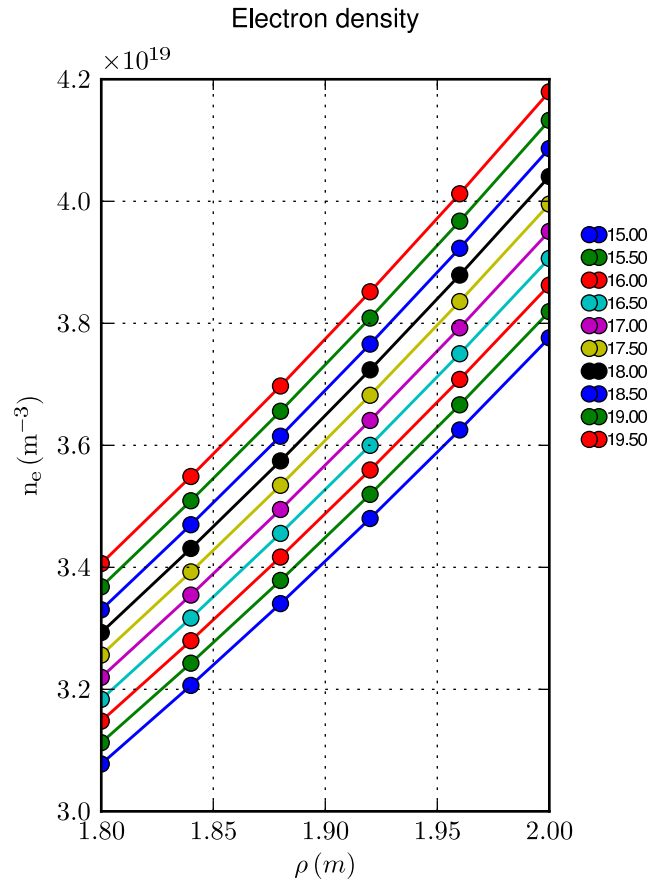
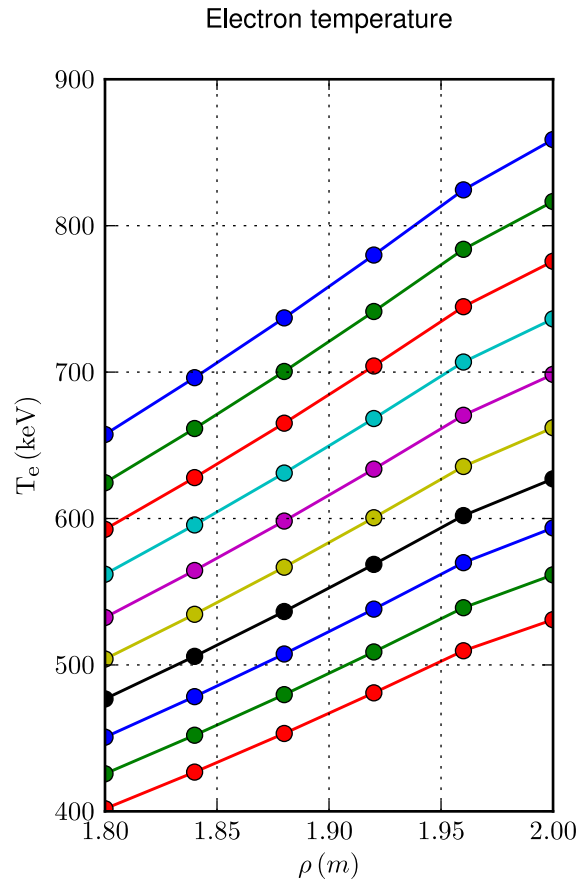


- 15.00
- 15.50
- 16.00
- 16.50
- 17.00
- 17.50
- 18.00
- 18.50
- 19.00
- 19.50

### Profiles

[Case: I.1.5.a, Solver: 7,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

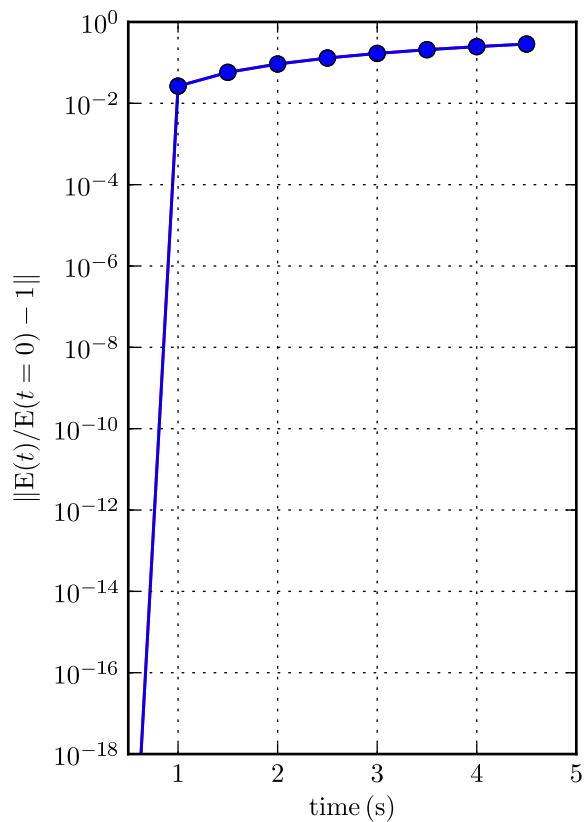
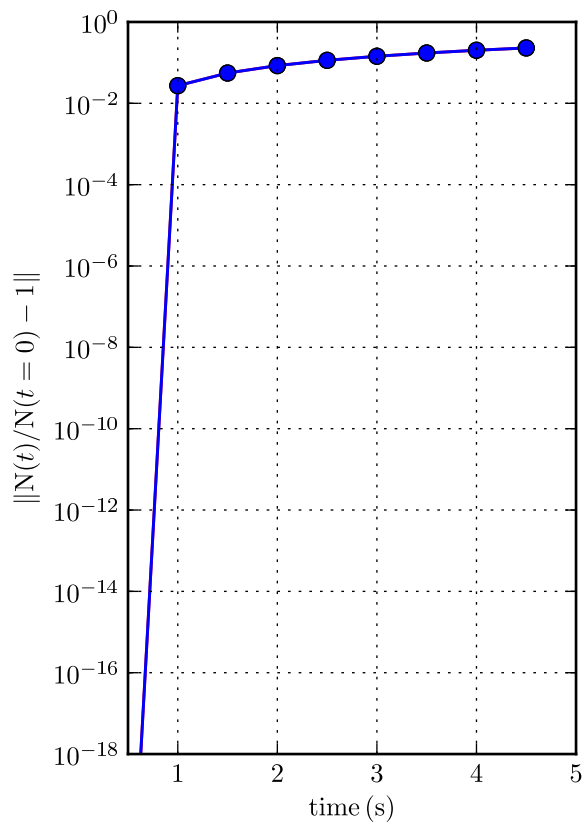
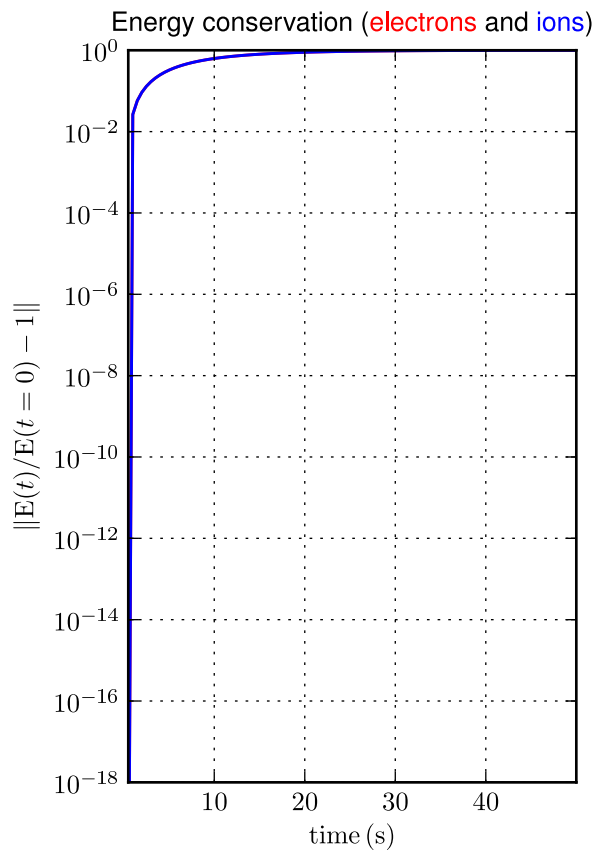
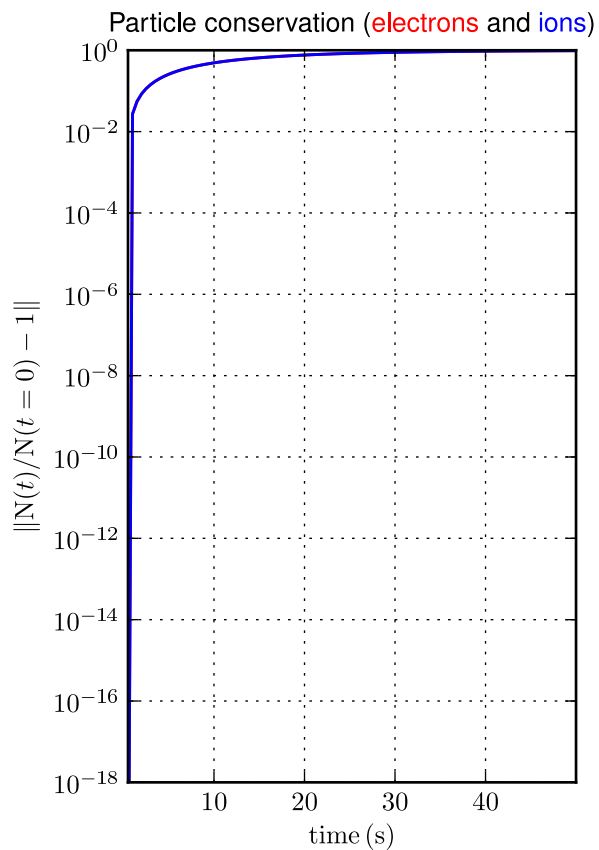
Spatial zoom over edge; time sampling: last 10 time slices



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

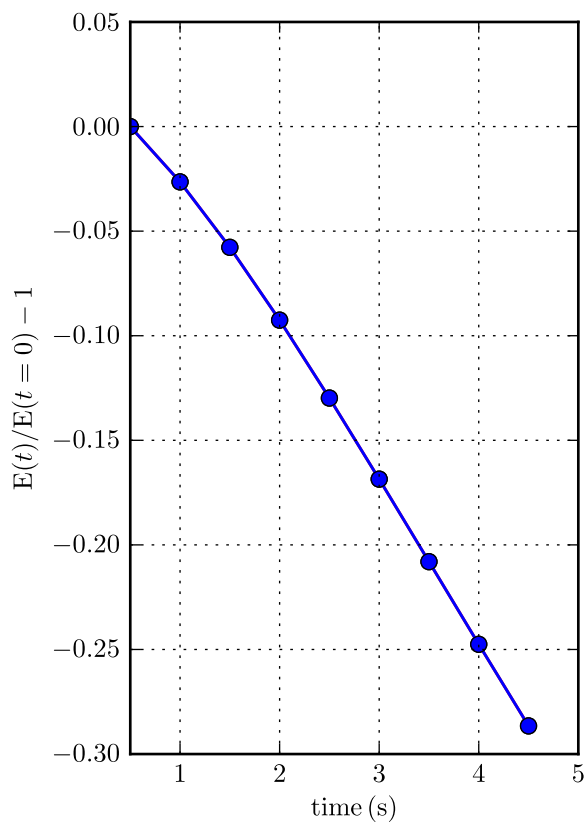
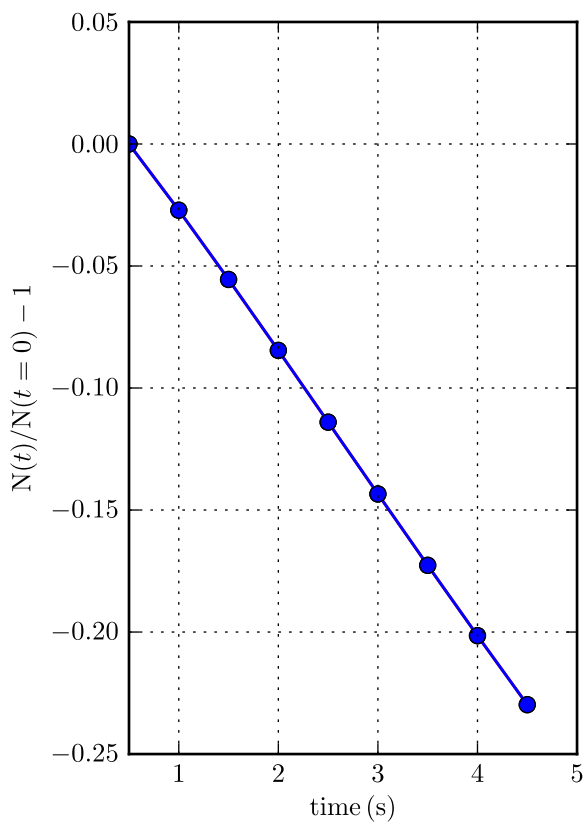
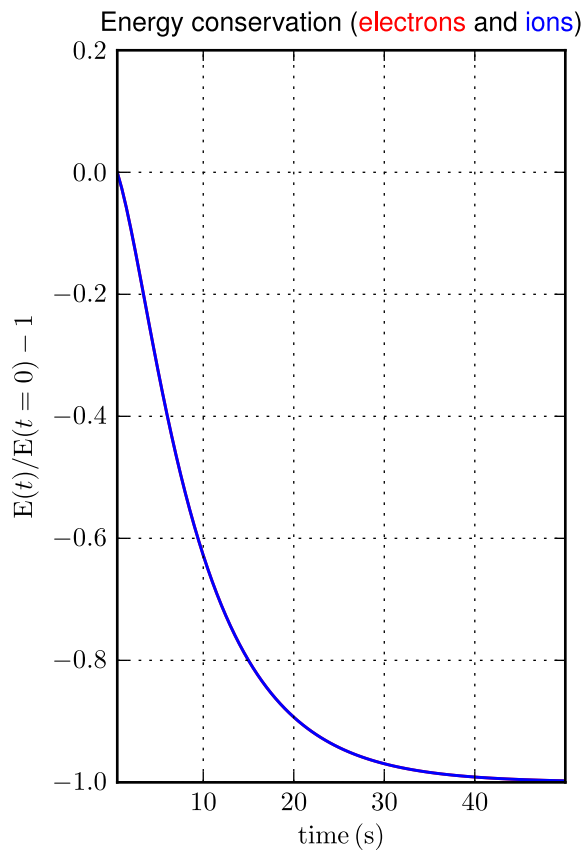
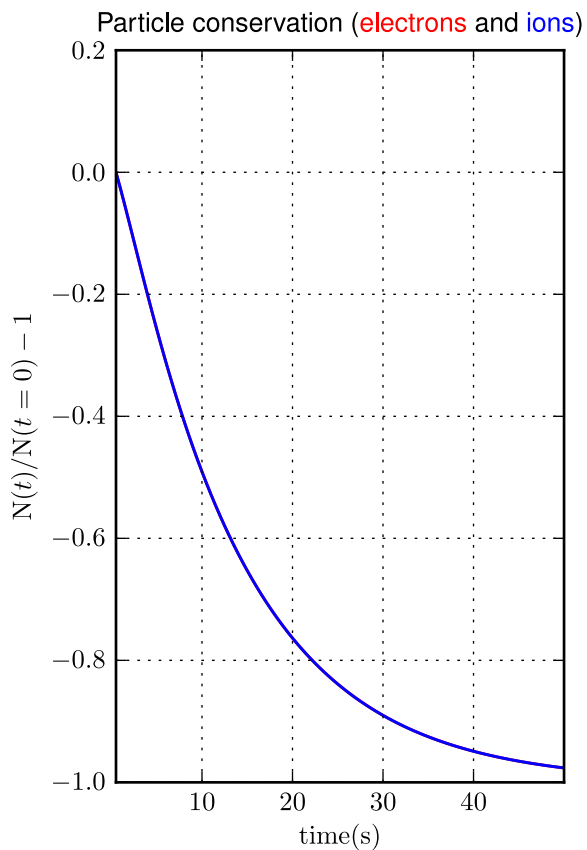
Comparison with initial solution - log scale; total time and zoom over time



### Part. & Energy conservation

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

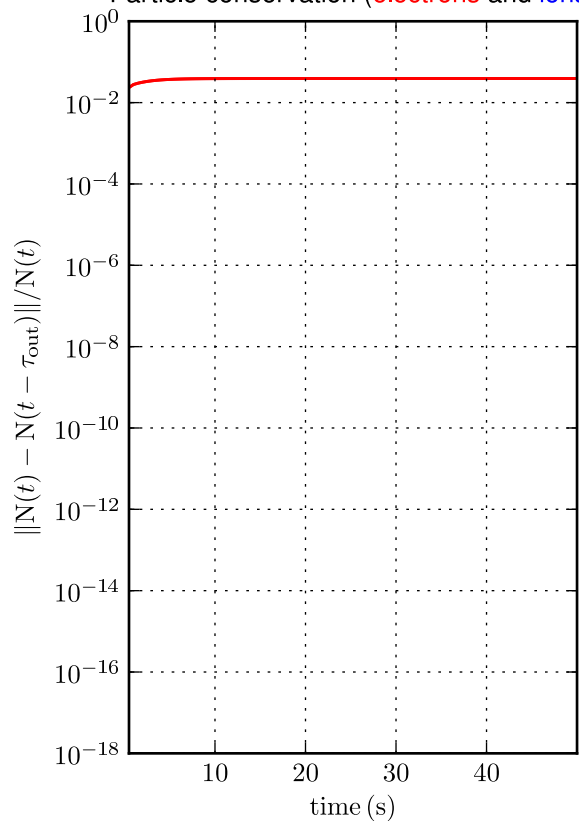


### Part. & Energy conservation

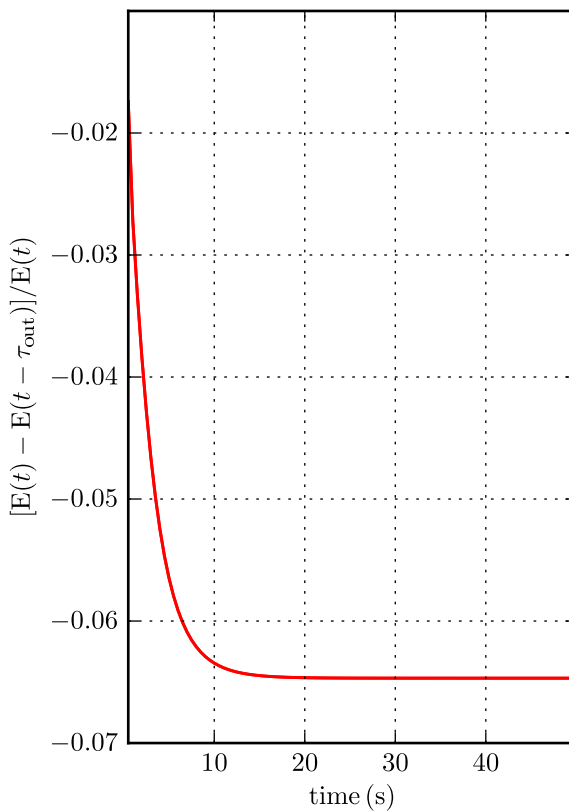
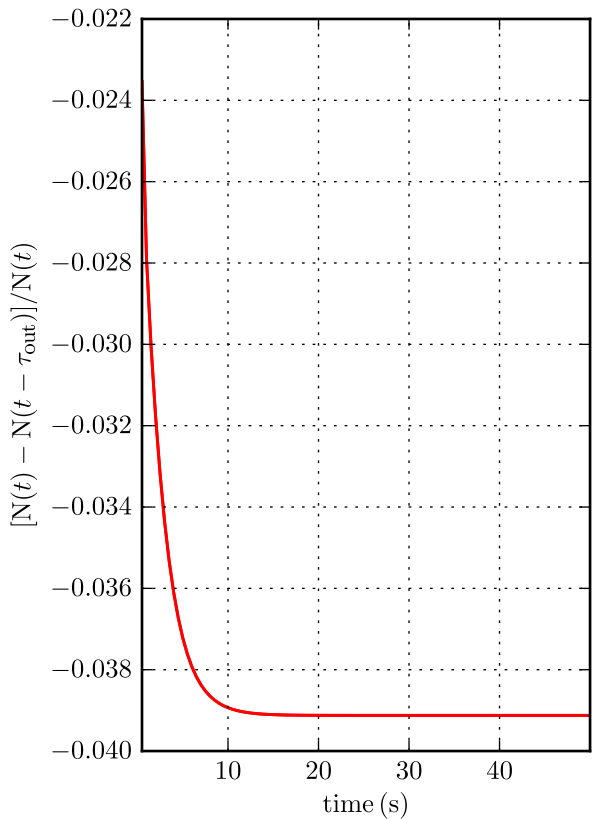
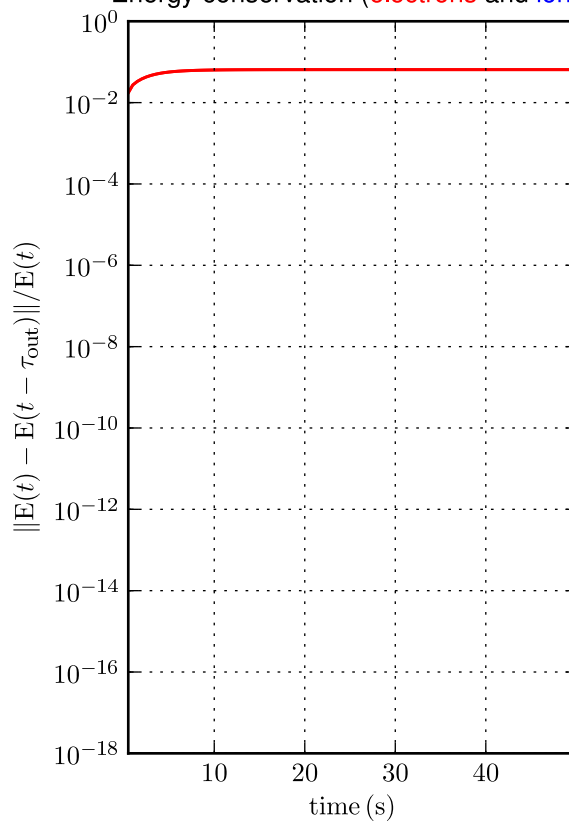
[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

Particle conservation (electrons and ions)



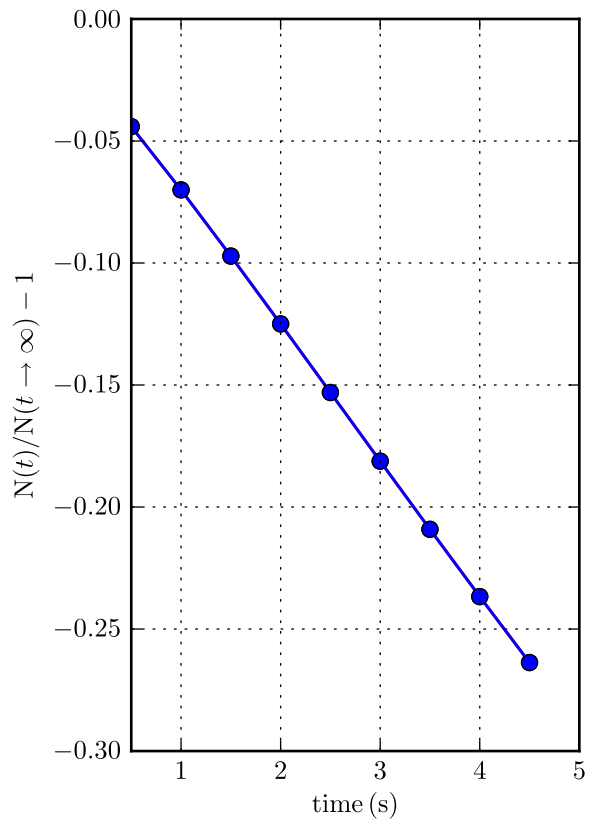
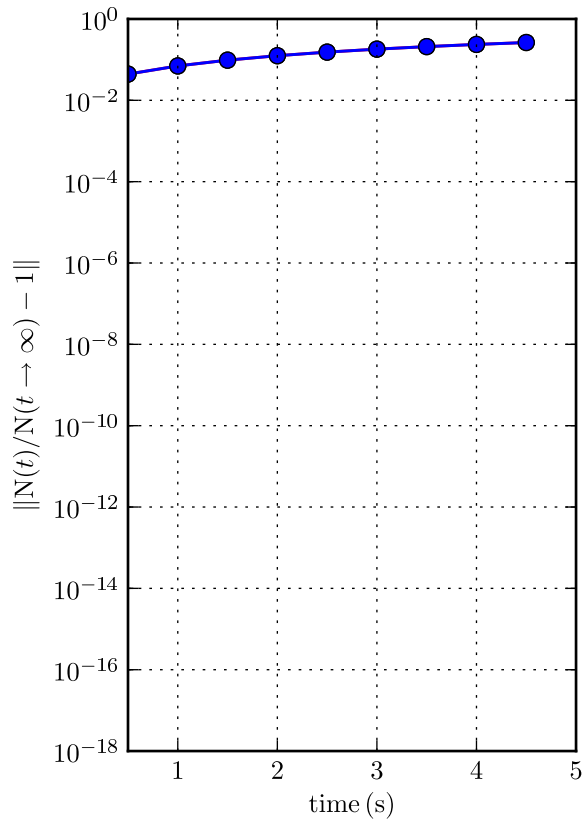
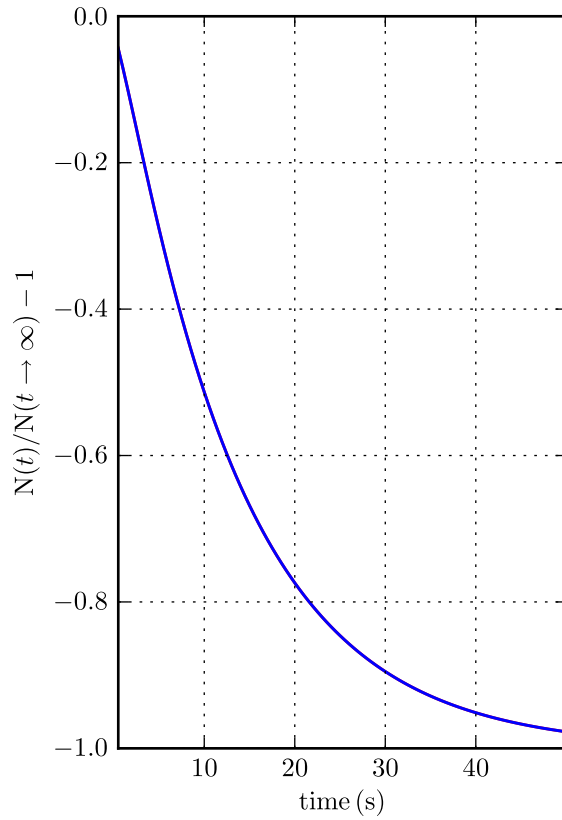
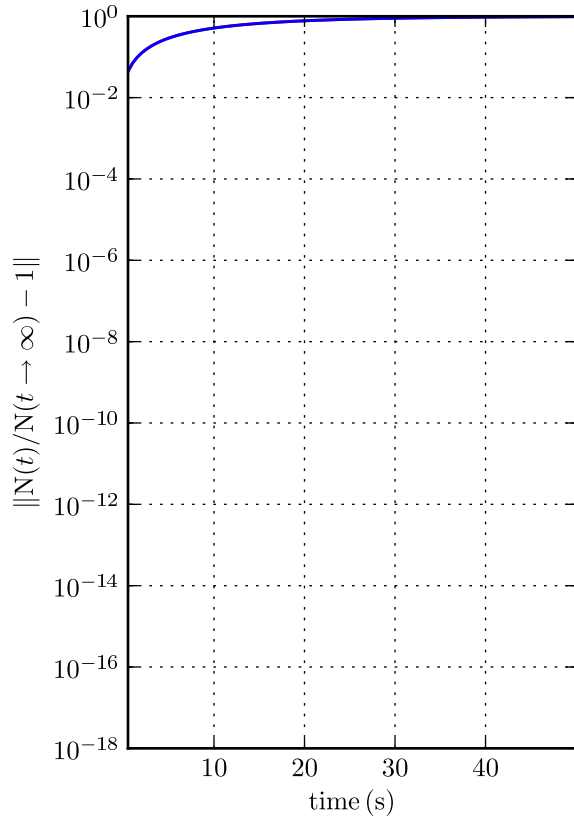
Energy conservation (electrons and ions)



### Particle conservation

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

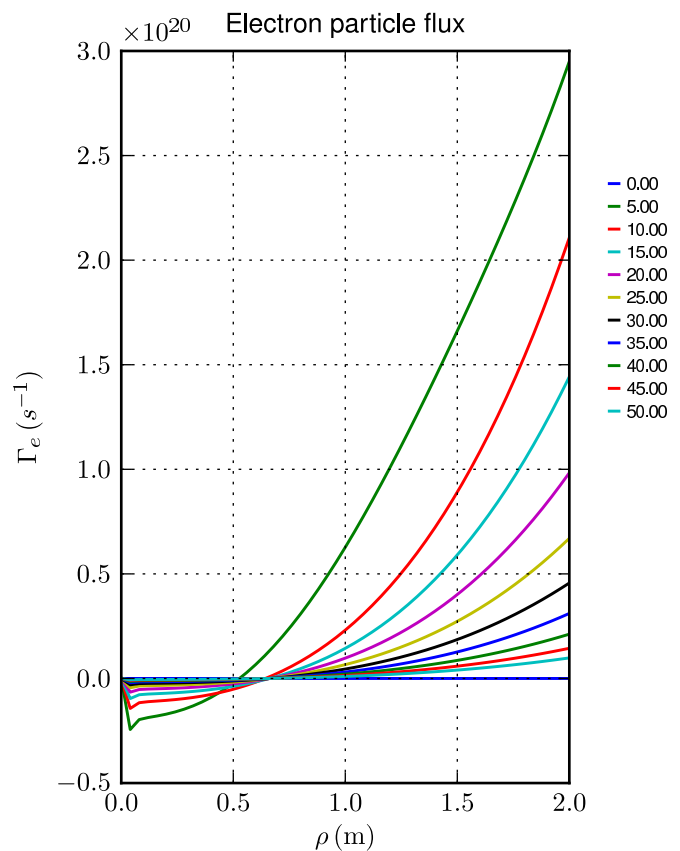
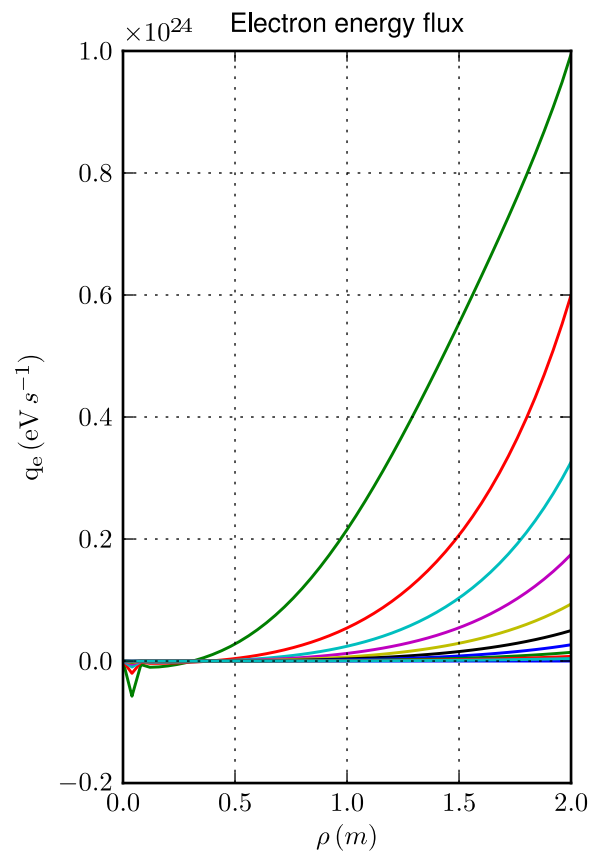
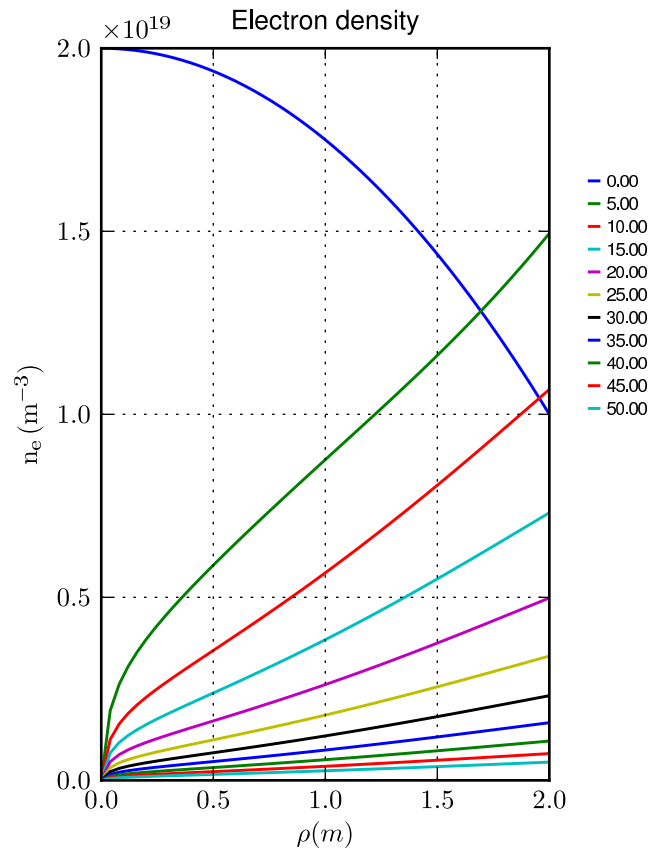
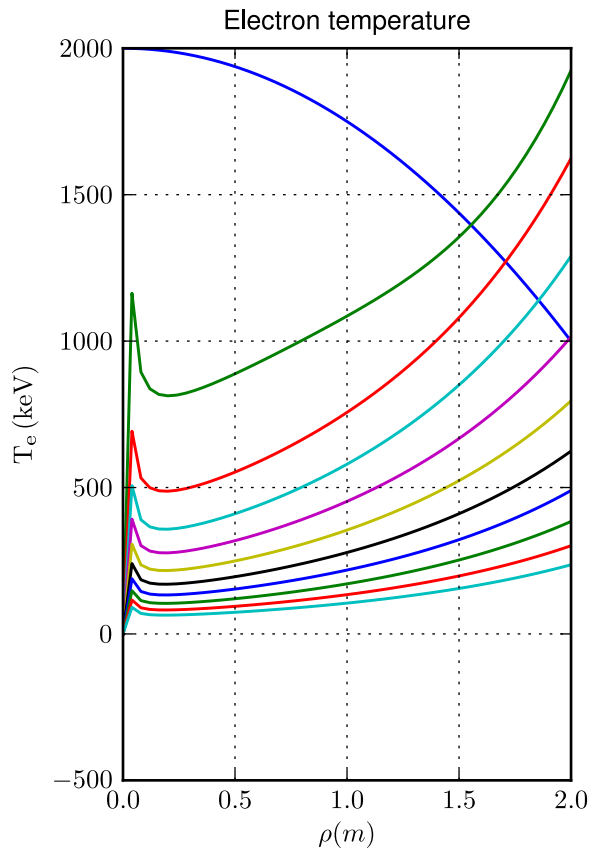




### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Time sampling: total simulation time/10

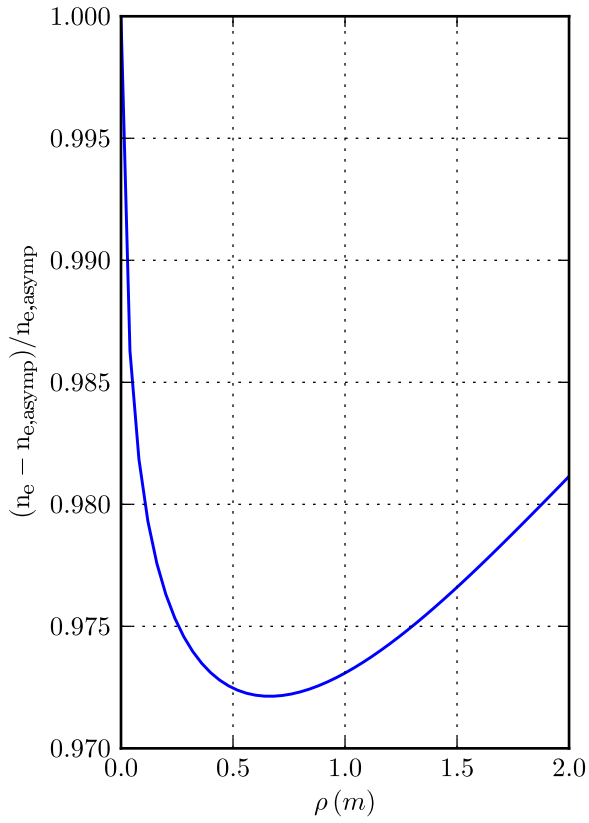


### Profiles

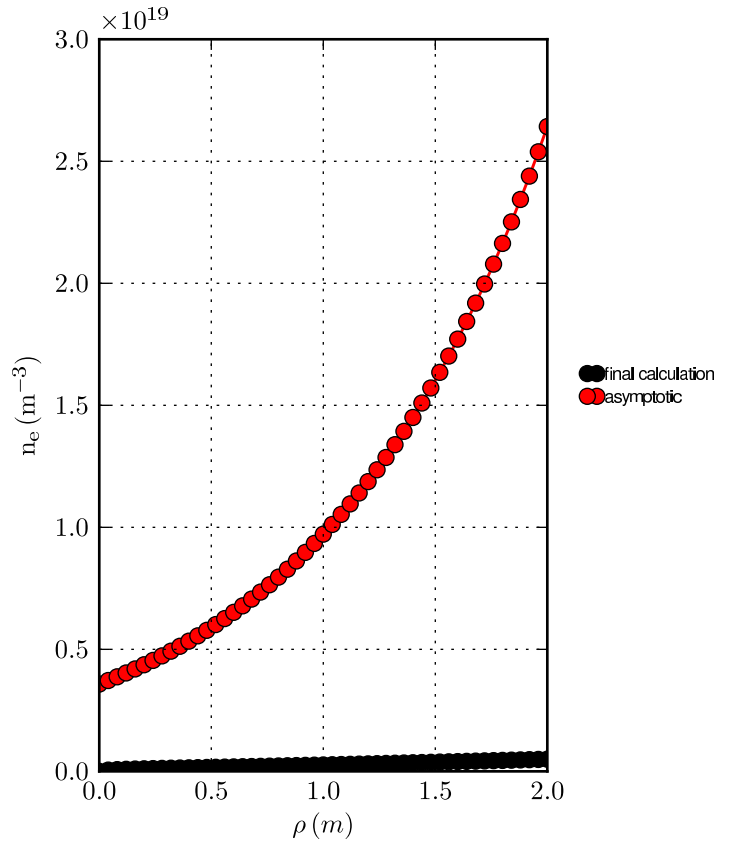
[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Comparison with asymptotic solution

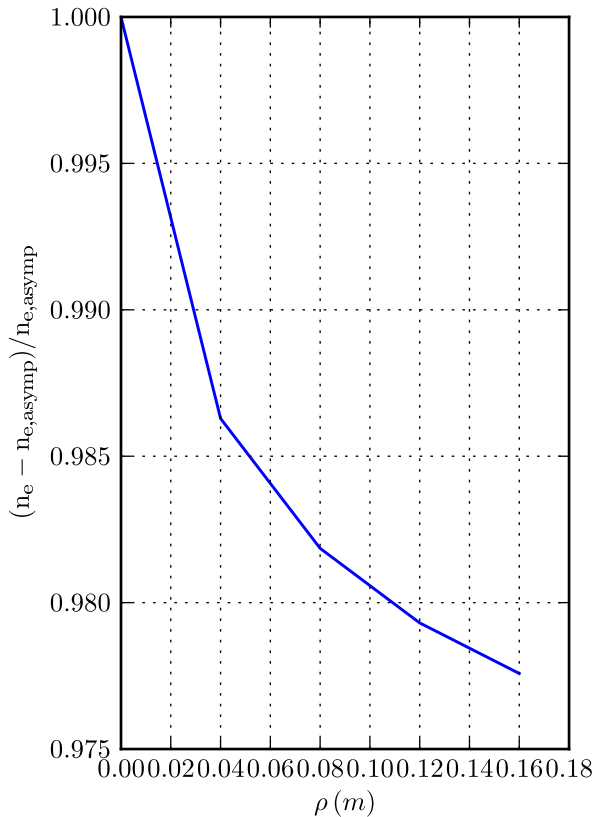
Electron density relative error



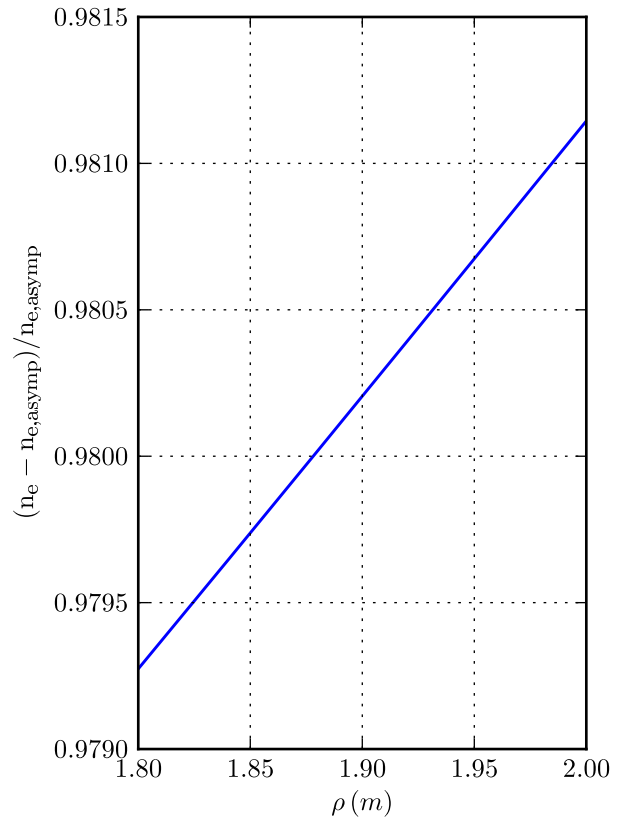
Electron density



Error: zoom over axis



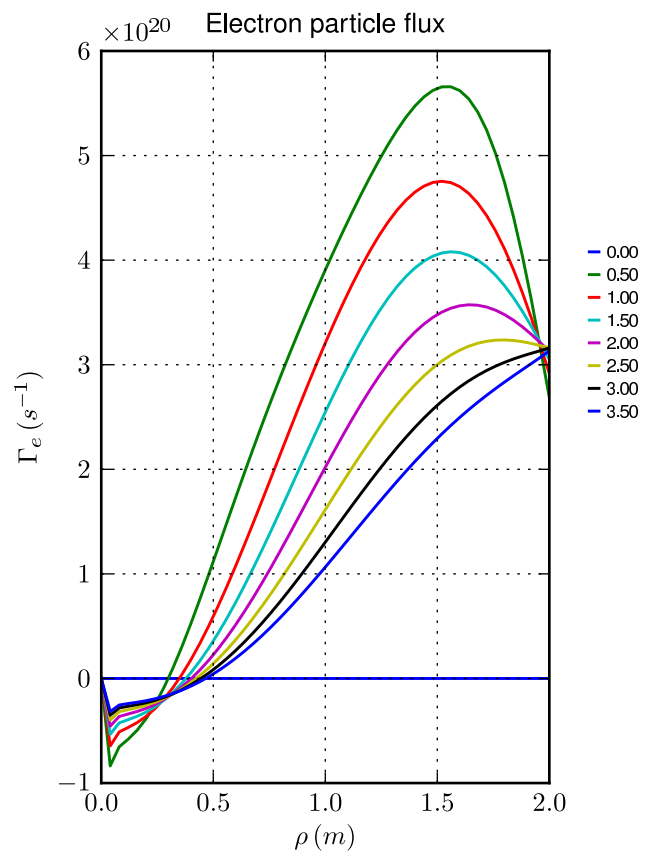
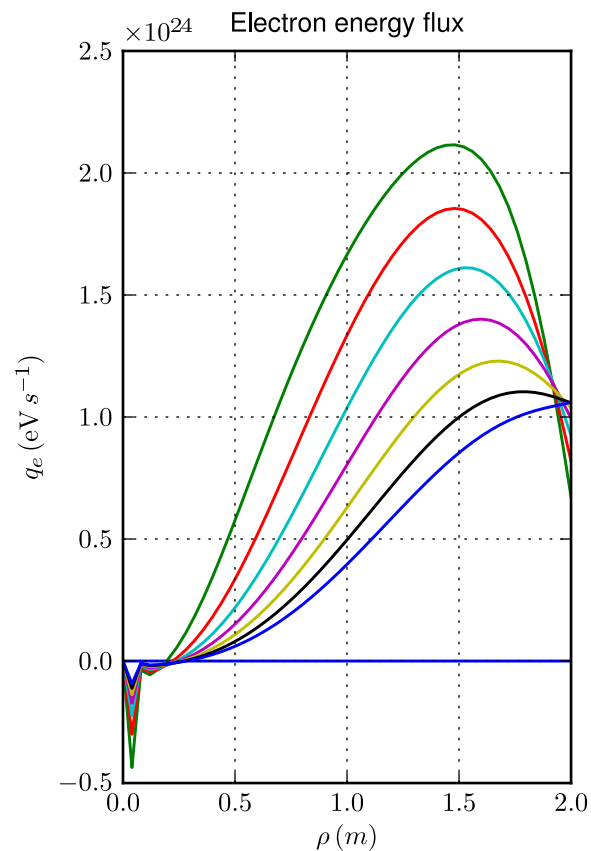
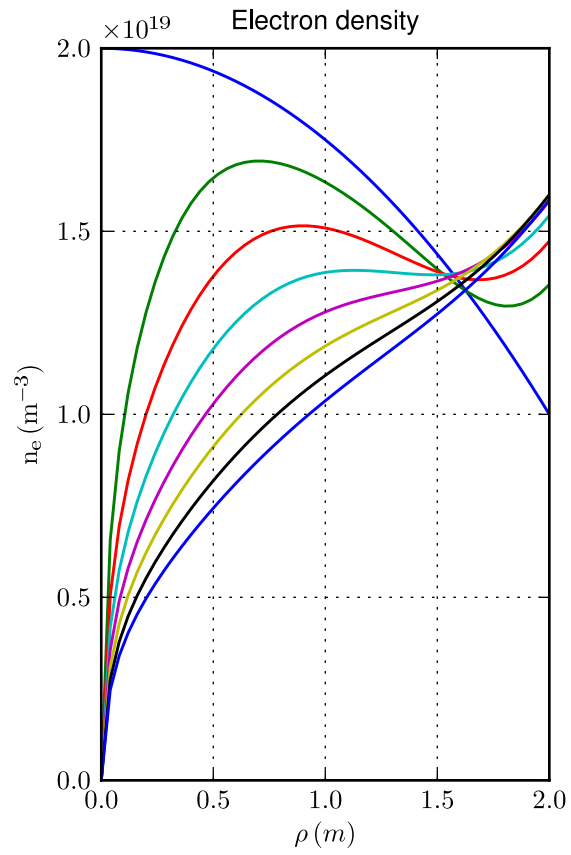
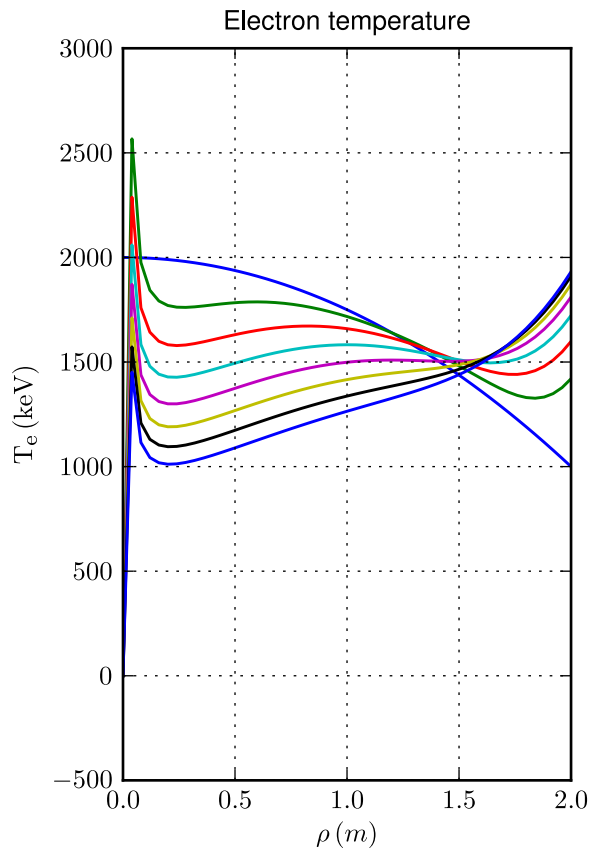
Error: zoom over edge



### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

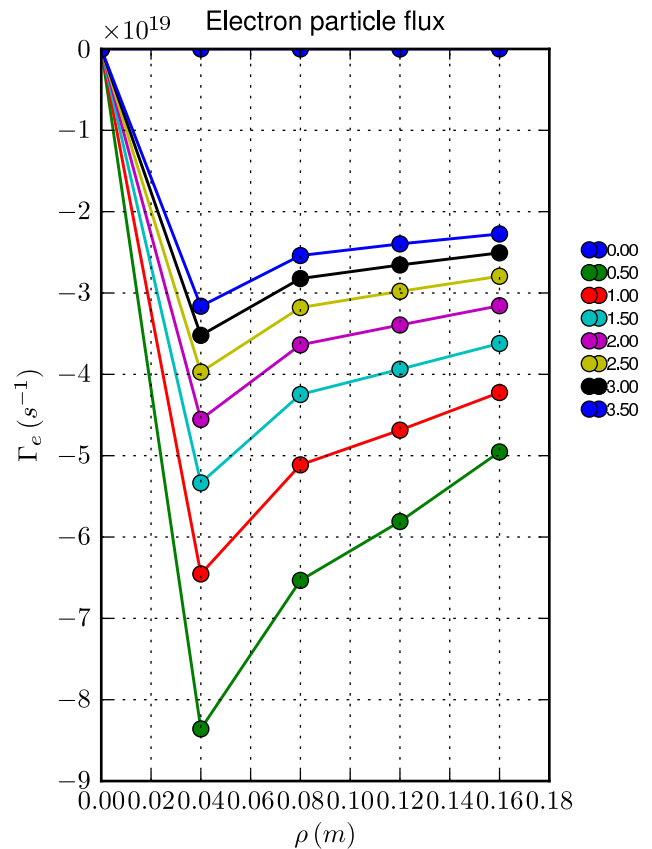
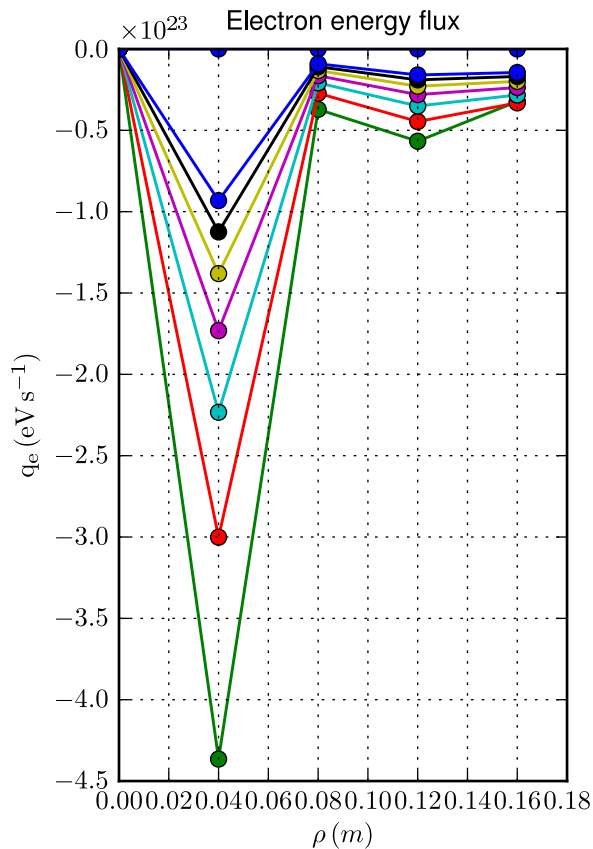
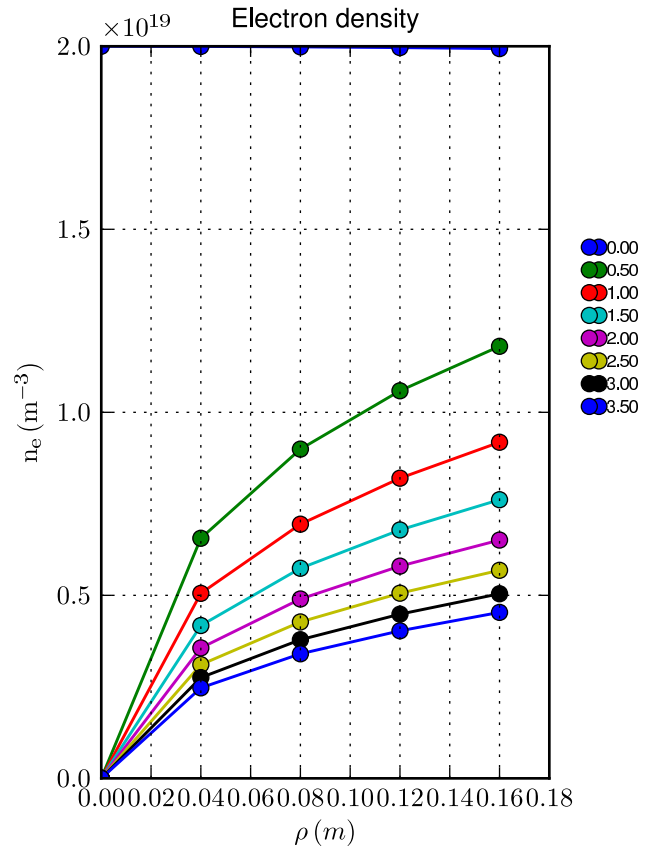
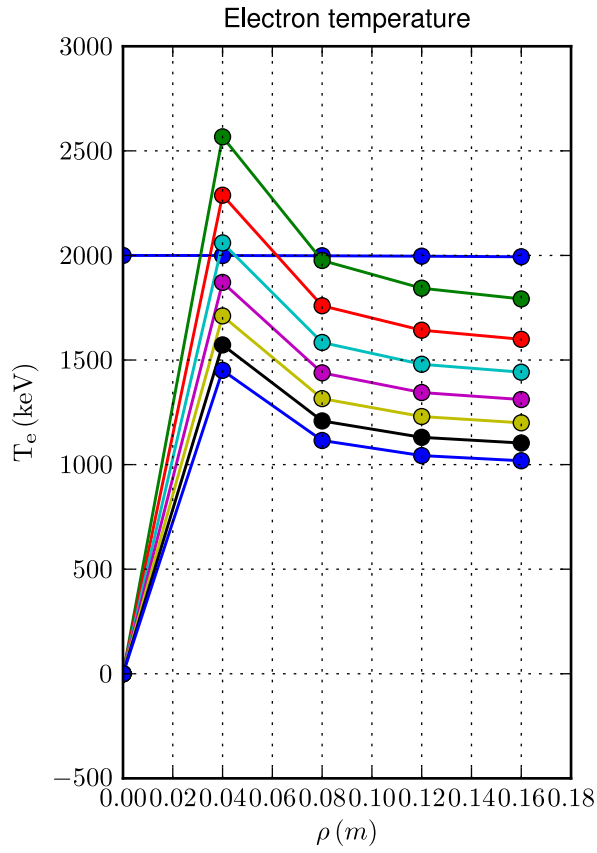


### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over magnetic axis

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

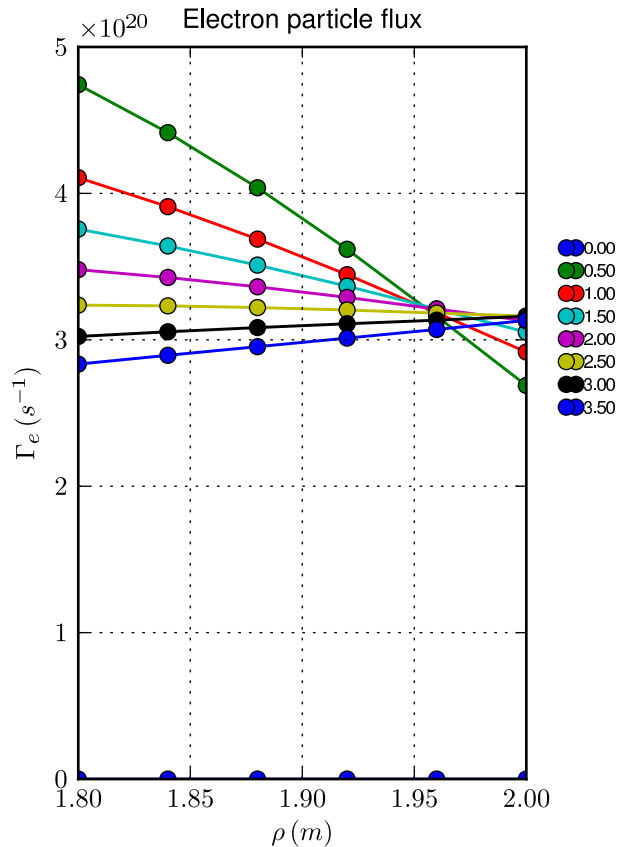
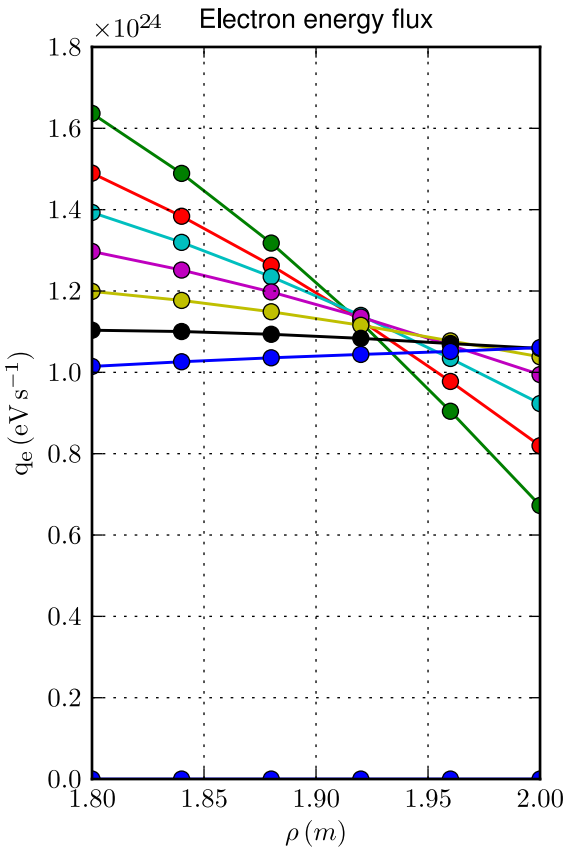
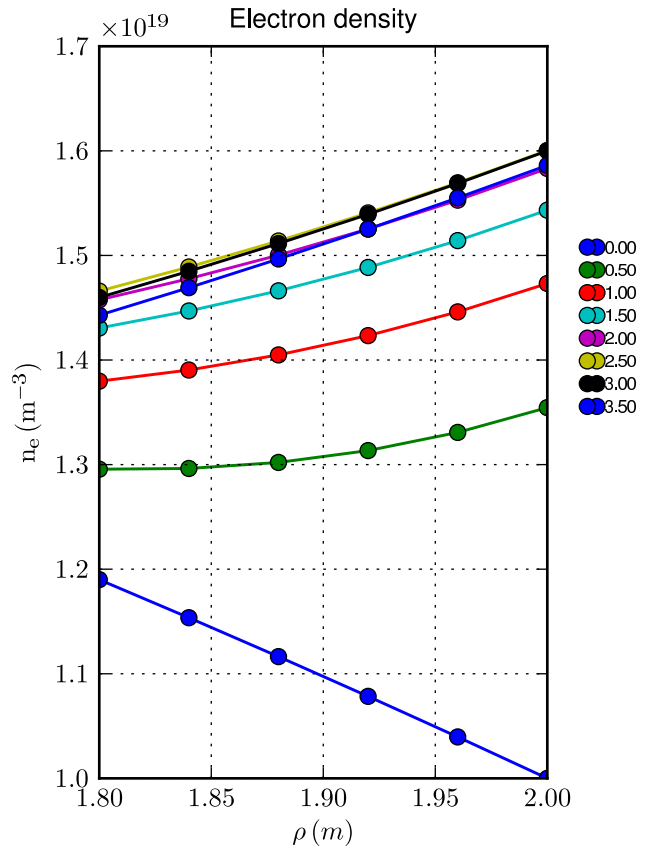
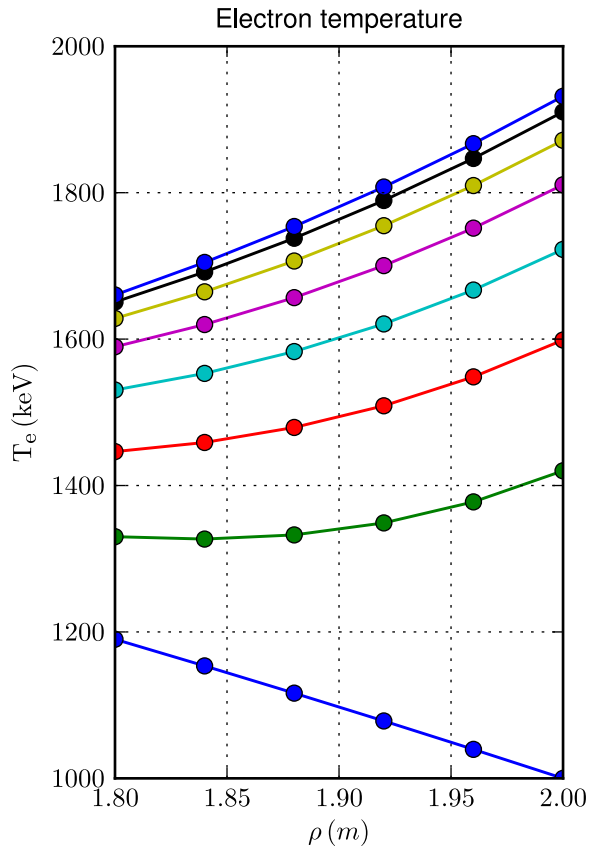


### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

Spatial zoom over edge

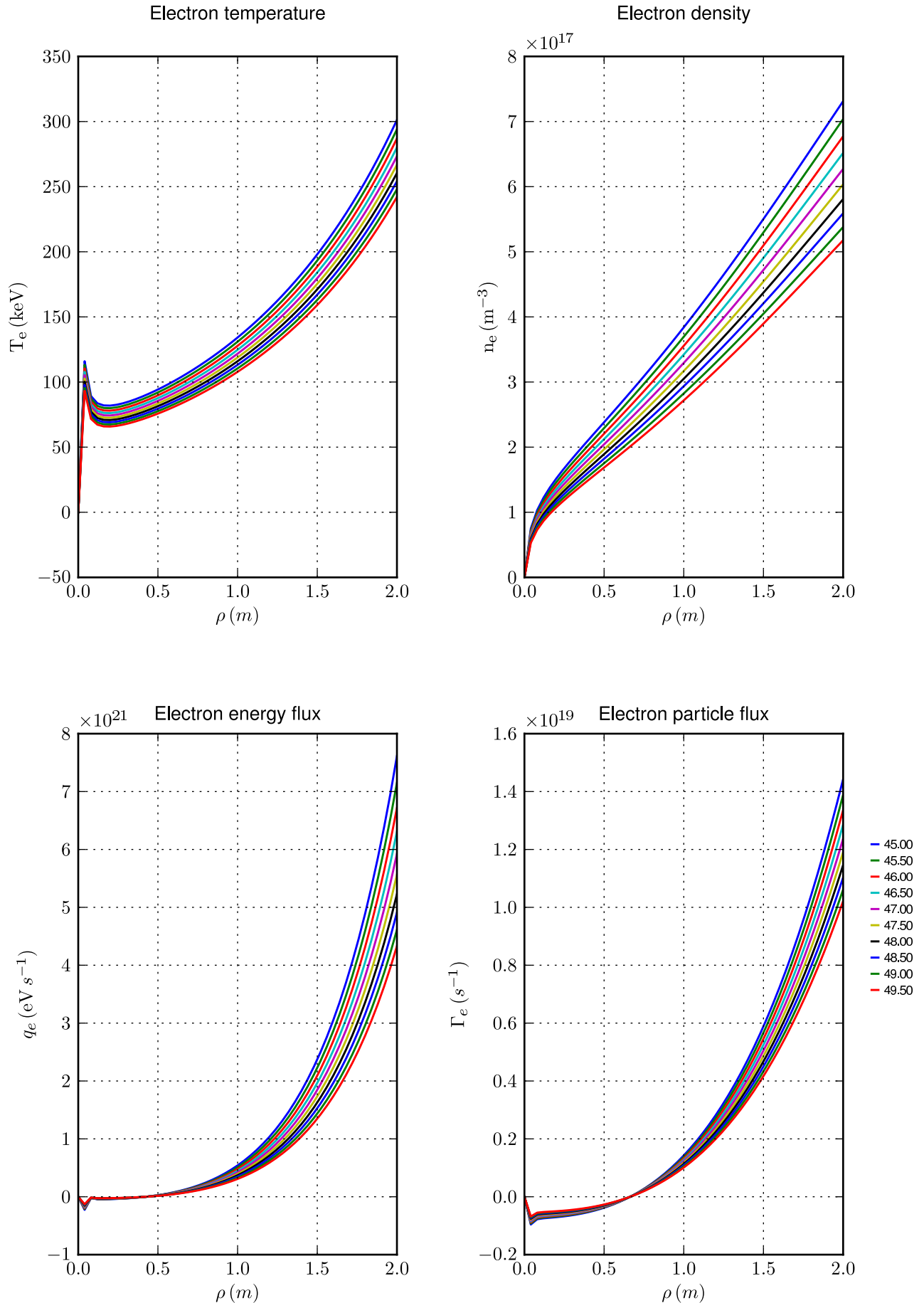
Time sampling: first 10 time slices or zoom over time  $0.1 \times (a^2/D)/|1 - (Va/D)| = 4.00 \text{ s}$



### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

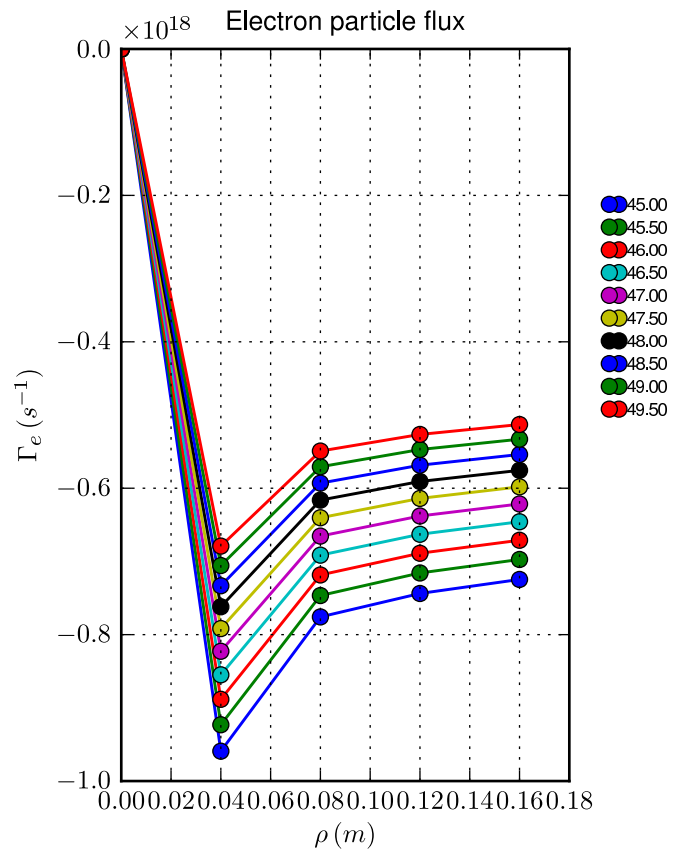
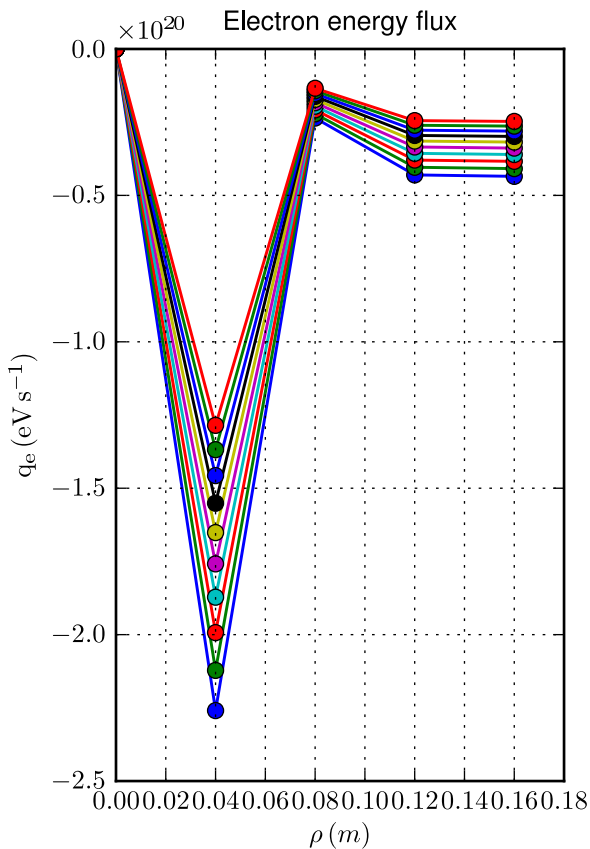
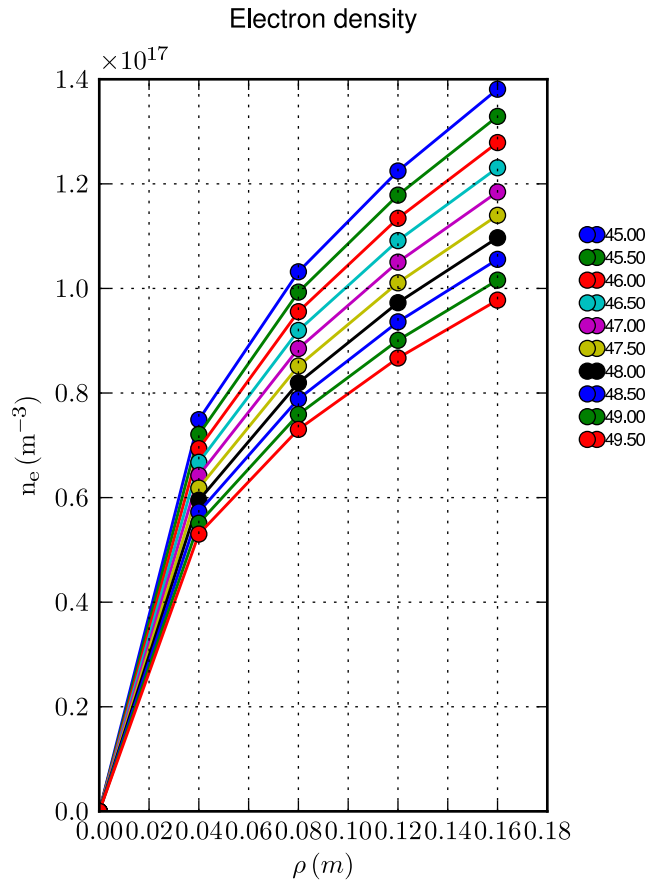
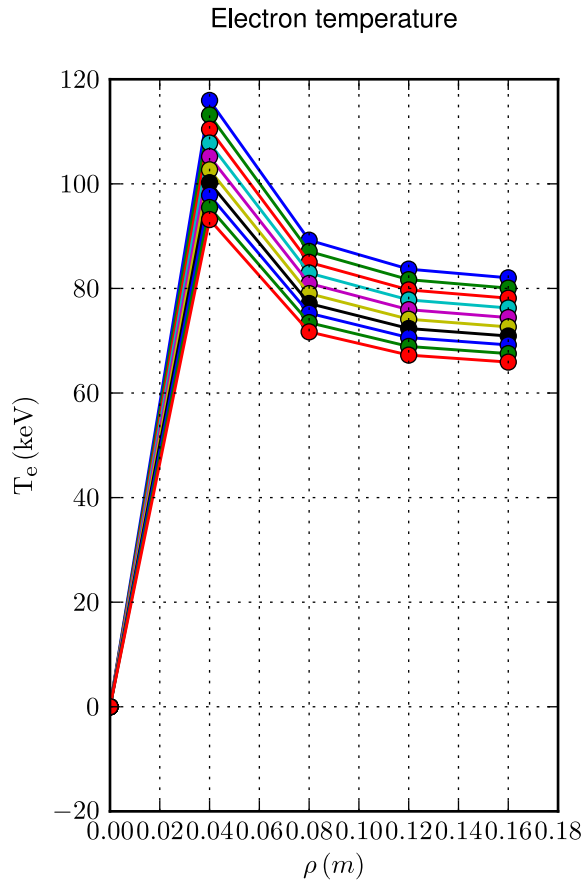
Time sampling: last 10 time slices



### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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



### Profiles

[Case: I.1.5.a, Solver: 10,  $D = 0.1 \text{ m}^2/\text{s}$ ,  $v = 0.10 \text{ m/s}$ ,  $\Delta t = 50.00$ ,  $\tau = 1.0 \times 10^{-3} \text{ s}$ ,  $N_\rho = 51$ ]

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

