

For the dynamics without RTA.

energies.<name>	historical, contains only the binding energy
forces.<name>	forces on ions, generated when ion molecular dynamics is active
<name>.bs	not found
pdip.<name>	dipole moment in x, y, z direction, versus time
penerclu.<name>	kinetic energy of the cluster in the x,y,z directions and total, versus time, at intervals commanded by the input parameter jener
pescel.<name>	proportion of electrons remaining, total number of electrons, number of electrons lost, versus time, at intervals commanded by the input parameter jesc
plaser.<name>	laser parameters Ex, Ey, Ez, power, laser energy, etc as a fonction of time
povlp.<name>	unused in this version
penergies.<name>	Various energies, versus time. The 26 detailed entries (single particle energy, rearrangement energy, etc..) are described in the output file itself. The total energy is at location 18.
pesc0rb.<name>	Number of electrons lost per orbital, versus time, at intervals commanded by the input parameter jnorms
pkinenion.<name>	kinetic energy of the cluster in the x,y,z directions and total, versus time, at intervals commanded by the input parameter jpos
pPES.<name>	unused in this version
pposion.<name>	positions of the individual ions in x,y,z, and distance to center, versus time, at intervals commanded by the input parameter jpos
pproba.<name>	probabilities of charge states versus time, at time intervals commanded by input parameter jnorms
pprojdip.<name>	x, y, z pos of projectile versus time, at time intervals commanded by input parameter jdip
prhov.<name>	unused in this version
progstatus	Only a flag when dynamics are finished
pspenergies.<name>	single particle energies versus time, at time intervals commanded by input parameter jinfo
pspvariances.<name>	single particle energy variances versus time, at time intervals commanded by input parameter jinfo
pspvariancesp.<name>	single particle energy variances versus time (with correction by projection), at time intervals commanded by input parameter jinfo
ptempion.<name>	ion temperatures during ionic-core relaxation
pvelion.<name>	ion velocities during ionic-core relaxation, or dynamic calculation with molecular dynamics
rsave.<name>	This file contains all parameters of a static convergence to allow for a dynamic start without recomputing the statics: to use it set ismax=0 and istat=1
save.<name>	This file contains all parameters to allow for a dynamic start at time : to use it set irect ₀ =0
Time	Number of points in the calculation box and used wall time to complete the given number of iterations

In this table the files that are generated when RTA is activated. I assume this list will be much shorter.

convergenceRTA	unknown to me, PG?
peqstate	parameters for convergence of the dtmf process: current iteration number, cycles to convergence, variance, residual err. on density, residual err. on current, parameters mu, muj, energy achieved
prta	prints at each rta step: time, entropy, laser energy and the mu and temperature of a fermi distribution fitted to the occupation numbers
pspeed.<name>	prints at each rta step, along x axis, the reference density (spin up and down), achieved density (spin up and down), target x current, achieved x current

Notes:

- I do not know <name>.bs
- I do not know convergenceRTA, maybe this has been added by PG
- pescel, plaser are for any dynamic problem, not only rta, I moved them
- some files are missing, but we have a good start here