

NOTES ON THE PICLS 2D OUTPUT STRUCTURE

Output data is processed by the diagnostics and is getting stored in the files in number of folders. The file names are mostly organized as :

name_node index_timestep.gz,

except the

*./etc/energy_***.gz*,

where index is iterated with every consequent start of the code from the checkpoint after its "break". The folders are organized in a following way:

NAME OF THE FOLDER	COMMENT	STRUCTURE
"./dnss"	distribution of the density averaged within each cell	$[n_i, n_e]$
"./empi"	instant snapshot of the distribution of p-polarized electromagnetic field	$[E_x, E_y, B_z]$
"./emps"	distribution of p-polarized electromagnetic field averaged within each cell	$[\bar{E}_x, \bar{E}_y, \bar{B}_z]$
"./emsi"	instant snapshot of the distribution of s-polarized electromagnetic field	$[B_x, B_y, E_z]$
"./emss"	distribution of s-polarized electromagnetic field averaged within each cell	$[\bar{B}_x, \bar{B}_y, \bar{E}_z]$
"./gmns"	distribution of the energy density averaged within each cell	$[\varepsilon_i, \varepsilon_e]$
"./phs"	phase profiles of the ions – "phs01_*" and electrons – "phs02_*	$[x, y, p_x, p_y, p_z, \text{weight}]$
"./rjci"	instant snapshot of the current density distribution	$[j_x, j_y, j_z]$
"./rjcs"	current density distribution, averaged within each cell	$[\bar{j}_x, \bar{j}_y, \bar{j}_z]$

The folder "./etc" contains some useless files \smile and also "energy_***.gz" which gives the energy evolution structured as:

[time, total energy, e-m energy, kinetic energy ions, kinetic energy electrons]