

Driver_evolveFlash Input: simTime, dt, dtOld

Operation Input: Subset of cell-centered solution variables on leaf blocks and without good GC data.

Operation Output: Updated subset of cell-centered solution variables (including EoS variables) on leaf blocks and without updating GC data.

Intermediate Data: dtd[XYZ] arrays (based on dt and deltas) and auxC tile

Setup-time parameter

Setup-time/Runtime parameter

Timestep parameter

Task/Data Movement/Barrier Keyword

If not useHydro:

 RETURN

If tiling:

 myLeafItor = AllLeavesWithTiling

Else:

 myLeafItor = AllLeavesWithoutTiling

prepareBuffers

setOperationGlobalParams

If not Grid_skipGcFill:

 MpiBarrier

 fillGC (global, internode DM)

 if doC2PConvert:

 iterate myLeafItor:

 postGcFillCleanupWithConvert

 else:

 iterate myLeafItor:

 postGcFillCleanupWithoutConvert

 iterate myLeafItor:

 eosOnGuardcells

iterate myLeafItor:

 computeFluxes

If tiling and UinUoutAliased:

 TaskBarrier

iterate myLeafItor:

 updateSolution

iterate myLeafItor:

 eosOnInteriors

freeBuffers