File: libvtkFiltersCellGrid-9.6.9.6.dylib
Type: cpu
Showing nodes accounting for 82.12s, 57.80% of 142.07s total
Dropped 706 nodes (cum <= 0.71s)
Dropped 92 edges (freq <= 0.14s)
Showing top 80 nodes out of 178

See https://git.io/JfYMW for how to read the graph

[libsasl2.2.dylib]
6.54s (4.60%)
of 142.07s (100%)

142.07s

MooseApp
run
0 of 142.07s (100%)

141.19s

LinearAssemblySegregatedSolve
solve
0 of 141.19s (99.38%)

2.78s
50.63s
30.94s
48.52s
0.72s
10.76s
0.59s

LinearAssemblySegregatedSolve
correctVelocity
0 of 50.63s (35.64%)

0.33s
2.43s
47.32s

RhieChowMassFlux
computeHbyA
0.02s (0.014%)
of 2.43s (1.71%)

LinearAssemblySegregatedSolve
solveMomentumPredictor
0 of 30.94s (21.78%)

LinearAssemblySegregatedSolve
solveAdvectedSystem
0 of 48.52s (34.15%)

LinearAssemblySegregatedSolve
solvePressureCorrector
0 of 47.32s (33.31%)

0.76s
1s
0.65s
2.31s
0.84s
3.74s
27.17s
0.95s
42.84s
8.33s
37.97s

FV
relaxMatrix
0 of 1.76s (1.24%)

ConsoleStream
operator<<
0 of 2.78s (1.96%)

PetscLinearSolver
solve
0 of 14.38s (10.12%)

FEProblemBase
computeLinearSystemSys
0.01s (0.007%)
of 107.98s (76.00%)

0.97s
1.08s
0.18s
14.33s
107.97s
0.61s
0.17s
0.22s
0.25s

PetscMatrix
get_row
0.12s (0.084%)
of 2.05s (1.44%)

KSPSolve_Private
0 of 14.33s (10.09%)

FEProblemBase
computeLinearSystemTags
0 of 107.97s (76.00%)

FEProblemBase
execute
0 of 10.82s (7.62%)

6.11s
7.92s
20.66s
39.20s
4.97s
48.11s
5.85s

KSPSolve_GMRES
0 of 6.11s (4.30%)

hypre_BoomerAMGSetup
0.01s (0.007%)
of 7.92s (5.57%)

LinearSystem
computeLinearSystemInternal
0 of 20.66s (14.54%)

FEProblemBase
computeUserObjects
0 of 44.17s (31.09%)

FEProblemBase
computeSystems
0 of 53.96s (37.98%)

0.40s
0.58s
5.75s
0.57s
1.65s

PCApply
0 of 5.75s (4.05%)

LinearSystem
computeGradients
0 of 2.26s (1.59%)

18.47s
44.02s
53.87s
1.60s
5.73s

hypre_BoomerAMGCycle
0.01s (0.007%)
of 5.73s (4.03%)

Threads
parallel_reduce
0 of 118.24s (83.23%)

0.97s
4.35s
97.90s
3.08s
15.39s

__kmpc_fork_call
0 of 5.65s (3.98%)

hypre_BoomerAMGRelax
0.01s (0.007%)
of 4.35s (3.06%)

ThreadedElementLoopBase
operator()
0.93s (0.65%)
of 97.90s (68.91%)

ComputeLinearFVElementalThread
operator()
0.05s (0.035%)
of 3.08s (2.17%)

ComputeLinearFVFaceThread
operator()
0.26s (0.18%)
of 15.39s (10.83%)

5.54s
1.27s
2.69s
38.94s
50.52s
0.60s
1.57s
3.86s
3.78s

__kmpc_invoke_microtask
0.01s (0.007%)
of 5.54s (3.90%)

operator delete
0.09s (0.063%)
of 3.64s (2.56%)

BoundaryInfo
side_boundary_ids
0.88s (0.62%)
of 2.69s (1.89%)

ComputeUserObjectsThread
onElement
0.21s (0.15%)
of 38.94s (27.41%)

ComputeElemAuxVarsThread
onElement
0.32s (0.23%)
of 50.52s (35.56%)

LinearFVElementalKernel
addRightHandSideContribution
0.04s (0.028%)
of 1.57s (1.11%)

LinearFVFluxKernel
addMatrixContribution
0.24s (0.17%)
of 3.86s (2.72%)

LinearFVFluxKernel
addRightHandSideContribution
0.19s (0.13%)
of 3.78s (2.66%)

1.55s
4.34s
3.92s
3.35s
6.65s
7.91s
32s
31.98s
8.02s
1.14s
0.47s
2.43s
0.85s
1.26s

<unknown>
0 of 8.26s (5.81%)

tc_free_sized
1.30s (0.92%)
of 3.35s (2.36%)

FEProblemBase
reinitElem
0.22s (0.15%)
of 14.56s (10.25%)

FEProblemBase
prepare
0.34s (0.24%)
of 63.99s (45.04%)

AuxKernelTempl
compute
0.44s (0.31%)
of 8.02s (5.65%)

PetscMatrix
add_matrix
0.04s (0.028%)
of 3.57s (2.51%)

PetscVector
add_vector
0.07s (0.049%)
of 1.57s (1.11%)

4.34s
hypre_BoomerAMGRelaxHybridGaussSeidel_core
4.34s (3.05%)

6.45s
7.89s
2.83s
5.26s
54.78s
5.45s
0.94s

SystemBase
reinitElem
2.13s (1.50%)
of 6.45s (4.54%)

AuxiliarySystem
reinitElem
0.54s (0.38%)
of 7.89s (5.55%)

Assembly
setCoordinateTransformation
1.51s (1.06%)
of 2.83s (1.99%)

SystemBase
prepare
4.62s (3.25%)
of 5.26s (3.70%)

Assembly
reinit
0.09s (0.063%)
of 56s (39.42%)

kEpsilonViscosityAux
computeValue
0.62s (0.44%)
of 5.45s (3.84%)

VecSetValues
0.33s (0.23%)
of 2.09s (1.47%)

LinearFVDiffusion
computeFluxRHSContribution
0.32s (0.23%)
of 2.02s (1.42%)

0.77s
1.69s
3.57s
7.26s
2.68s
52.01s
3.64s
0.52s
0.32s
0.90s

MooseVariableDataLinearFV
computeValues
0.56s (0.39%)
of 10.85s (7.64%)

Assembly
setVolumeQRule
1.61s (1.13%)
of 2.68s (1.89%)

Assembly
reinitFE
4.10s (2.89%)
of 52.01s (36.61%)

RawValueFunctor
evaluate
0.65s (0.46%)
of 6.45s (4.54%)

FunctorEnvelope
evaluate
0.93s (0.65%)
of 1.02s (0.72%)

MooseLinearVariableFV
gradSln
0.50s (0.35%)
of 1.62s (1.14%)

0.17s
0.17s
3.47s
45.25s
5.29s
5.04s
0.98s

[libmoose-oprof.0.dylib]
1.05s (0.74%)

MooseVariableDataLinearFV
getDofIndices
0.63s (0.44%)
of 3.47s (2.44%)

FE
reinit
2.43s (1.71%)
of 46.45s (32.70%)

MooseVariableDataBase
fetchDofValues
2s (1.41%)
of 5.29s (3.72%)

non-virtual thunk to MooseLinearVariableFV
evaluate(Moose
ElemArg const&, Moose
StateArg const&) const
1.57s (1.11%)
of 5.04s (3.55%)

0.77s
0.34s
11.27s
13.65s
12.08s
0.87s

std
__1
vector
__append
0.81s (0.57%)
of 4.40s (3.10%)

FEMap
compute_map
1.64s (1.15%)
of 11.27s (7.93%)

FEMap
compute_affine_map
0.93s (0.65%)
of 13.65s (9.61%)

FEGenericBase
compute_shape_functions
0.73s (0.51%)
of 12.08s (8.50%)

PetscVector
operator
0.37s (0.26%)
of 2.07s (1.46%)

1.37s
0.42s
0.17s
0.35s
0.63s

3s
1.44s
2.26s
6.50s
10.30s
0.97s
0.24s
0.37s
4.63s
4.63s

operator new
0.19s (0.13%)
of 4.47s (3.15%)

FEMap
resize_quadrature_map_vectors
3.70s (2.60%)

FEMap
compute_single_point_map
14.38s (10.12%)
of 16.80s (11.83%)

FEGenericBase
determine_calculations
1.86s (1.31%)
of 2.34s (1.65%)

[libmesh_oprof.0.dylib]
1.78s (1.25%)

H1FETransformation
map_dphi
4.63s (3.26%)

FE
all_shapes
2.42s (1.70%)
of 4.64s (3.27%)

PetscVector
map_global_to_local_index
1.71s (1.20%)
of 1.82s (1.28%)

4.26s
2.42s

tc_new
1.67s (1.18%)
of 4.26s (3.00%)

FEMap
compute_single_point_map
2.42s (1.70%)