luleshOMP-0611.cc

```
1503   Real_t *x8n  = Allocate<Real_t>(numElem8) ;
1504   Real_t *y8n  = Allocate<Real_t>(numElem8) ;
1505   Real_t *z8n  = Allocate<Real_t>(numElem8) ;
1506
1507   /* start loop over elements */
1508#pragma omp parallel for firstprivate(numElem)
1509   for (Index_t i=0 ; i<numElem ; ++i){
1510      Real_t  x1[8],  y1[8],  z1[8] ;
1511      Real_t pfx[8], pfy[8], pfz[8] ;
1512
1513      Index_t* elemToNode = domain.nodelist(i);
1514      CollectDomainNodesToElemNodes(elemToNode, x1, y1, z1);
1515
1516      CalcElemVolumeDerivative(pfx, pfy, pfz, x1, y1, z1);
1517
1518      /* load into temporary storage for FB Hour Glass control */
1519      for(Index_t ii=0;ii<8;++ii){
1520         Index_t jj=8*i+ii;
1521
1522         dvdx[jj] = pfx[ii];
1523         dvdy[jj] = pfy[ii];
1524         dvdz[jj] = pfz[ii];
1525         x8n[jj]  = x1[ii];
1526         y8n[jj]  = y1[ii];
1527         z8n[jj]  = z1[ii];
```

Top-down view | Bottom-up view | Flat view

Scope	temporal reuse
_start	8.46e+06 100 %
__libc_start_main	8.46e+06 100 %
main	8.46e+06 100 %
loop at luleshOMP-0611.cc: 3117	4.24e+06 50.1%
loop at luleshOMP-0611.cc: 3117	4.24e+06 50.1%
3119: [I] LagrangeLeapFrog	4.24e+06 50.1%
2882: [I] LagrangeNodal	4.24e+06 50.1%
1685: [I] CalcForceForNodes	4.24e+06 50.1%
1598: [I] CalcVolumeForceForElems	4.24e+06 50.1%
1578: [I] CalcHourglassControlForElems	3.96e+06 46.7%
1539: [I] CalcFBHourglassForceForElems	1.10e+06 13.0%
1505: [I] Allocate<double>(unsigned long)	4.92e+05 5.8%
509: malloc	4.92e+05 5.8%
_start	4.92e+05 5.8%
__libc_start_main	4.92e+05 5.8%
main	4.92e+05 5.8%
loop at luleshOMP-0611.cc: 3117	4.92e+05 5.8%
loop at luleshOMP-0611.cc: 3117	4.92e+05 5.8%
3119: [I] LagrangeLeapFrog	4.92e+05 5.8%
2882: [I] LagrangeNodal	4.92e+05 5.8%
1685: [I] CalcForceForNodes	4.92e+05 5.8%
1598: [I] CalcVolumeForceForElems	4.92e+05 5.8%
1578: [I] CalcHourglassControlForElems	4.92e+05 5.8%
1508: GOMP_parallel	3.03e+05 3.6%
168: CalcHourglassControlForElems(double*, double) [clone ._or	3.03e+05 3.6%
loop at luleshOMP-0611.cc: 1533	3.03e+05 3.6%
1527: _start	3.79e+04 0.4%
1527: _start	3.79e+04 0.4%
__libc_start_main	3.79e+04 0.4%
main	3.79e+04 0.4%
loop at luleshOMP-0611.cc: 3117	3.79e+04 0.4%
loop at luleshOMP-0611.cc: 3117	3.79e+04 0.4%
3119: [I] LagrangeLeapFrog	3.79e+04 0.4%
2882: [I] LagrangeNodal	3.79e+04 0.4%
1685: [I] CalcForceForNodes	3.79e+04 0.4%
1598: [I] CalcVolumeForceForElems	3.79e+04 0.4%
1578: [I] CalcHourglassControlForEle	3.79e+04 0.4%
1539: [I] CalcFBHourglassForceFo	3.79e+04 0.4%
1283: GOMP_parallel	3.79e+04 0.4%
168: CalcFBHourglassForceF	3.79e+04 0.4%
loop at luleshOMP-0611.cc: 1	3.79e+04 0.4%
luleshOMP-0611.cc: 1314	3.79e+04 0.4%

allocation call path

Data allocation

use call path

Use location

reuse call path

Reuse location