|  |  |
| --- | --- |
| Acctim |  |
| accum\_courant |  |
| adapt\_mesh\_in\_FPI | variable for adapting the mesh in FPI solver |
| After\_adapt | Logical expression (false) |
| After\_adapt\_itime | flag to either enter the pressure solve or not |
| C\_phi\_series | allocatable array |
| Calulate\_mass\_delta | calculate mass change |
| Courant\_number |  |
| courant\_tol |  |
| CV\_funs | control volume shape functions |
| CV\_GIdims | control volume Gaussian integration parameter |
| Density\_field | tensor field options |
| dt | Real, intent (inout) |
| Eles\_wiht\_pipe | pipe coordinates |
| Entersolve | logical(true) |
| Exit\_initialise\_porous\_media | logical(false) |
| Exitnonlinearloop | logical expression for adaptive time stepping |
| FE\_funs, | finite element shape functions |
| FE\_GIdims | finite element Gaussian integration parameters |
| first\_time\_step |  |
| Igot\_theta\_flux | integer for shape function related fields |
| Itime | defining time option |
| Its | integer |
| magma\_phase\_coef | type of magma phase diagram |
| mass\_ele | real, pointer |
| Mdims | multi-dimension |
| Mdisopt, | multi-discretisation options |
| mmat | multi-matrix |
| Mspars | multi-sparsity |
| Multi\_absorb | multi-absorption (magma, porous media) |
| Multicomponent\_state | state type and pointer |
| Ndgl | Conversion from local to global |
| nonlinearadaptTs | nonlinear adaptive time stepping variable |
| old\_acctim | real |
| Outfluxes | multi-outfluxes |
| Packed\_state | state type |
| Pipes\_aux | type of multi-pipe package |
| Porousity\_field | type of vector field |
| Pres\_its\_taken | integer |
| Pressure\_field | type of tensor field |
| Reference\_field | real allocatable array |
| Repeat\_timestep | logical expression(false) |
| saturation\_field | type of tensor field |
| Scalarfield\_source\_store | real multidimension array and pointer |
| SFPI\_taken | integer |
| State | state type |
| Suf\_sig\_diagten\_bc | real allocatable multidimension array |
| Sum\_one\_m\_theta\_flux | real allocatable multidimension array |
| Sum\_one\_m\_theta\_flux\_j | real allocatable multidimension array |
| Sum\_theta\_flux\_j | real allocatable multidimension array |
| T\_adapt\_threshold | real |
| theta\_gdifff | real multidimension pointer array |
| Tracer\_field | type of tensor field |
| Upwnd | variable storing sigma at the interface for porous media |
| Velocity\_field | type of tensor field |

Question:

1571 - trim(option\_name)

635 - What is pipe?

540 - #ifdef