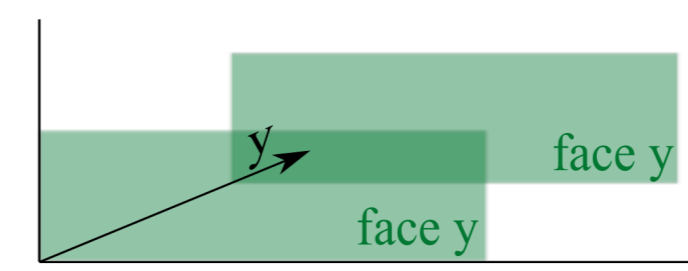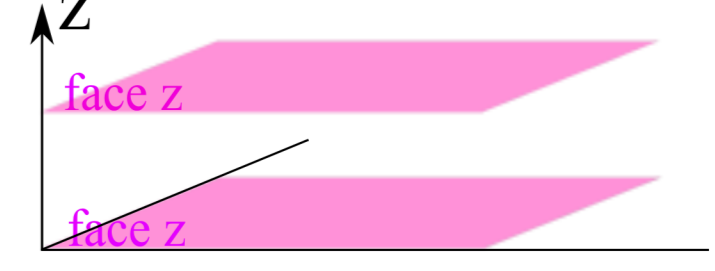| process | subroutine | face x (0:NI,1:NJ,1:NK) | center (1:NI,1:NJ,1:NK) (0:NI+1,0:NJ+1,0:NK+1) | face y (1:NI,0:NJ,1:NK) | face z (1:NI,1:NJ,0:NK) |
|---|---|---|---|---|---|
| previous time step | | | **u, v, w,** **s, T, Tr,** **h, p** | | |
| advection | *advecn* | uflx, vflx, wflx, Tflx, sflx, Trflx | | ufly, vfly, wfly, Tfly, sfly, Trfly | uflz, vflz, wflz, Tflz, sflz, Trflz |
| | *viscous + diffusion* | | uux, uvx, uwz, usx, uTx udif, vdif, wdif, sdif, Tdif cx, cy, cz, **s, T, Tr** | | |
| interpolation | *intpol* | cxf | | cyf | czf |
| baroclinic pressure (rp) | *rpevalgrad* | grpifc | drpx, drpy | grpjfc | |
| Coriolis terms + rp terms | *coriolis* | | si, sj, sk | | |
| Coriolis terms + rp terms | *srcface* | sifc | | sjfc | |
| update the free surface elevation | *hsolve* | | **h** | | |
| Coriolis terms + rp terms | *calcskfc* | | | | skfc |
| u-tilde, v-tilde, w-tilde | *vhydro (+uvchy)* | cxf | cx, cy, cz | cyf | czf |
| 3D non-hydrostatic pressure | *mgrid* | | **p** | | |
| final velocities | *vface* | uf | | vf | wf |
| final velocities | *vcenter* | | **u, v, w** | | |