

particles.f90

init.f90



```
init_particles()  
initparticledump()  
initparticlestat()
```

```
write_particle_hist()  
particlestat()
```

step.f90



```
particles()
```

```
    calc_sgstke()  
    calc_restke()  
    fsubgrid()  
    fsubgrid_local()  
    globalrandomize()
```

```
    ui3d()
```

```
    vi3d()
```

```
    wi3d()
```

} (*interpolation*)

```
    usgs()
```

```
    vsgs()
```

```
    wsgs()
```

```
    rk3()
```

```
    checkbound()
```

```
    partcomm()
```

```
    balanced_particledump()
```

```
exitparticledump()
```

```
exitparticlestat()
```

```
exit_particles()
```

(time loop)

IF:  
**lpartic**  
lpartsgs  
lrandsurf  
lpartstat  
lpartdump