

FILE: FRAP.F90

```
1 module frap
2
3     use global_env
4     use walker
5     use calendar
6     use cell
7
8     implicit none
9
10    integer, dimension(:), allocatable :: frap_active
11
12 contains
13
14    subroutine frap_bleach()
15
16        integer :: i
17
18        allocate(frap_active(n_walkers))
19
20        do i = 1, n_walkers
21            frap_active(i) = 1
22        end do
23
24        do i = 1, n_walkers
25            if (walker_pos(i,Z) .eq. box_size(Z)) then
26                frap_active(i) = 0
27            end if
28        end do
29
30    end subroutine
```

```

31
32     subroutine frap_measure(ratio)
33
34         real(DP), intent(out) :: ratio
35
36         integer :: num = 0, denom = 0
37         integer :: i
38
39         do i = 1, n_walkers
40             if (walker_pos(i,Z) .eq. box_size(Z)) then
41                 denom = denom + 1
42                 if (frap_active(i) .eq. 1) then
43                     num = num + 1
44                 end if
45             end if
46         end do
47
48         ratio = num/denom
49
50     end subroutine
51
52 end module

```