ecosystem_dynamics
(ed)

integrates variables using stiff ode integator, then perform patch and cohort deletion and fusion algorithms

(cs->integration_flag == 0)||
(RPT_INTEGRATION == 1)

F

T

data->current_site= cs;

t%COHORT_FREQ==0

F

T

phenology (phenology)

fire_on

fire_frequency (disturbance)

T

F

cp=cs->youngest_patch

while(cp!=NULL)

light_levels (light)

cp=cp->older

#if PATCH_DYNAMICS

F

T

calculate_site_disturbance_rates (disturbance)

cp=cs->youngest_patch

integrate_state_variables (odeint)

while(cp!=NULL)

cc=cp->tallest

t%N_SUB == 0 && t > 0

T

once a year update the pastDbh array of all the cohorts before cohort dynamics

while(cc!=NULL)

update_pastDbh_cohort (cohort)

F

t%COHORT_FREQ==0

cc=cc->shorter

F

T

reproduction (reproduction)

cp=cp->older

cp=cs->oldest_patch

while(cp!=NULL)

if(cp->dist_type>0)

fuse_cohorts (cohort)

T

no cohort dynamics on agricultural sites

recruitment (cohort)

F

split_cohorts (cohort)

terminate_cohorts (cohort)

(t%(PATCH_FREQ) == 0)&&(t>0)

F

T

calculate_site_disturbance_rates (disturbance)

sort_cohorts (cohort)

cp=cp->younger

fuse_patches (patch)

spawn_patches (patch)

terminate_patches (patch)

REDUCE_COHORTS

T

reduce_cohorts (patch)

F