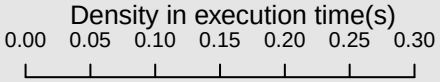
./scripts/C.R




```
1  generate.patches <-
2  function(environment.raster, n.patches = 50, patch.size = 10)
3  {
4   dummy.raster <- environment.raster
5   dummy.raster[!is.na(dummy.raster)] <- 1
6   n.cols <- ncol(dummy.raster)
7   n.rows <- nrow(dummy.raster)
8
9   # Get the environment matrix
10  env.m <- getValues(dummy.raster, format = "matrix")
11
12  # Select the number of patches
13  # n.patches <- 50
14  # Define the starting points for each patch
15  starts <- sample(x = which(!is.na(env.m)), size = n.patches, replace = FALSE)
16  # Select patch size
17  # patch.size <- sample(5:20, n.patches, replace = T)
18  patch.s <- patch.size
19  test <- lapply(starts, FUN = function(s1, x1, patch.s1)
20  {
21    expand(start = s1, x = x1, n.size = patch.s1)
22  }, x1 = env.m, patch.s1 = patch.s)
23  test2 <- rowSums(matrix(unlist(test), ncol = length(test), byrow = FALSE), na.rm = T)
24  ids <- which(test2 == 2)
25
26  # Attribute all patch values in the environment matrix (NA = sea, 0 = no patch, 1 = patch)
27  env.m[!(is.na(env.m))] <- 0
28  env.m[ids] <- 1
29
30  patch.raster <- setValues(dummy.raster,
31                            env.m)
32
33  return(patch.raster)
34  }
```