Density in execution time(s)

0.0   0.2   0.4   0.6   0.8

```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    ids <- NULL
20    for (run in 1:n.patches)
21    {
22      s <- starts[run]
23      # patch.s <- patch.size[run]
24      # Create the patch (same matrix as env.m, but with values of 2 where the patch exist)
25      patch <- expand(x = env.m, n.size = patch.s, start = s)
26      # Get patch cell ids
27      ids <- c(ids, which(patch == 2))
28    }
29
30    # Attribute all patch values in the environment matrix (NA = sea, 0 = no patch, 1 = patch)
31    env.m[!(is.na(env.m))] <- 0
32    env.m[ids] <- 1
33
34    patch.raster <- setValues(dummy.raster,
35                   env.m)
36
37    return(patch.raster)
38  }
```