

R code

```
# (Step 1)
# Example of RasterStack Area of Interest:

> AOI <- system.file('amazon.grd',
  package = 'ecochange')
> amazon <- brick(AOI)

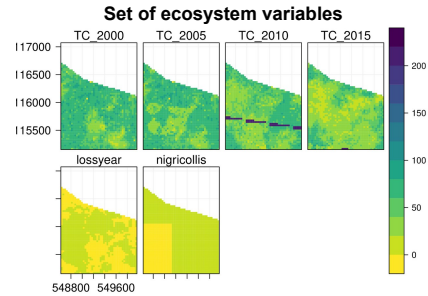
# Subset of ecosystem variables
# (see panel names):

> nm <- names(amazon)[c(3:6,2,7)]

# Levelplot:

> plot.echanges(amazon)
```

Output



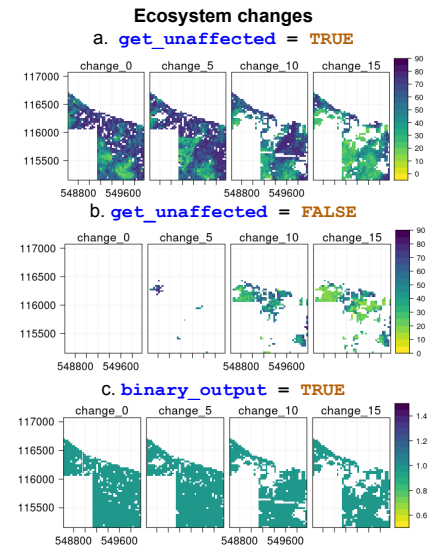
```
# (Step 2)
# Ecosystem-change representation:

> ech <- echanges(amazon,
  eco = 'TC',
  change = 'loss',
  sp_dist = 'nigri',
  eco_range = c(1,80),
  change_vals = c(1,5,10,15),
  get_unaffected = TRUE,
  binary_output = FALSE,
  mc.cores = 2)

> plot.echanges(ech)

# See other arguments in echanges().

?echanges
```

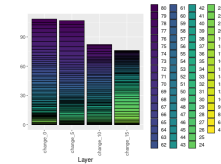


```
# (Step 3)
# Landscape-class metric:

> areas <- gaugeIndicator(ech,
  metric = 'area',
  smp_lsm = list(what = 'lsm_c_ca'))

> plot.Indicator(areas)
```

Ecosystem-class areas (ha)



```
# (Step 4)
# Grid metric (Conditional entropy):

> H <- sampleIndicator(ech,
  metric = 'condent',
  min = 1,
  max = 80,
  classes = 5)

> plot.echanges(H)
```

Conditional-entropy grids

