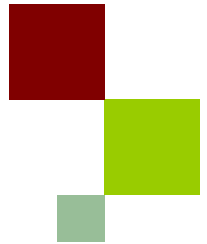


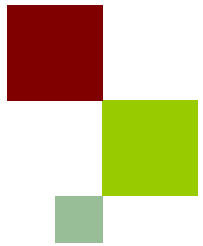
# Using R-plugins of Guiana Shield project : Step by step



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Maxence R.





# Plan



1- Reclass Forest and Deforestation map



2- Connected pixels and create Forest patches and Deforestation patches maps



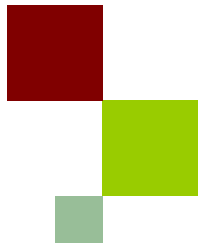
3- Vectorize Forest and deforestation patches map and join attribute table



4 - Analyse patterns using created vectors



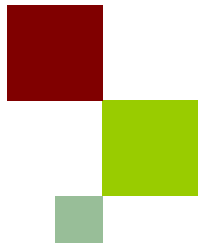
5- Produce new deforestation maps by pattern type



# 1- Reclass Forest and Deforestation map

- First step is to put raster map in required format (binary - 1 and 0 value only).
- Before to connected each patch of Forest or Deforestation, Forest and Deforestation map must represents an unique class:
  - where 1 corresponds to Forest class (or deforestation class)
  - All other class must be reclass in 0 value.
- For this use:
  - "Reclassify Forest and Deforestation map - For Hansen Treecover and Forest loss data"or
  - "Reclassify Forest map - For categorical map"
  - "Deforestation map - Benchmark initial and final forest map"

# 2- Connected pixels and create Forest patches and Deforestation patches maps



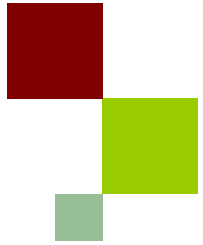
- ♣ Attribute the same value for all adjacent and connected cells of forest (or/and deforestation) of previously reclassified map.
- ♣ For this use plugins:
  - ♣ "landscape pattern and metrics - Forest and deforestation patches map and landscape metrics"
- ♣ Inputs:
  - ♣ Forest map (with value of 1 for forest and 0 for other)
  - ♣ Deforestation map (with value of 1 for deforestation and 0 for other)
- ♣ Outputs:
  - ♣ 1 forest patches map
  - ♣ 1 Deforestation patches map
  - ♣ 2 Tables (.csv) summarizing the metrics for Forest and Deforestation class
  - ♣ 2 Tables (.csv) summarizing the metrics for each forest and deforestation patch.

# 3- Vectorize Forest and deforestation patches map and join attribute table



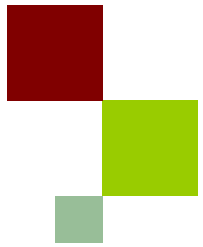
- ♣ To facilitate analysis it is useful to vectorize forest and deforestation patches map (create at the step 2) and join the attribute table (also create at the step 2).
- ♣ For this use the plugin: "Vectorize patches map and associate metrics"
- ♣ Inputs:
  - ♣ Forest or Deforestation map
  - ♣ Associated tables (.csv) summarizing the metrics for each forest (or deforestation) patch
- ♣ Output:
  - ♣ Vector map of forest (or deforestation) patches with associated metrics in attribute table

# 4 - Analyse of created vectors

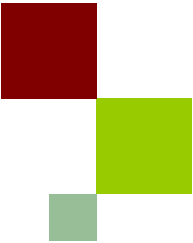


- ♣ Forest (or deforestation) patches vector, previously created, can be analyse with the following plugins:
  - ♣ "Statist" (Qgis plugin) to compute globally informations on metrics
  - ♣ Frequency table and histogram
  - ♣ Weighted-area frequency table

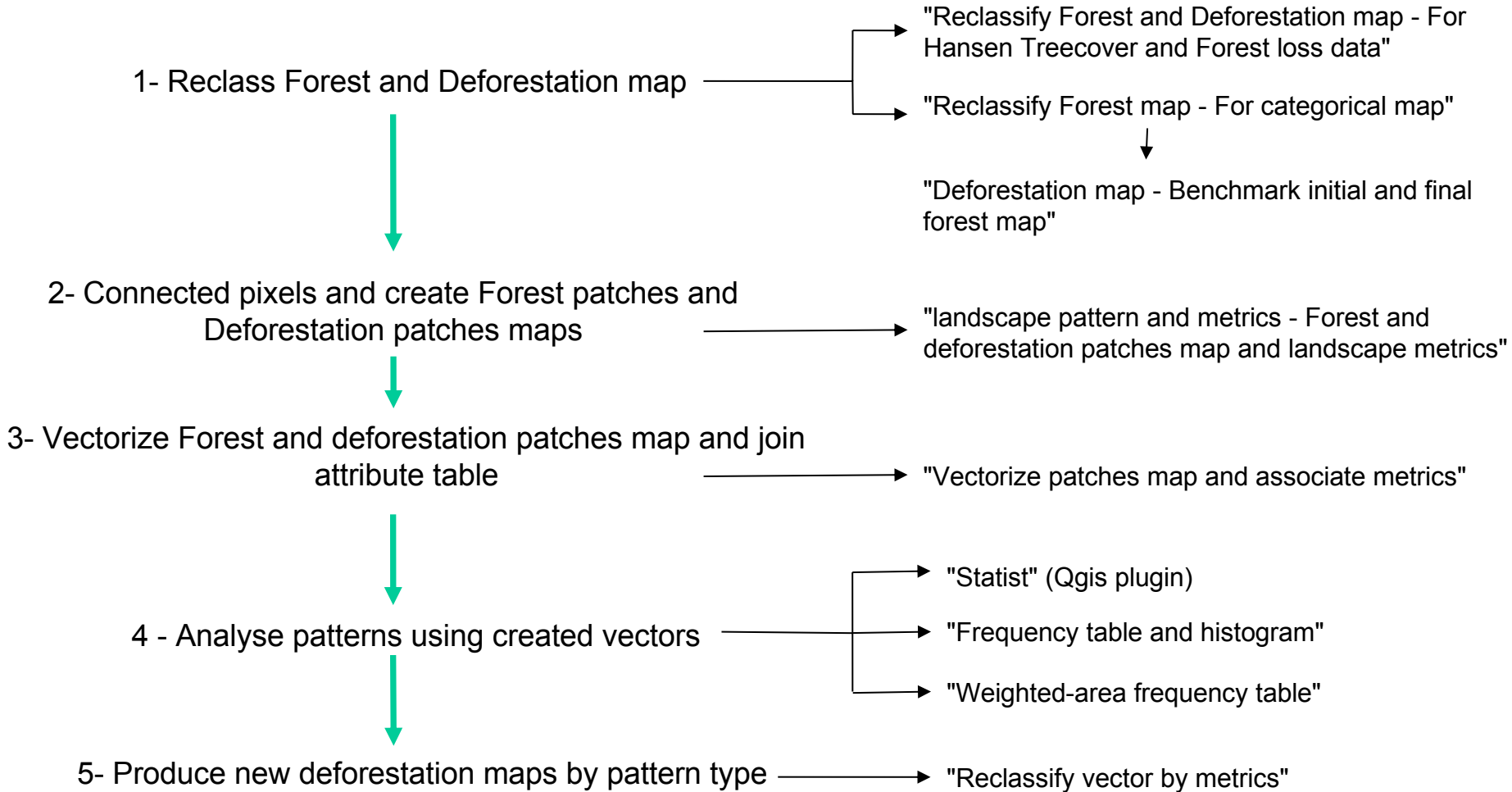
# 5- Produce new deforestation maps by pattern type



- ♣ It is possible to create new shapefile discriminating by value of metrics (by pattern).
- ♣ For this used the plugin: "Reclassify vector by metrics"
- ♣ Input:
  - ♣ Vector of deforestation and associated metrics in attribute map
- ♣ Output:
  - ♣ New vector map reclassified by type of pattern

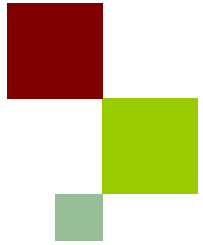


# Step by step





# Working Group



9h - 11h

- ♣ By country group, perform an analysis using landscape metrics and R plugins of the Guiana Shield.
  
- ♣ Objective and step:
  - ♣ Try to characterize and discriminate deforestation pattern(s) in space and time
  - ♣ Produce deforestation map(s) focusing each on one pattern of deforestation
  - ♣ Interpret the results with your field knowledge
  
- ♣ Produce some (3/4) slides presenting the different steps

11h -12h (15 min by group)

- ♣ Presentation of these results