

## APPLICATION STAGE / FITTING PHASE: 2. ALLOCATED RISK MAPPING

The second step in the application stage fitting phase creates a modeling region map from the cross-classification of the vulnerability map with a map of administrative divisions. The modeling region map is then superimposed on a map of deforestation during the Historical Reference Period (HRP) to determine the relative frequency of deforestation within each modeling region. The result is output as a table (in “.csv” comma separated values text file). This is then used to create a fitted deforestation density map for the HRP, where pixels are measures in ha/pixel.

### INPUTS

#### WORKING FOLDER

The computer folder where inputs are expected and outputs are written.

#### MAP OF ADMINISTRATIVE DIVISIONS

This is a raster map where each pixel contains an integer identifier (ID) of the administrative region it belongs to within the jurisdiction. ID's should start with 1 and be numbered consecutively. A typical map will have 10-200 regions. This map will be cross-classified with the vulnerability map to yield unique combinations. For example, a map with 100 regions will yield  $30 \times 100 = 3000$  modeling regions in the output.

#### VULNERABILITY MAP FOR THE HRP

This is the vulnerability map created in Step 1, or an alternative 30-class vulnerability map independently created.

#### MAP OF DEFORESTATION DURING THE HRP

This is also a binary map (contains 0's and 1's) where the 1's indicate areas that were deforested during the HRP and 0's indicate areas of forest persistence or non-forest at the start of the HRP.

### OUTPUTS

#### NAME FOR THE MODELING REGION MAP IN THE HRP

This is the map created by cross-classifying the vulnerability map with the administrative divisions map. Pixel values will be integer ID's that are created as a compound of the vulnerability zone times 1000 + the administrative division ID. For example, a region that is the intersection of vulnerability zone 28 and administrative region 15 will be identified as 28015.

#### NAME FOR THE RELATIVE FREQUENCY TABLE

This is a “.csv” file that will be created with 2 columns – an modeling region ID column and a relative frequency column. The file is a text file and can be viewed in a text editor. In addition, most spreadsheet programs can read and conveniently display the contents.

#### NAME FOR THE FITTED DENSITY MAP IN THE HRP

This is a map of the density of deforestation in the HRP fitted by the model. The units are ha/pixel.