APPLICATION STAGE / FITTING PHASE: 1. VULNERABILITY MAPPING

As with the testing phase, the application phase needs a vulnerability map which expresses the relative vulnerability of locations to unplanned deforestation during the whole Historical Reference Period (HRP). The map is required to have 30 non-zero ordinal classes with 30 being the highest vulnerability and 0 being used to delineate areas outside the jurisdiction and land to be excluded from consideration, such as planned deforestation concessions.

The inputs here will vary depending upon whether the vulnerability map is to be based on the benchmark model or an alternative. The benchmark is based on a map of distance from the forest edge (non-forest). Alternative models should be based on transition potentials – maps with continuous values from 0.0 (no potential) to 1.0 (highest potential).

Note: For the Benchmark, this is the same as the vulnerability map for the Calibration Period (CAL). In that case, you can use the same vulnerability map and skip ahead to Step 2. Depending upon how the alternative model is created, this may also apply to the alternative for the HRP.

Note that in the case of the Benchmark procedure, the NRT establishes the boundary between vulnerability class 1 and class 2.

Important: Be sure to specify the proper file extension (".tif" or ".rst") for all inputs and outputs. The folder location is not needed since the working folder is specified separately.

INPUTS: BENCHMARK MODEL

WORKING FOLDER

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

DISTANCE FROM FOREST EDGE AT START OF THE HRP

A map of Euclidian distance from non-forest at the start of the HRP, expressed in meters. This will be the same map as that used for the CAL. **Important:** Be especially careful to avoid map errors which cause small inclusions of non-forest in areas that are actually forest. These can cause substantial problems with the resulting distance map. Where appropriate, apply an area (sieve) filter to remove these errors beforehand (see the general instructions on the Start Page for suggestions).

MASK OF THE NON-EXCLUDED JURISDICTION

This is a binary map (contains 0's and 1's) where the 1's indicate areas inside the jurisdiction and suitable for consideration. Areas that are to be excluded from consideration (such as planned forestry concessions) should be marked with 0's. Note that maps with 1's and NAN's are not equivalent. All binary maps must be 1's and 0's with this tool.

NEGLIGIBLE RISK THRESHOLD (NRT) IN THE HRP

Use the same value for the NRT that was used in the testing phase. This value establishes the boundary between classes 1 and 2 in the Benchmark methodology.

INPUTS: ALTERNATIVE MODELS

WORKING FOLDER

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

EMPIRICAL TRANSITION POTENTIAL IN THE HRP

A map of the potential to transition from forest to non-forest in the Historical Reference Period (HRP). Transition potentials are expressed on a 0.0-1.0 continuous scale.

MASK OF THE NON-EXCLUDED JURISDICTION

This is a binary map (contains 0's and 1's) where the 1's indicate areas inside the jurisdiction and suitable for consideration. Areas that are to be excluded from consideration (such as planned forestry concessions) should be marked with 0's. Note that maps with 1's and NAN's are not equivalent. All binary maps must be 1's and 0's with this tool.

FOREST AREAS AT START OF HRP

This is a binary map (contains 0's and 1's) where the 1's indicate areas forest areas at the start of the Historical Reference Period (HRP).

OUTPUT (EITHER MODEL)

BENCHMARK VULNERABILITY FOR THE HRP

This is the output vulnerability map name that should be used. Be sure to specify the desired file extension.