Supplementary Material

Using indigenous knowledge to link hyper-temporal land cover mapping with land use in the Venezuelan Amazon: "The Forest Pulse"

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Figure S1. Statistical indicators of divergence between classes. The average separability value denoted similarity between all classes and the minimum separability value denoted similarity between the two most similar classes. When both average and minimum separability reach their highest values the number of classes is optimum.
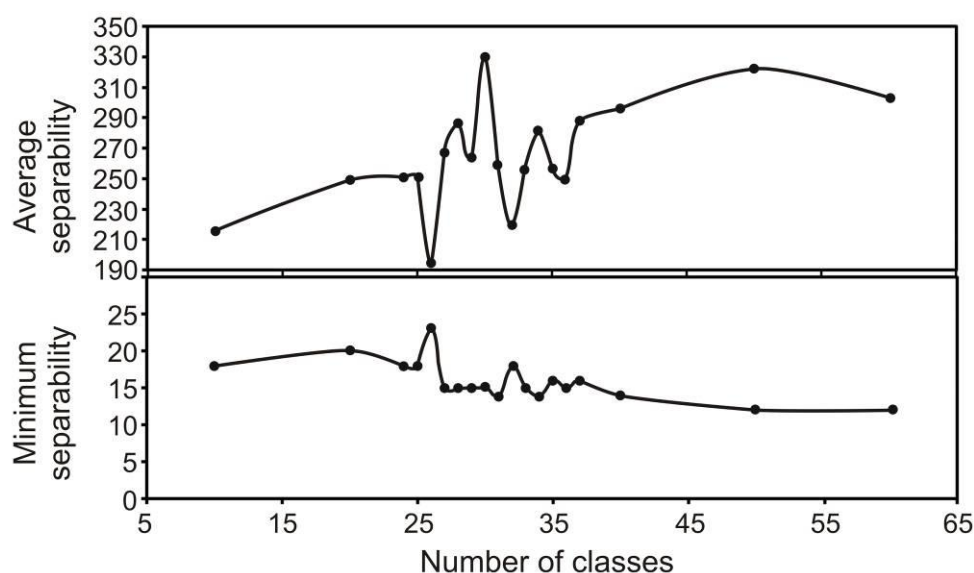
Figure S2. Class characterization based on greenness. a) Average NDVI values and standard deviations for every class during the study period; bottom lines underline homogeneous groups of classes based on pair-class analyses of variance of the NDVI (note that classes are labelled according to their final denomination in order to improve clarity). **b)** UPGMA classifications of land classes based on correlations between their oscillation patterns (left) and on distances between their NDVI values (right); dashed lines represent the 95th percentile limit for correlation and the 5th percentile limit for distance; classes that were clustered together in both dendrograms were grouped in the bottom line.
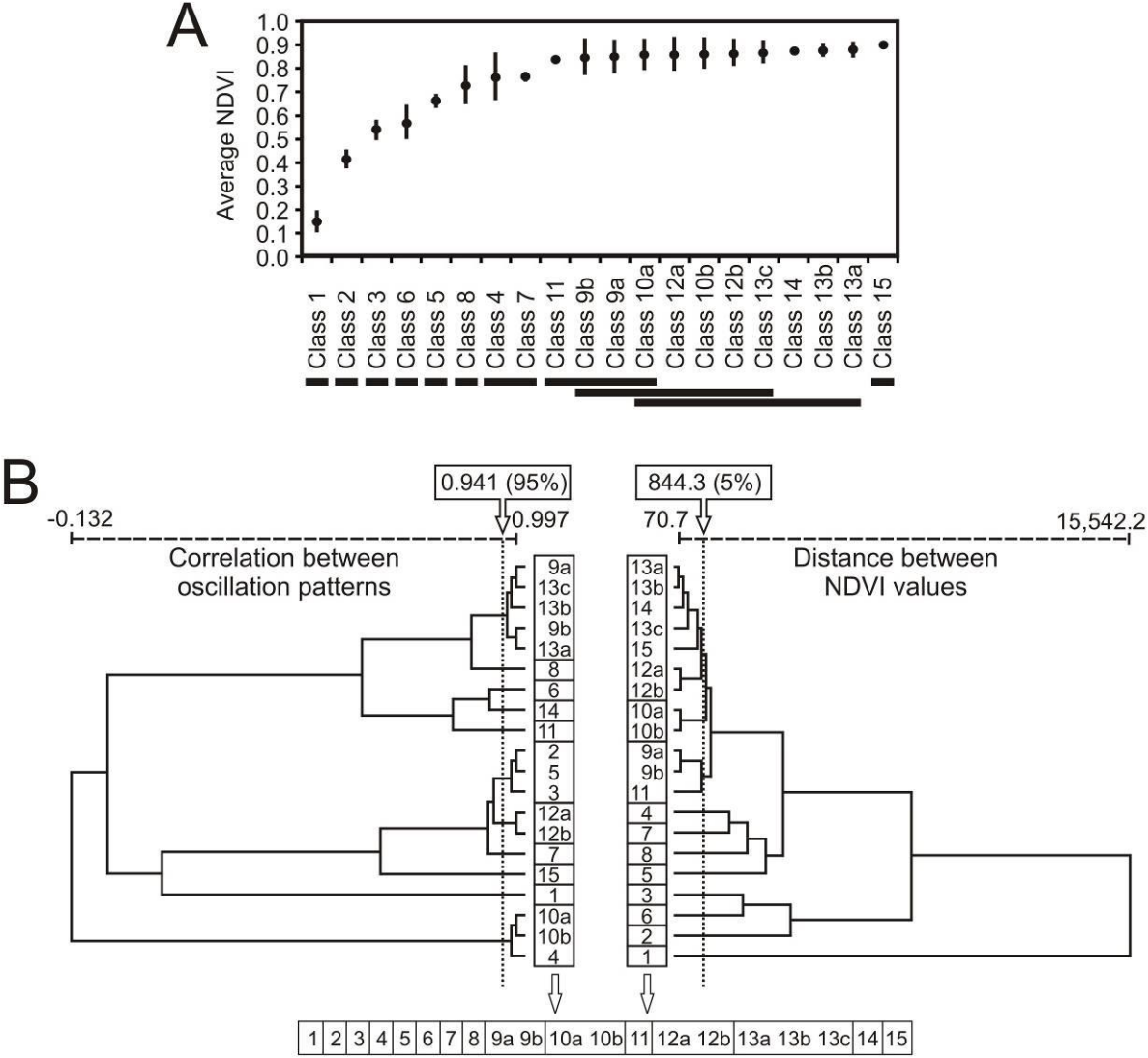
Figure S3. Class characterization based on topo-hydrology. Average values and standard deviations of topo-hydrological variables calculated for all of the cells of every class (see Fig. 4 in the main text). CTI is used here as a proxy of susceptibility to periodical flooding.
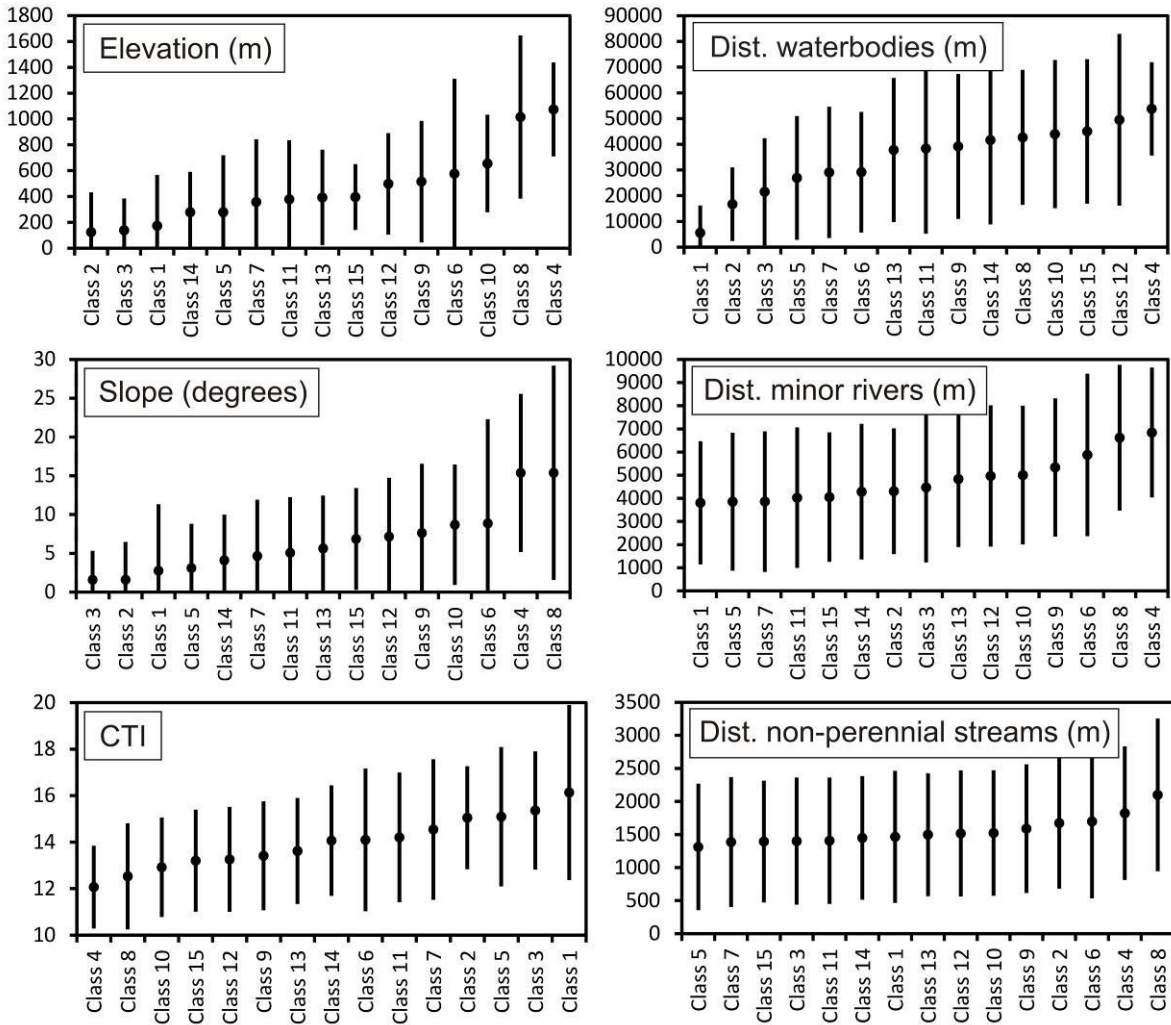
Figure S4. Sample of some landscapes affected by persistent cloudiness. Images represent natural-colour-composite raster images generated from Landsat 7 ETM+ data (left) a selected bi-monthly maximum NDVI layer — white patches corresponding to areas with persistent low pixel-reliability — (center) and the hyper-temporal land classification shown in Figure 4 of the main text (right). **(a)** Classes 4 and 6 near the cliffs of Duida Tepui (NDVI May-Jun 2007). **(b)** Class 1 near the Orinoco River in the north-western savannas (NDVI March-April 2006). **(c)** Classes 9 and 13 near the Ventuari River (NDVI May-Jun 2007). **(d)** Classes 10 and 12 near the border between Venezuela and Brazil (NDVI November-December 2005).