THE INTERFACE BETWEEN THE BRAZILIAN FOREST INVENTORY AND THE PERMANENT PLOTS NATIONAL SYSTEM: THE DEVELOPMENT OF A MULTI-LEVEL SYSTEM

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Abstract

As part of a national effort for monitoring and assessing the state of the country's forests, Brazil has recently started its National Forest Inventory (IFN-BR) and created a Permanent Plots National System (SisPP). Although both efforts aim to monitor Brazilian forests, they differ in their focus; the first has a strategic view (national level) while the second is related to research groups across the country (ecosystem level). These differences require the development of an interface for the integration of both datasets. We propose a system of five hierarchical levels of information and access. The first level presents the location of the Permanent Plots and the areas surveyed by the Forest Inventory over a vegetation map. The second layer is designed for those states that have their own inventories and different methodologies as a filter is required at this level prior to their use. The third level shows the IFN-BR five-year monitoring at the ecosystem level distributed in a 20 x 20 km grid over pre-mapped forest areas. The IFN-BR plots share the same sampling methodology whereas the sampled area varies depending on the ecosystem. The forth level represents the land use monitoring at a landscape scale. In this assessment, an area of 100 km2 is evaluated for every second plot of the IFN-BR grid. Finally, the fifth system level congregates the permanent plots that have been monitored by the different groups in Brazil. We expect that the proposed system will provide a more in-depth understanding of the Brazilian forests.