

Land use and land cover maps of Rio de Janeiro State, Brazil

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This work shows the land use and land cover maps of Rio de Janeiro State, on 1:250.000 scale.

The digital analysis of satellite images was made, using remote sensing techniques, as the supervised classification of the Landsat -TM5 scenes and Principal Components Analysis. The bands used were 1, 2, 3, 4, 5 and 7. The dates of the images are june and july of 1993 and 1994. As a result of this classification, the maps were made with the following individualized classes and their respective areas occupied in the state: pasture (56.10%), forest (28.38%), urban areas (3.81%), bare soil (2.76%), agricultural areas (2.36%), water bodies (1.70%), herbaceous sandbank vegetation (1.12%), arboreous sandbank vegetation (0.60%), bare rock (0.74%), wet field (0.58%), mangroves (0.30%), sand covers (beaches and dunes) (0.22%), saline (0.06%) and sand mining areas (0.005%).

The conclusions of this work are: pasture occupies more than half of the state as a result of burns and deforesting; less than 3% of the state is used to agriculture and it is concentrate in the north; a third part of the state is covered by primary and secondary forests; sandbank vegetation and mangroves are being invaded by the urban areas and bare soil. All of this is a result of a bad land use of the state.