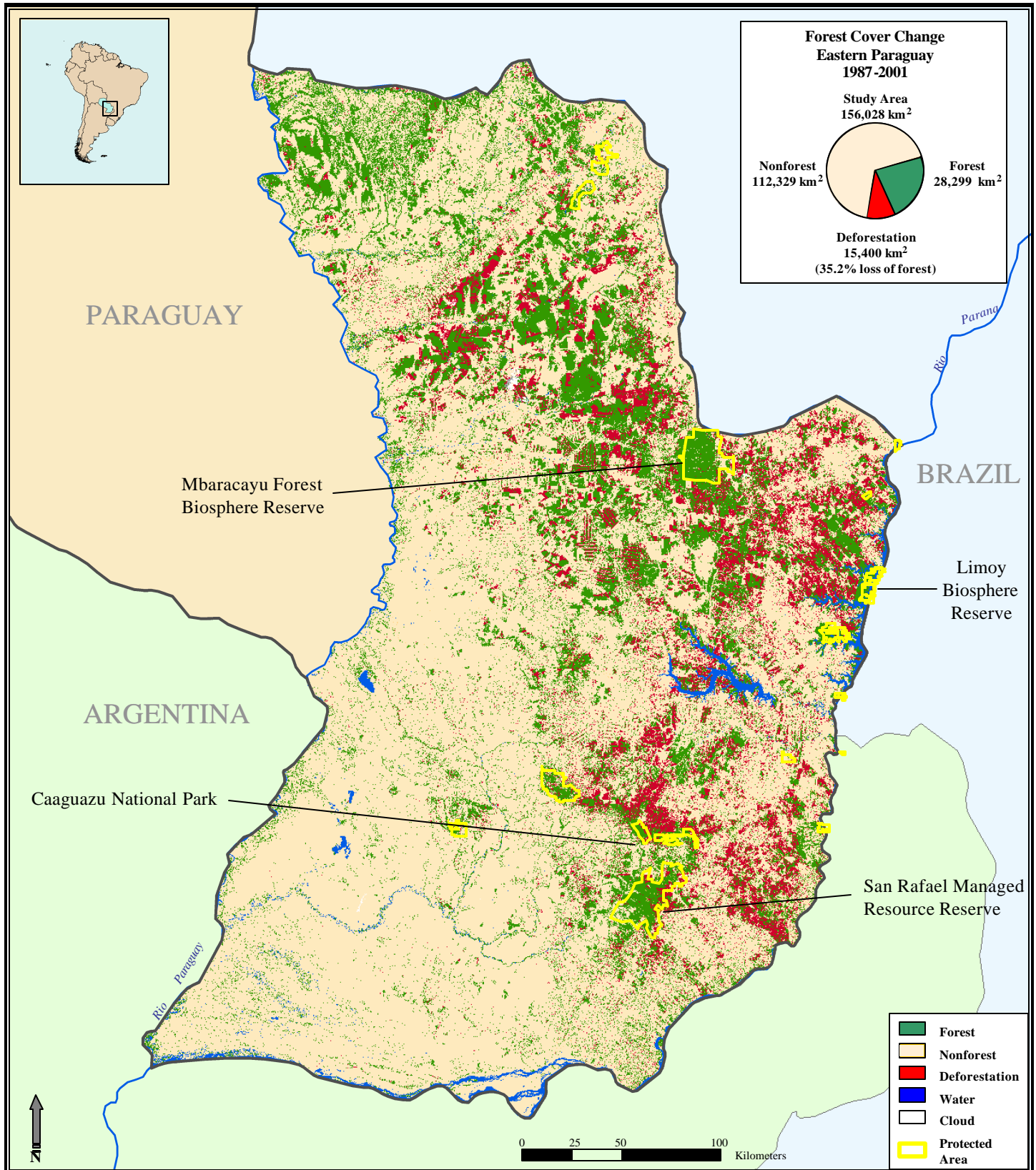


Change in the Subtropical Forest of Eastern Paraguay During the 1990s

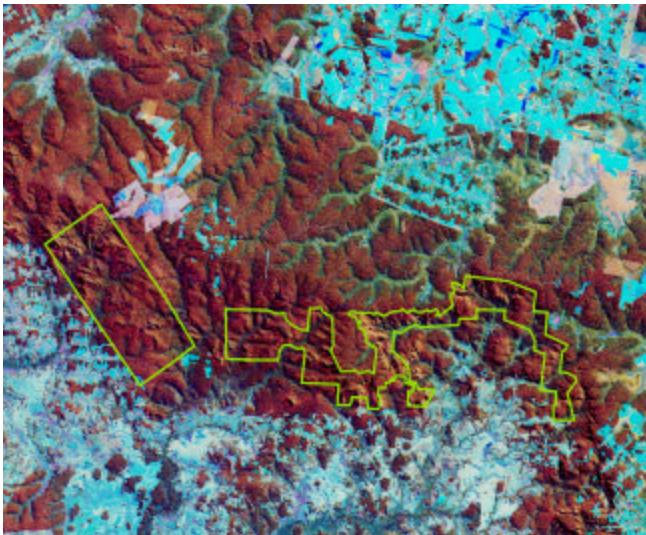


This forest cover change map resulted from a land cover study in Paraguay using remotely sensed imagery. This study was funded under NASA's Land Cover Land Use Change Program, Grant NAG5-9337 *Improvements in Landsat Pathfinder Methods for Monitoring Tropical Deforestation and their Extension to Extra-Tropical Areas*. Please see the reverse for more information.

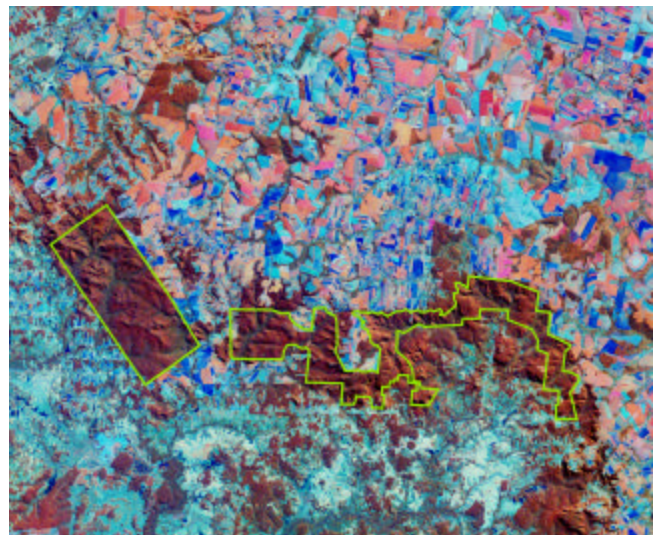
Change in the Subtropical Forest of Eastern Paraguay During the 1990s

The forest cover change map on the reverse was derived from co-registered pairs of Landsat imagery acquired in 1989-1991 and 1999-2001. Large scale conversion of forest to agriculture occurred in Paraguay during the 1990s. A relatively small amount of forest conversion occurred inside the protected areas despite significant deforestation outside the boundaries, indicating that protected area status may facilitate forest conservation. Histograms for three different parks show the lowest forest change rates are located inside the protected areas. Histograms for three different parks show the lowest forest change rates are located inside the protected areas.

Caaguazu National Park, Paraguay



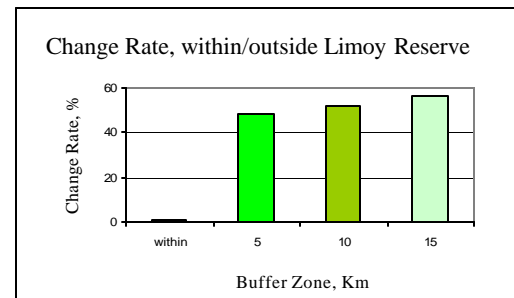
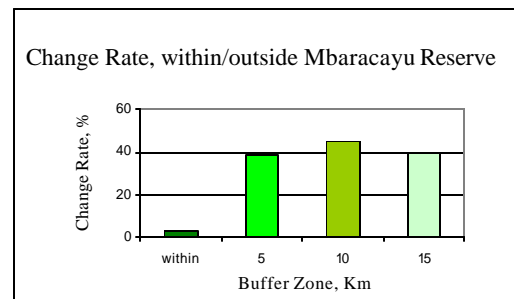
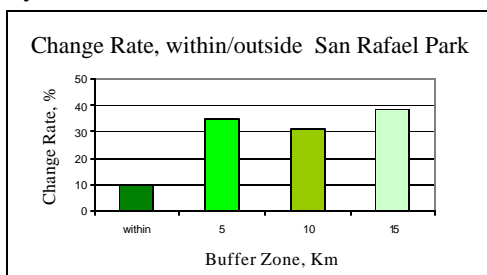
April 19, 1989



August 5, 1999

10 km

Images above are subsets of Landsat TM and ETM+ imagery centered on Caaguazu National Park. Forested areas are dark red and cultivated areas and clearings are brightly colored. Two patterns of forest conversion are occurring in close proximity to Caaguazu. To the north, large tracts of the forest have been converted to soybean agriculture. To the south and west, rural settlers have established small farms in the forest resulting in a recognizable linear pattern of clearings. The forest in this area of Paraguay is part of the critical Atlantic Forest ecosystem of east central South America.



The Global Land Cover Facility provides free earth observation imagery and derived data to users around the world. Primary data collections include imagery from the major U.S. earth observation satellites: Landsat and MODIS from NASA, and AVHRR and GOES from NOAA. Derived products focus on land cover classification and analysis, especially forest cover and forest change. GLCF products are available for download at <http://glcf.umiacs.umd.edu>