

Summary

During 1991, land use and types of pastures existing in the flat plateau region of the Eastern Plains of Colombia were classified, along with their respective surface area, at the Carimagua Research Center (4° 30' N and 71° 30' W). Three SPOT HRV (Land Observation System) satellite images were taken with a multispectral sensor (XS) in three bands: yellow-green (0.50-0.59 nm), red (0.615-0.680 nm), and near infrared (0.79-0.89 nm), with a 20 x 20 m resolution, equivalent to 12 pixels (picture elements). The image corresponds to an area of 60 x 60 km, that is, 9 billion pixels. Data on reflectance were taken at the ground level in January and September with a CIMEL radiometer at the same frequencies as the SPOT XS sensor. These data were used to define check plots that were analyzed based on SPOT images corresponding to March and September; land use classification into broad categories continued using the reflectance

classification established at the field level. The Multiscope Program (CAP SESA) was used to make these estimations.

Given the good resolution and large scale (1:50,000) of SPOT satellite images, an inventory was made of savanna vegetation according to use, management, and physiological status. To identify cultivated and native pastures by botanical composition and degree of degradation, information covering several periods of the same year is needed, with at least one record made during the dry season and another during the rainy season. If only one is feasible, the information corresponding to the end of the rainy season is most appropriate, especially if many burnt areas exist. Data from the dry season, however, are more indicated when studying degraded areas.