

## **EROSION SUSCETIBILITY MAP OF SÃO PAULO STATE**

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This paper presents the results of ten years of research activities related to rural and urban erosion in São Paulo State, located in the south east of Brazil. São Paulo has an area of approximately 250.000 km<sup>2</sup>. Its tropical climate shows annual average rainfalls of 1.700mm. In Summer season, heavy rainfalls are responsible for the occurrence and development of gullies. The Erosion Map of São Paulo State in 1:1.000.000 scale, represents the natural susceptibility and is the synthesis of the recent knowledge about erosion in the region. About 6.300 gully erosions were surveyed by aerial photos. They are specially located in the western part of the State, due to the characteristics of geology, relief and soil. Deforestation was the main factor responsible for the increase of the landscape alterations. During this study, the urban areas of all cities were also visited in order to recognise the gullies (causes of development and the damages to the environment). There are about 730 gullies mapped in urban areas. Based on these information, the analyses have shown that 45% of the State territory are considered of high suscetibility to erosion processes. This map is an instrument of erosion prevention, because it shows the main cities and drainage basins with serious erosion problems. It can be used to start specific studies of erosion control, recuperation and conservation of soil and water resources.