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GEOTECHNOLOGY USE FOR ENHANCEMENT OF THE EMISSIONS ESTIMATES AND GREENHOUSE GASES REMOVAL IN BIOMA CAATINGA
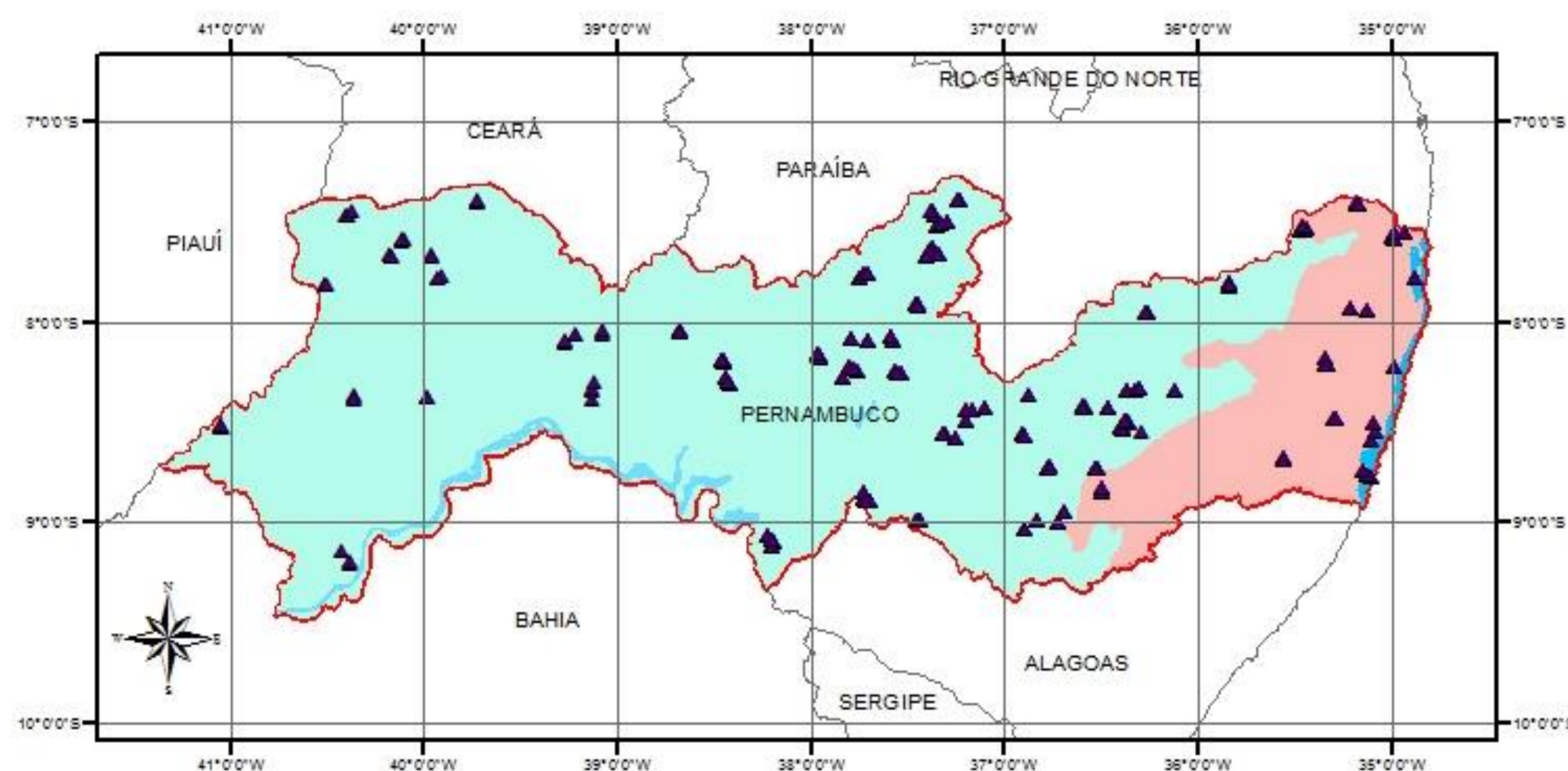
INTRODUCTION

Soil and vegetation are important carbon reservoirs and its proper management can surveys and regional determinations of the balance of greenhouse gas emissions, and carbon balance in terrestrial environments for diverse plant and biomes faces, and their different usage characteristics contribute to carbon removal from the atmosphere and long-term stock of such. However, there is a clear need for the scientific community working on the improvement and deepening of and occupation. The detailed understanding of biogeochemical cycling and the interactions between the biosphere and atmosphere in these areas can be way supportive in identifying the main factors that control carbon cycling in the region, as well as the vulnerabilities along with adaptation strategies to climate change projected.

GOALS

Develop from the use of technology, the improvement of a methodology that enables the quantification and mapping of stocks and flows (emissions and removals) of carbon in soil and vegetation in the Caatinga biome.

STUDY AREA

Legenda

0 25 50 100 150 200 Km

SGR - SIRGAS 2000

- Caatinga
- Water
- Atlantic Forest
- ▲ Points collected

METHODOLOGY

From the organization of data will be creating a geographic database containing the information and specialized georeferenced from the study area, in which it will aim store coordinates and quantitative attributes, to serve this study and for other future surveys. In the data collection will take place the unification of cartographic databases to be able to generate an overlap of information layers in a Geographic Information System - GIS. Through the use of geoprocessing techniques will be generated maps that will support decision-making for a better understanding of the studied area.

EXPECTED RESULTS

With the carbon stock maps in soil and vegetation for the Caatinga biome in Pernambuco in different years and the results obtained from the modeling, you can better understand the biome and from this suggest adaptation strategies projected changes.

It is also expected to identify possible changes in those processes caused by climate change in the Caatinga biome for the state of Pernambuco. Specialized data to be obtained will serve as a source of knowledge and to contribute to the inventory of emissions and greenhouse gas removals in the Caatinga biome.

ACKNOWLEDGMENTS