

Implementação de Autômatos Celulares para Simulação do Processo de Expansão da Esquistossomose na Área Litorânea de Pernambuco

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IMPLEMENTAÇÕES DE AUTÔMATOS CELULARES

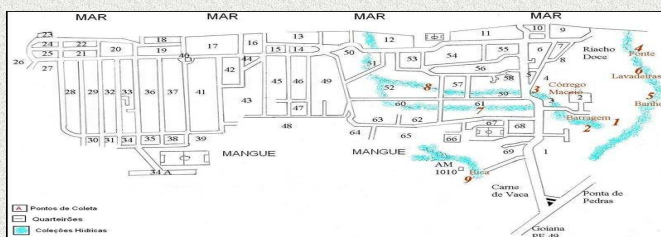
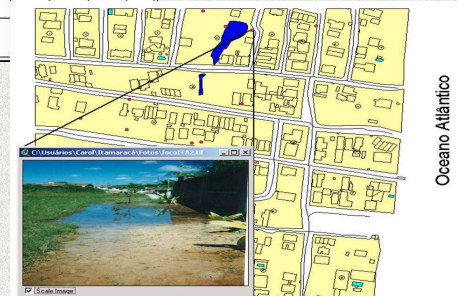
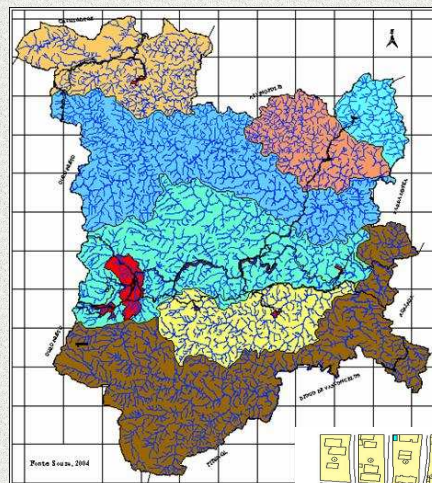
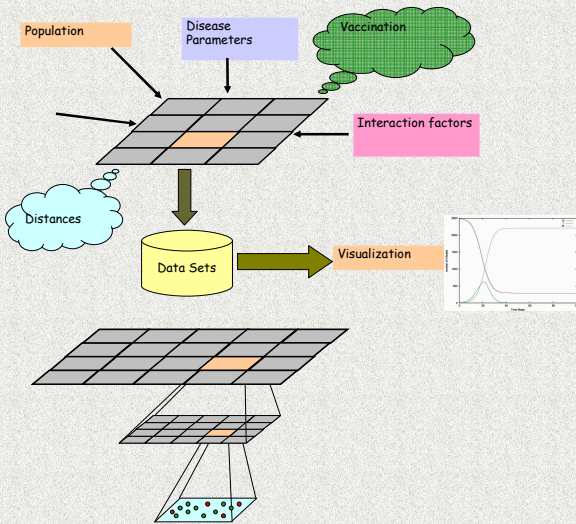
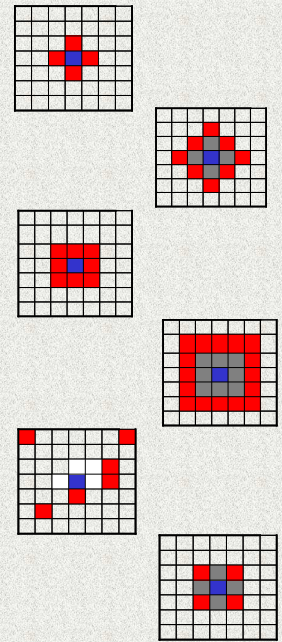
$Y_{c_{i,j}, c_{k,l}}$ represents an **interaction coefficient** that controls all possible interactions between a cell $C_{i,j}$ and its global neighborhood $G_{i,j}$.

A function of **inter-cell distance** and **cell population density**.

Definition of a Fuzzy Set
Neighborhood of cell $C_{i,j}$ is global SCA

$$G_{i,j} = \{ \{ C_{k,l}, Y_{c_{i,j}, c_{k,l}} \} \mid \text{for all } C_{k,l} \in C, 0 \leq Y_{c_{i,j}, c_{k,l}} \leq 1 \}$$

C is a set of all cells in the CA.



IMPLEMENTAÇÕES

Matlab
Mathematica

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Este projeto é parcialmente financiado pelo CNPq, Projeto Edital MCT/CNPq 02/2006 - Universal no. 477703/2006-2.

