Automation of the process of vectorization in areas of interest and buffer variable on satellite images

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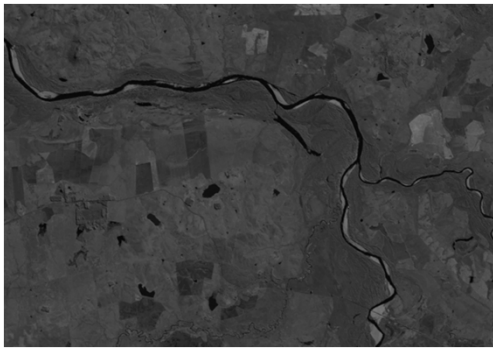Montevideo, Uruguay
2012

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Technological Innovation

Geographic Information System (GIS), of digital image processing.

Prototype (something still in stage of testing or development) of software developed as a proposed technological innovation in the field of GIS.

Automate procedures that, until now, has been performed by users of computer programs in GIS, more specifically related to the delimitation of areas of interest through vectorization.
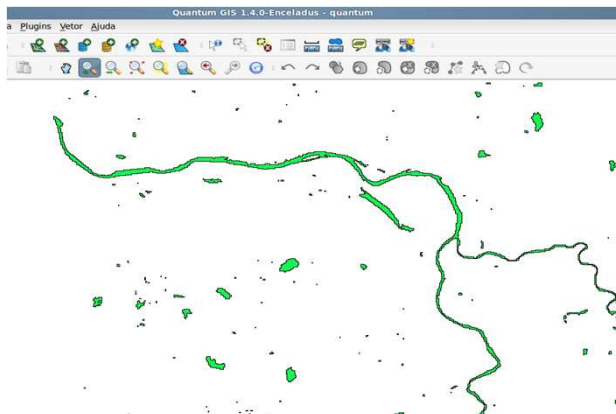
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Optimization of time and accuracy

Image used had dimensions of 617 pixels wide by 424 pixels high, totaling 261,608 pixels to be analyzed

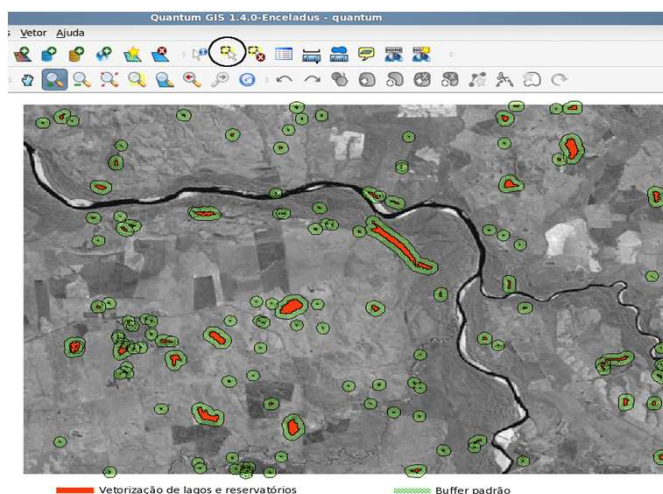Computer used: 2.0 Centrino processor CoreTM2 Duo, 3 GB RAM 667, and with 3 M cache.

- 9 seconds
- 131 polygons
- 7249 coordinates

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Creating a PPA delimitation

The buffer is used when one wants to create delimitation vector of distance, user editable, also on a vector data.

Vetorização de lagos e reservatórios   Buffer padrão

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Buffer Variable

- thirty (30) meters: watercourses up to ten (10) meters wide;

- fifty (50) meters: watercourses from ten (10) to fifty (50) meters wide;

- one hundred (100) meters: watercourses from fifty (50) to 200 (two hundred) meters wide;

- 200 (two hundred) meters: water courses from 200 (two hundred) to 600 (six hundred)

Vetorização do curso d'água
Buffer variável
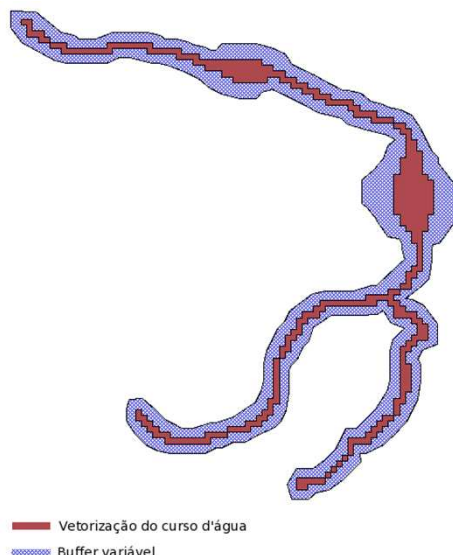
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Thanks!

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