

Geolmagin – uma plataforma Open Source para estudo de microestruturas geológicas

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Geolmagin

► SUMÁRIO

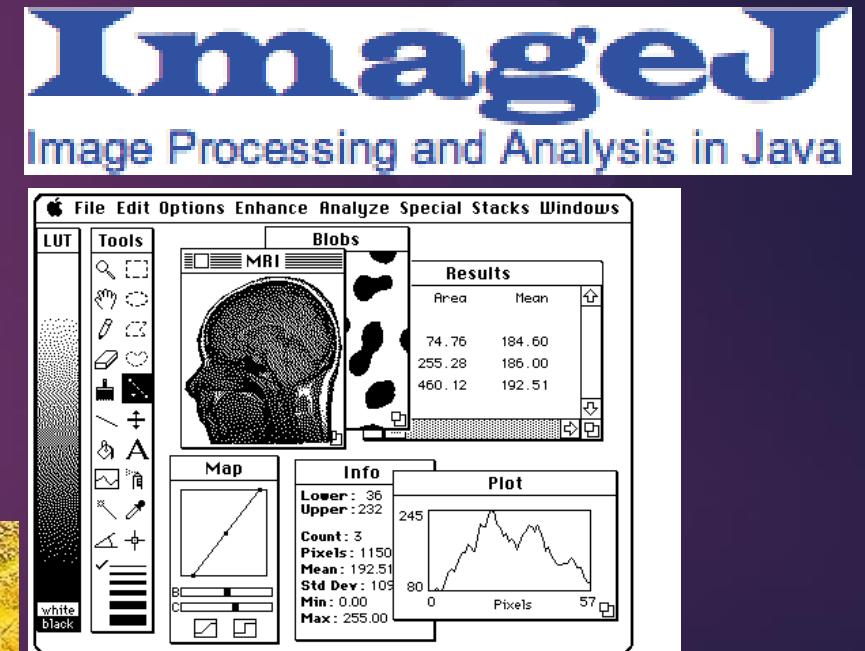
- ▶ História dos desenvolvimentos
- ▶ O que existe
- ▶ A importância de ter software livre
- ▶ Aquisição de imagens
- ▶ A plataforma de base
- ▶ O que foi desenvolvido
- ▶ O futuro

História

- ▶ Lespinasse, M., Pecher, A. (1986) – Microfracturing and regional stress field: a study of preferred orientations of fluid inclusion planes in a granite from the Massif Central, France. *Journal of Structural Geology* , 8, pp. 169-180.
- ▶ Nogueira, P. & Noronha, F., 1995. PLANIF: a computer program for the study of fluid inclusion planes. *Bol. Soc. Esp. de Mineralogia*, 18-1, pp.162-163

O que existe

- ▶ Planif (R.I.P.)
- ▶ imageJ
 - ▶ μManager
- ▶ NIG image
- ▶ Mirone



A importância do software livre

- ▶ Open source software is software that can be freely used, changed, and shared (in modified or unmodified form) by anyone. Open source software is made by many people, and distributed under [licenses](#) that comply with the [Open Source Definition](#).
- ▶ The Open Source Initiative (OSI) is a global non-profit that supports and promotes the open source movement. Among other things, we maintain the [Open Source Definition](#), and a [list of licenses](#) that comply with that definition. See our [about](#) and [history](#) pages for more.



Aquisição de imagens

- ▶ Open Computer Vision (OpenCV)



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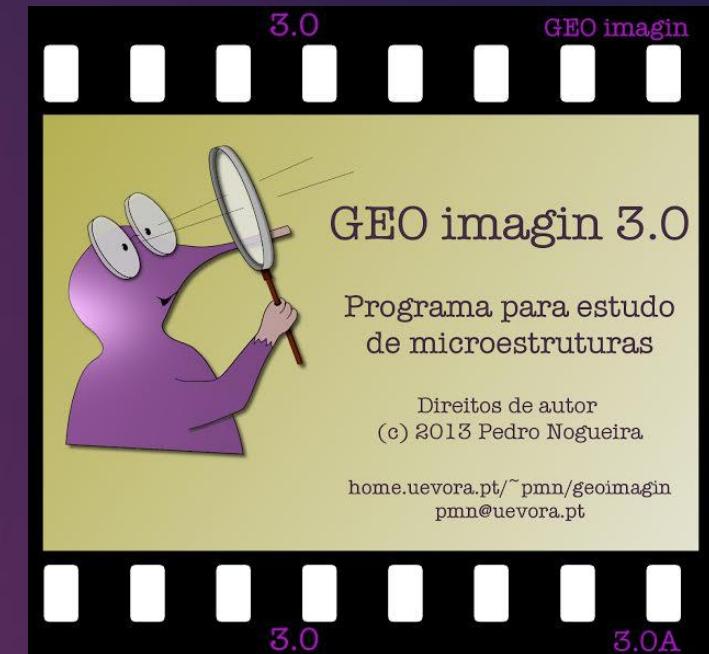
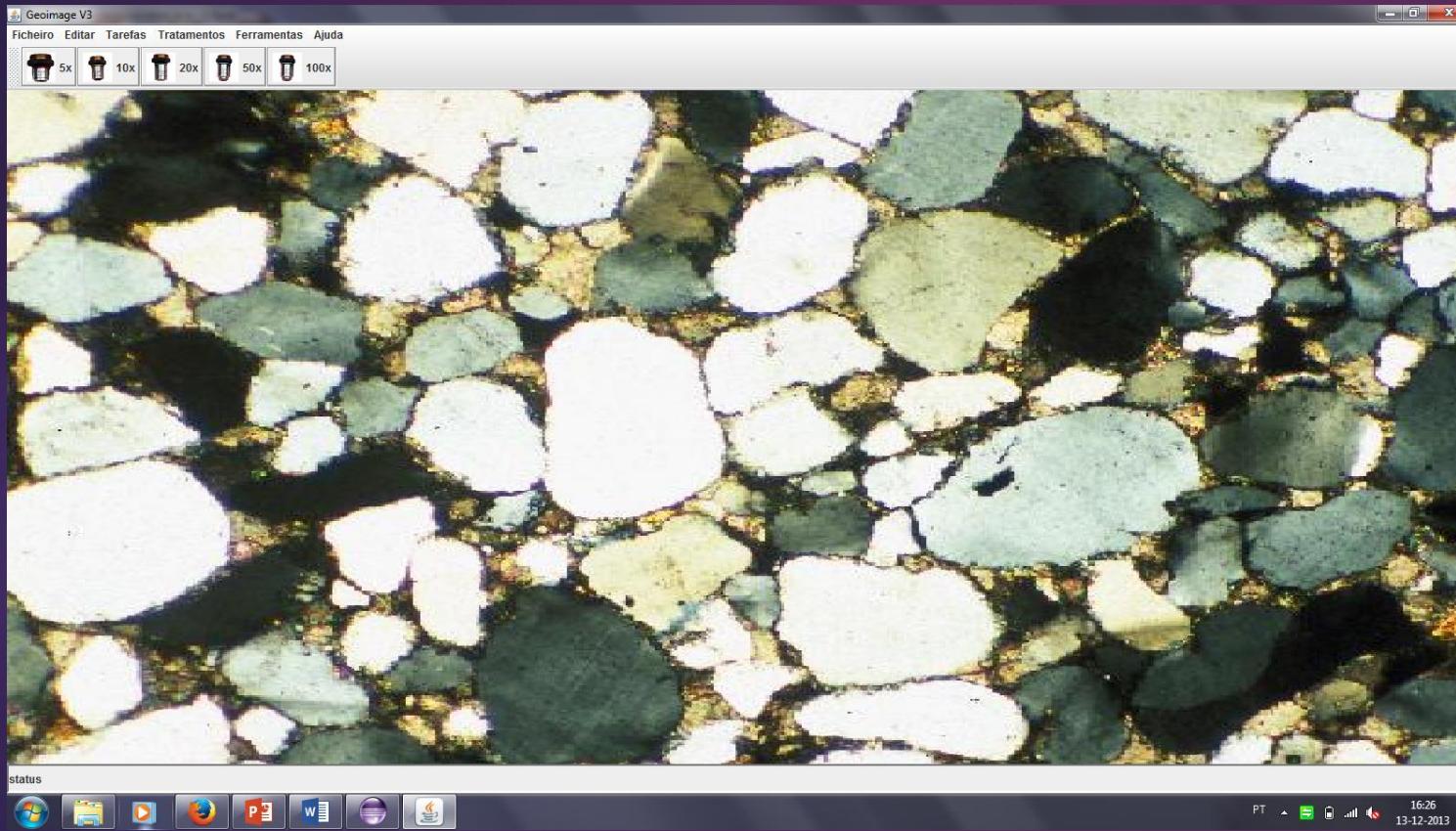
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A plataforma de base



A plataforma de base

A screenshot of the Geoimage V3 software interface. The main window displays a "IMAGEM LIVE" (Live Image) of a mineral sample with various light-colored, irregularly shaped grains against a darker background. Overlaid on the image are four orange rectangular callouts with white text: "MENU" with an arrow pointing to the toolbar at the top left; "INFORMAÇÕES" with an arrow pointing to the bottom left; "FERRAMENTAS" with an arrow pointing to the top right; and another "FERRAMENTAS" button located in the center-right area of the image. The top menu bar includes "Geoimage V3", "Ficheiro", "Editar", "Tarefas", "Tratamentos", "Ferramentas", and "Ajuda". The toolbar at the top left contains icons for 10x, 20x, 50x, and 100x magnification. The bottom status bar shows "status", system icons, and the date/time "13-12-2013 16:26".

Geoimage V3

Ficheiro Editar Tarefas Tratamentos Ferramentas Ajuda

10x 20x 50x 100x

MENU

INFORMAÇÕES

FERRAMENTAS

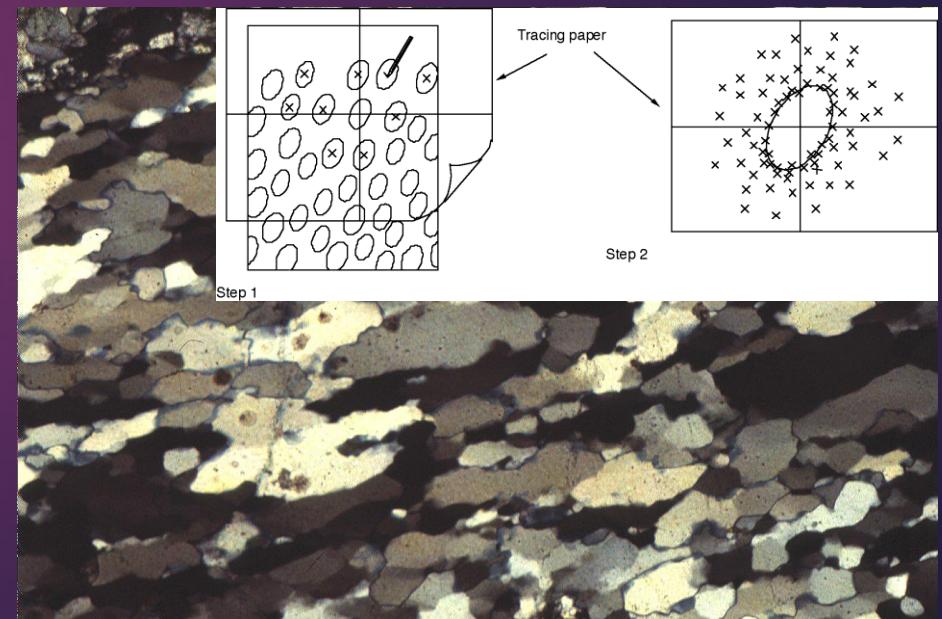
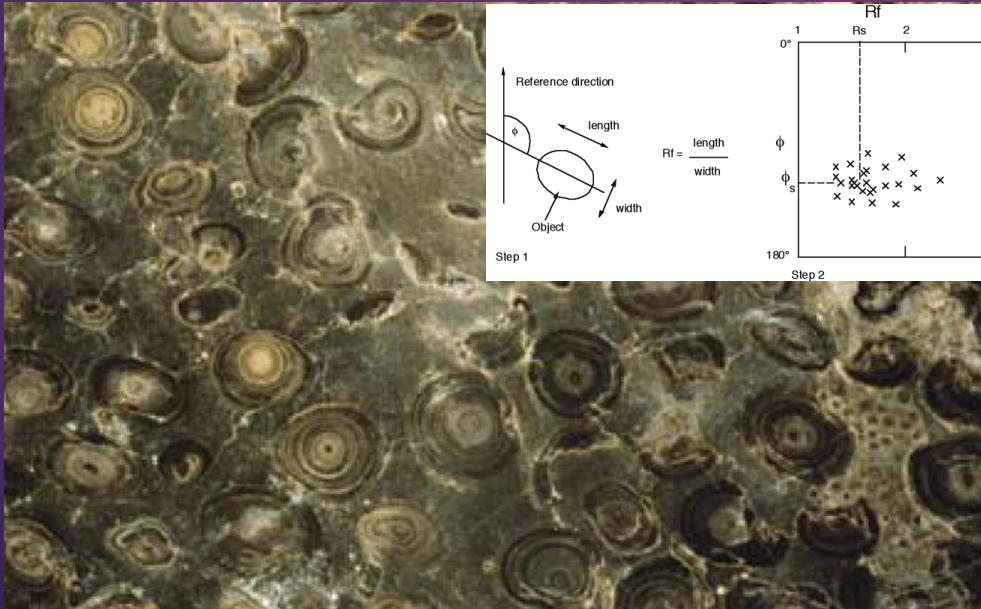
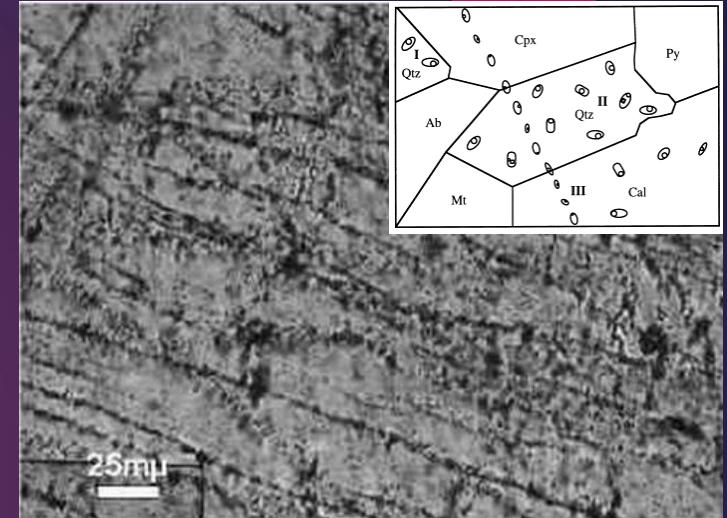
FERRAMENTAS

status

13-12-2013 16:26

O que foi desenvolvido

- ▶ Planos de Inclusões fluidas
- ▶ Fry
- ▶ Rf-phi



O futuro

- ▶ Fry normalizado
- ▶ Centro a centro
- ▶ Contagem de pontos
- ▶ Fracking

- ▶ Identificação de elementos (ex. inclusões fluidas, MOD, etc.)
- ▶ Medição de poder refletor
- ▶ “Fission track”
- ▶ etc

