

Elmer/Ice, a software for Ice Sheet Modelling: tools for development, implementation and visualisation

Laure Tavard, Fabien Gillet-Chaulet, Olivier Gagliardini & LGGE Elmer/Ice Development's Team*

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CONTEXT

Elmer/Ice is an open source software for glaciers and ice sheet flow modelling. It is based on the finite element model Elmer mainly developed by CSC-IT Center for Sciences Ltd. in Finland.

Collaborative developments and specific applications of the code are concomitant. This requires the use of efficient tools to track any change of the model.

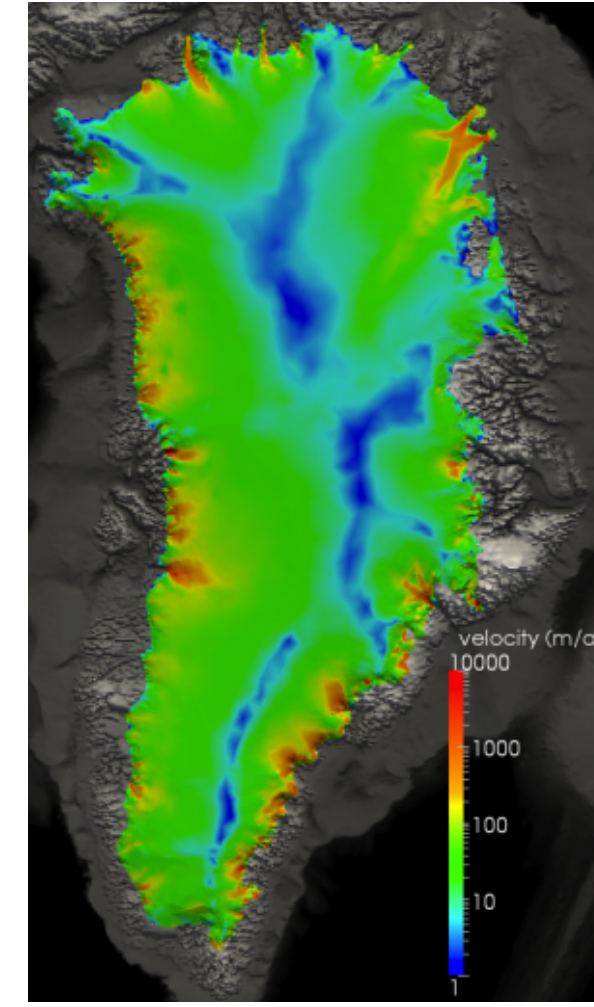
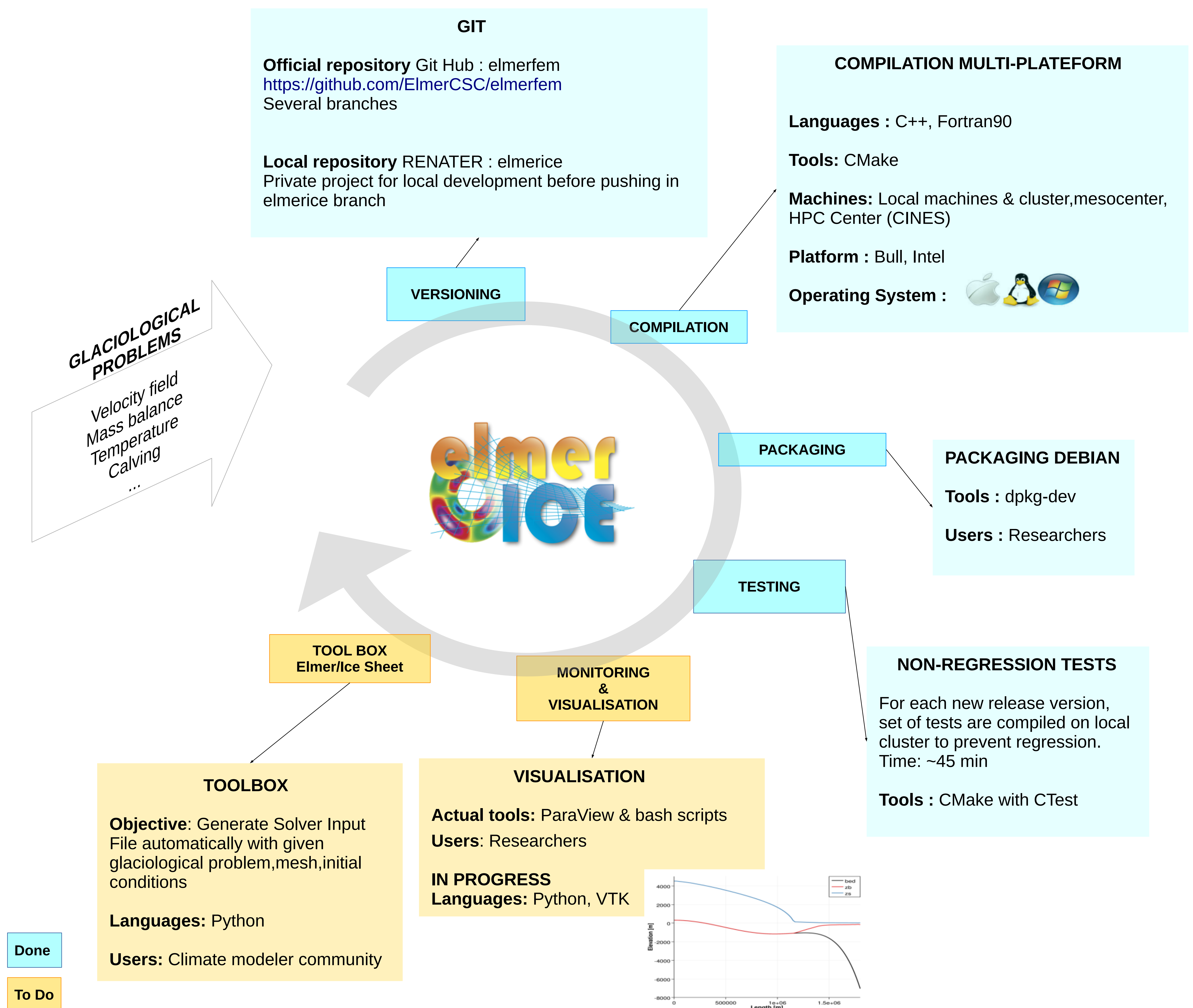


Figure 1: Surface velocity of Greenland computed with Elmer/Ice.
Gillet-Chaulet et al., 2012

EVOLUTION OF THE SOFTWARE ELMER/ICE



* Gael Durand, Vincent Peyaud, Michel Sacchetti & Antoine Roux



Laboratoire de Glaciologie et Géophysique de l'Environnement



OBJECTIVES

Outlines for futures developments are :

MONITORING

Analyse the outputs of the simulations in real time and give some informations on technical elements (time step, ...)

Languages: Python, ParaView & VTK

TOOLBOX

Contribute to the coupled ice-sheet/ocean models, a toolbox is being developed to automatically generate input files and meshes for standard problems.

Languages: Python

Contact: Laure.Tavard@lgge.obs.ujf-grenoble.fr