

First Elmer/Ice users meeting
9 April 2013 – Vienna (EGU 2013)



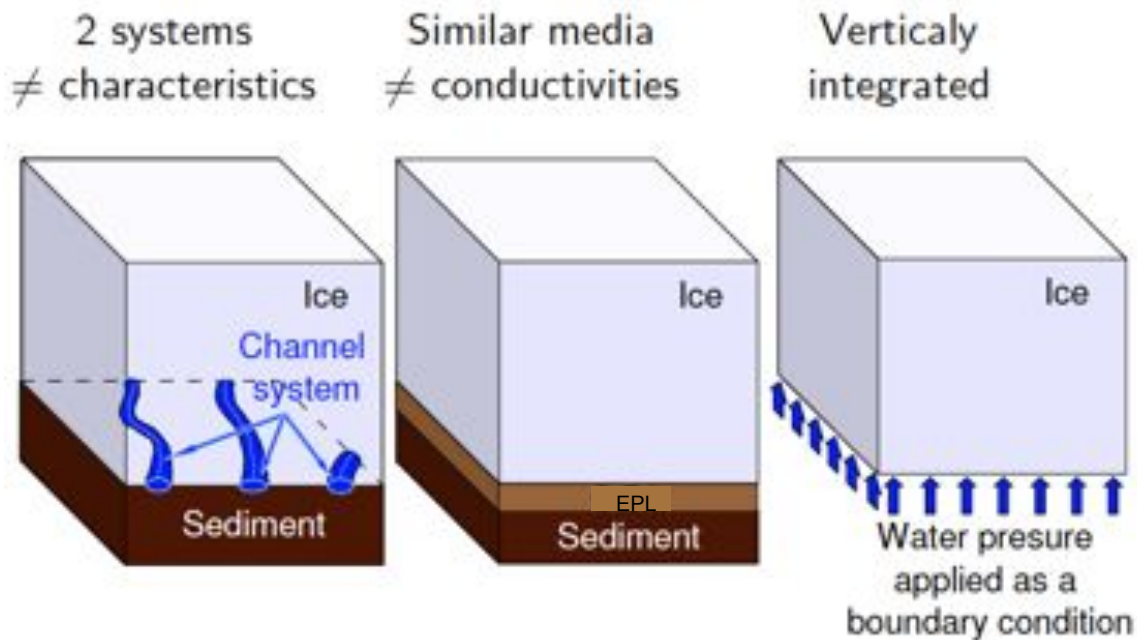
Hydrology models under Developments in Elmer/Ice

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Mauro Werder (SFU)

Olivier Gagliardini (LGGE)

Double continuum model

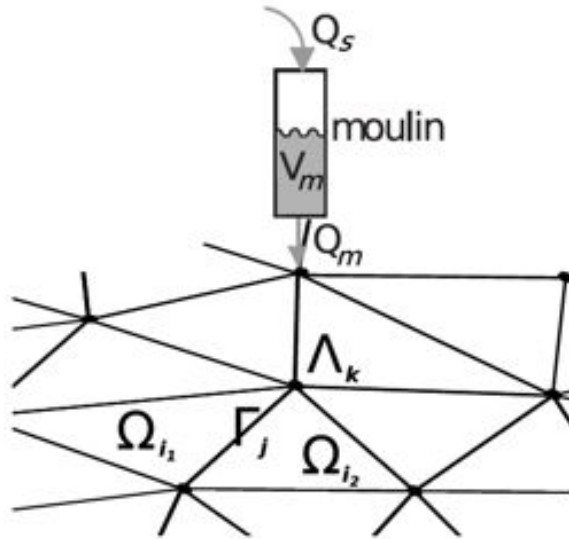


Based on Darcy equation for both in the Inefficient Drainage System (IDS) and the Equivalent Porous Layer (EPL)

A paper should be submitted in TC soon with an application to Arolla glacier.

Contacts : Basile de Fleurian, Olivier Gagliardini

Glacier Drainage System model (GlaDS)



Based on the empirical Darcy-Weisbach law (turbulent flow) for both the water sheet and the channels. Channels stands on the edge of the surface elements.

GlaDS model published in Werder et al., submitted JGR (matlab code)

Implementation in Elmer/Ice in progress

Contacts : Mauro Werder, Olivier Gagliardini