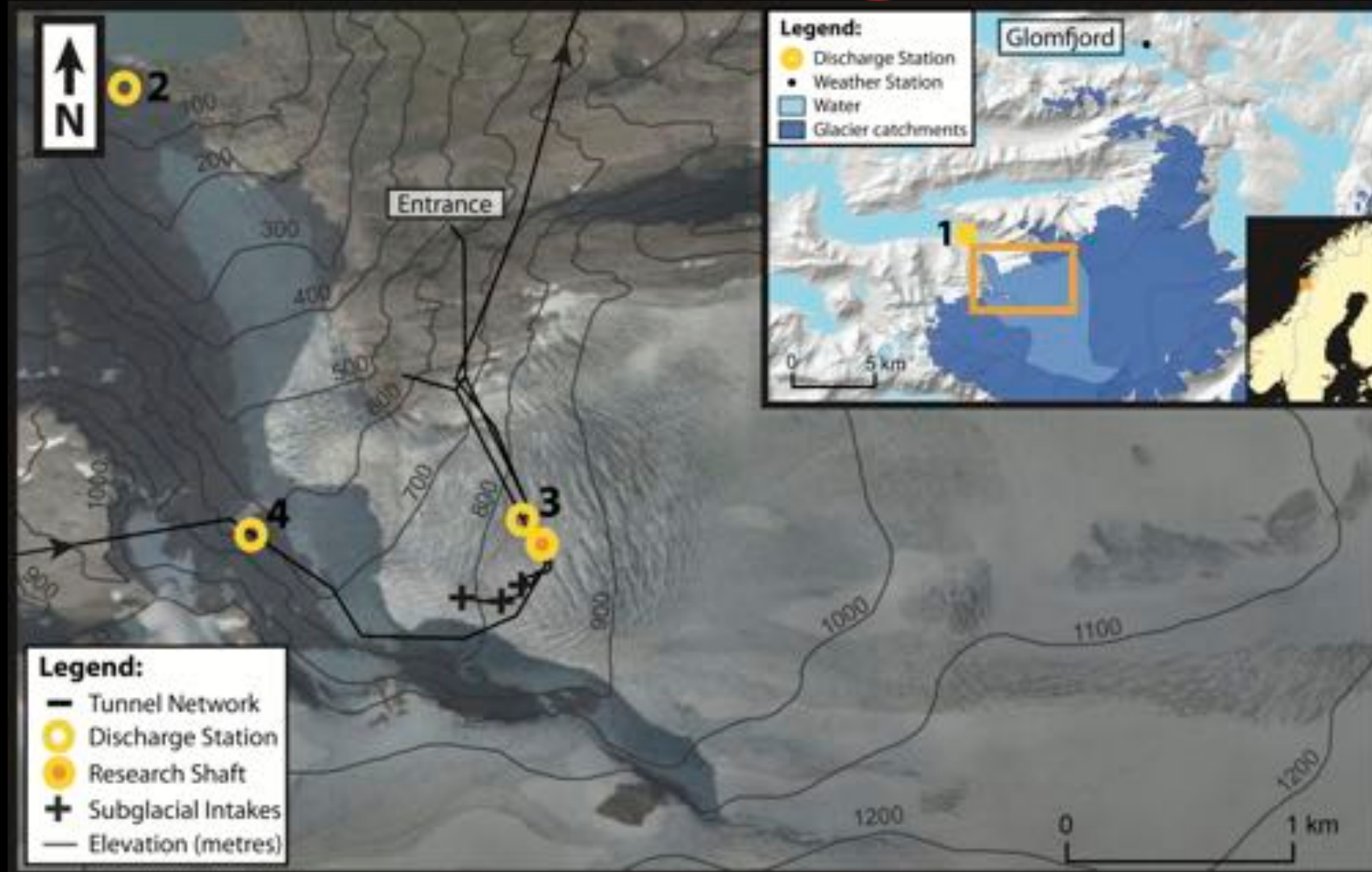


Subglacial | Processes Hydrology

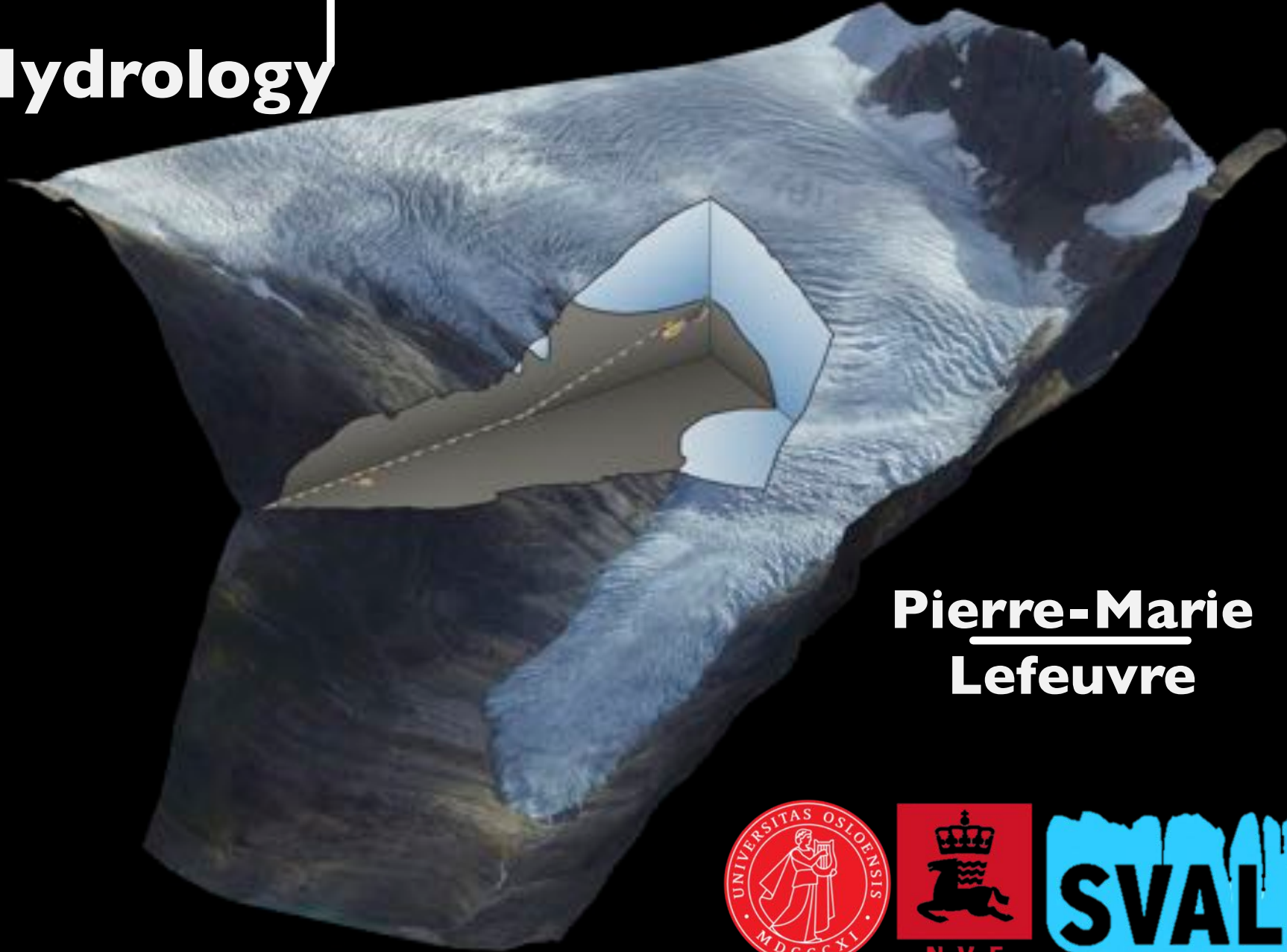


Pierre-Marie Lefeuvre

Miriam Jackson, Jon Ove Hagen, Gaute Lappégard -- Thomas Zwinger

Subglacial Processes

Hydrology



Pierre-Marie
Lefeuvre

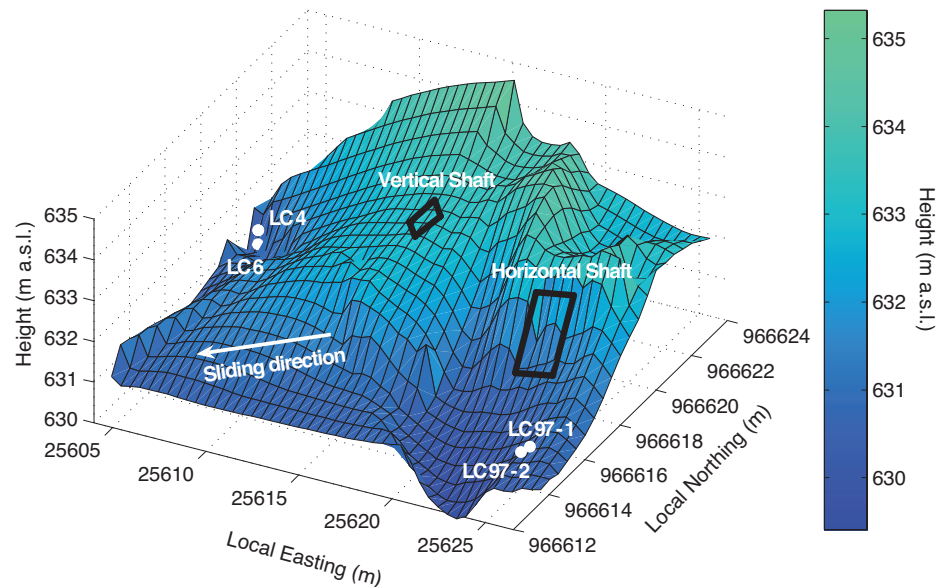




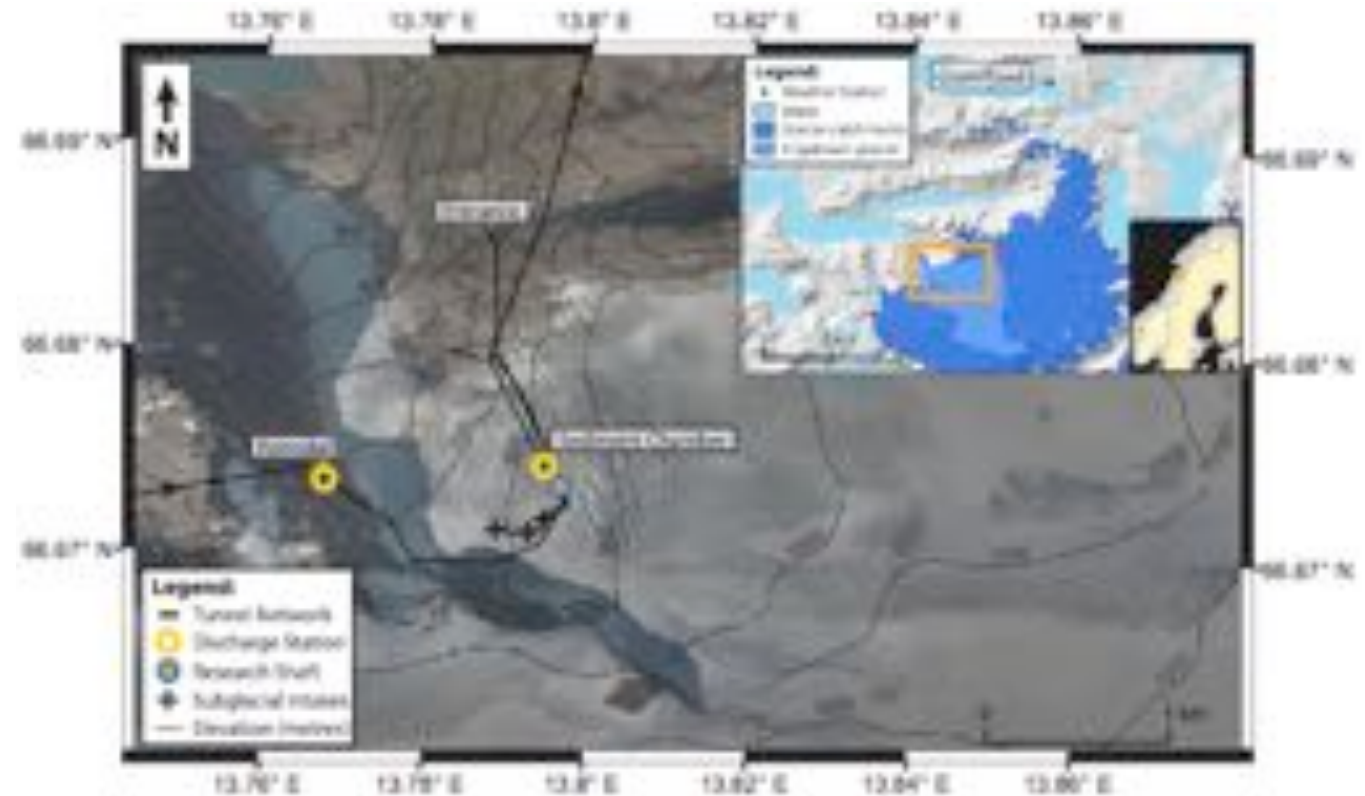
Stress Redistribution Explains Anti-correlated Subglacial Pressure Variations

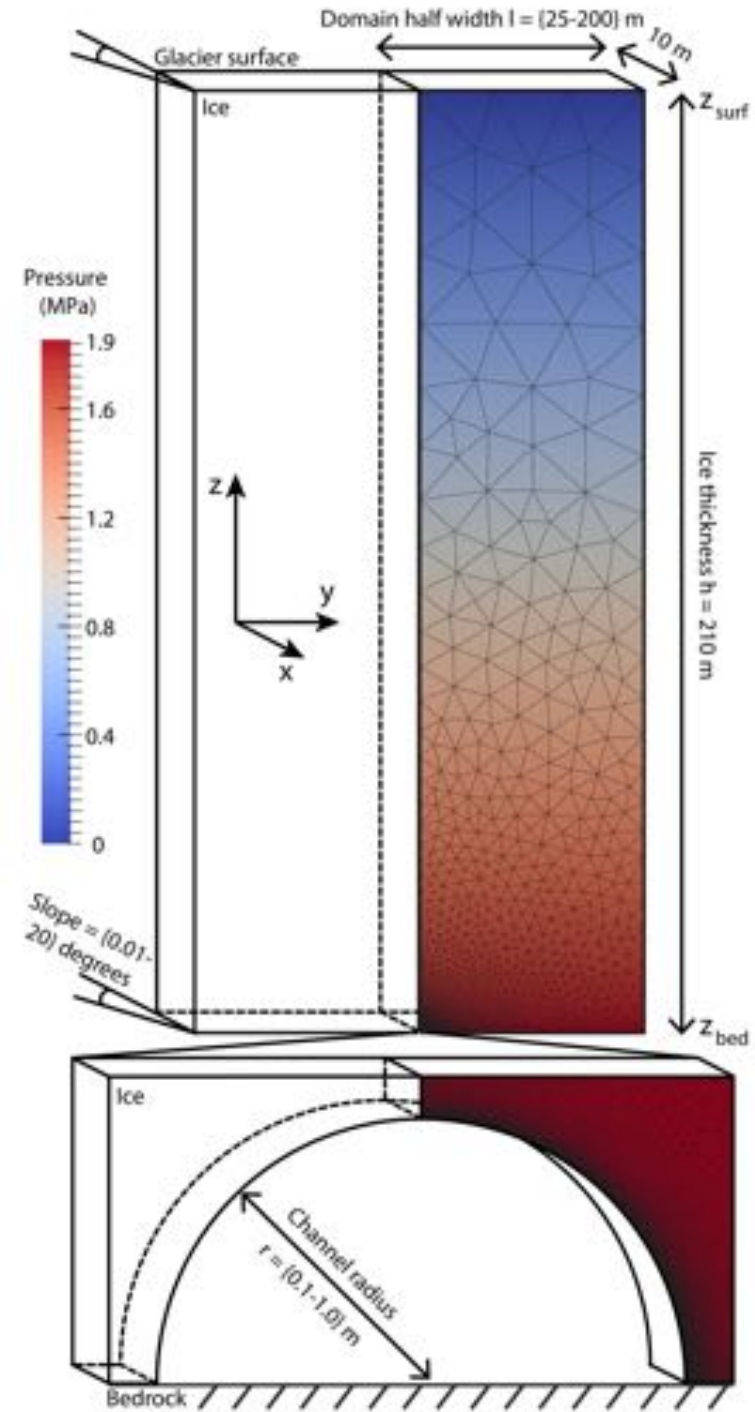
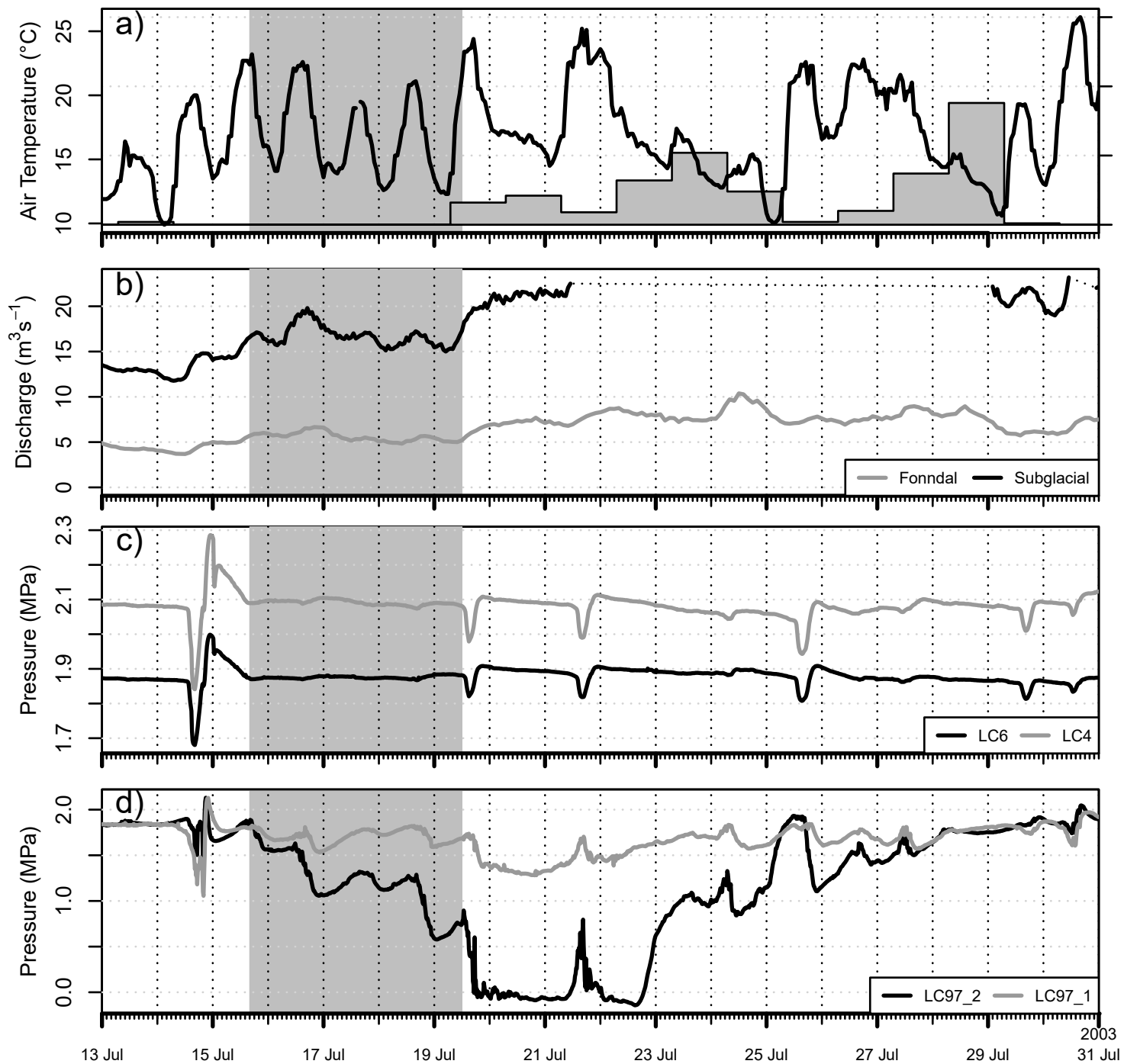
Pierre-Marie Lefeuvre^{1,2*}, Thomas Zwinger³, Miriam Jackson², Olivier Gagliardini⁴, Gaute Lappégard⁵ and Jon Ove Hagen¹

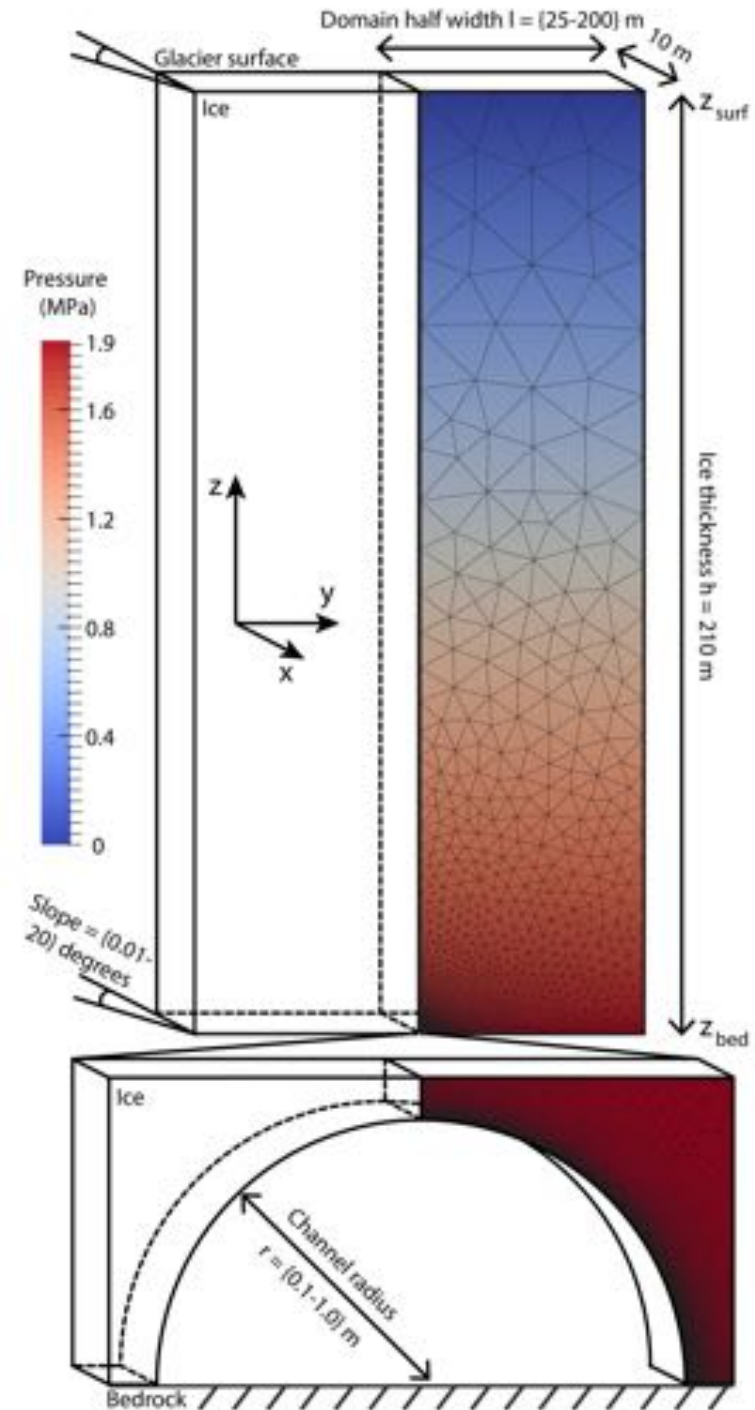
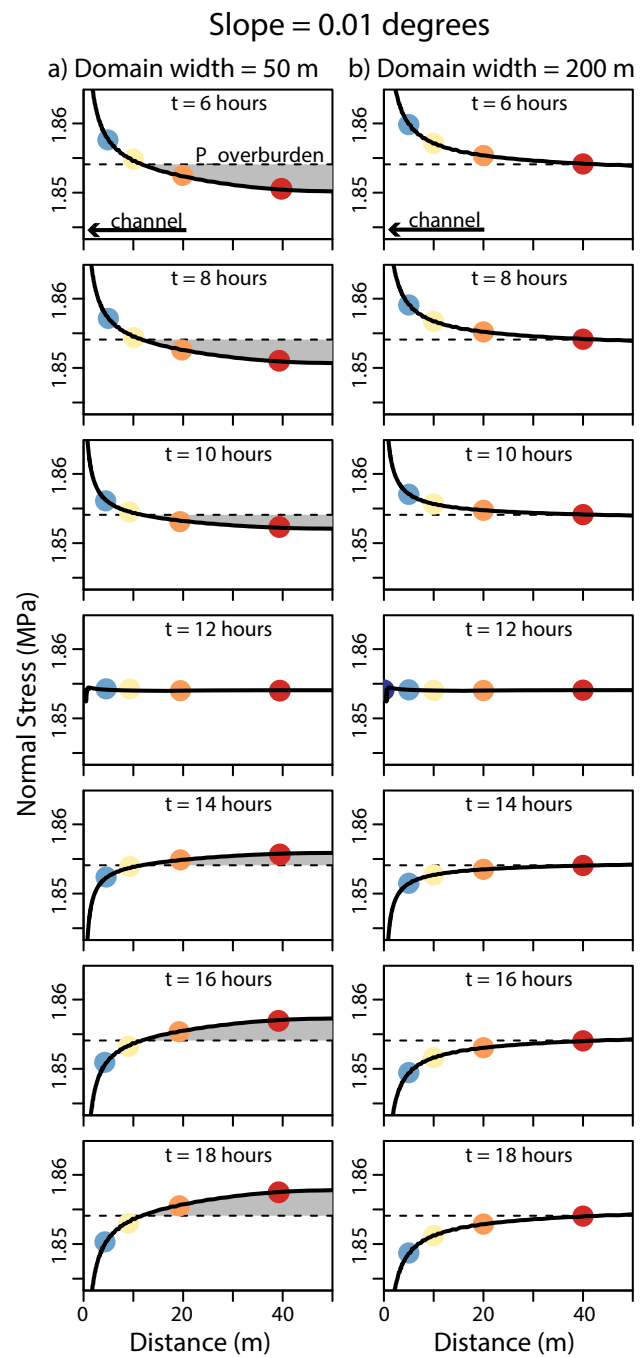
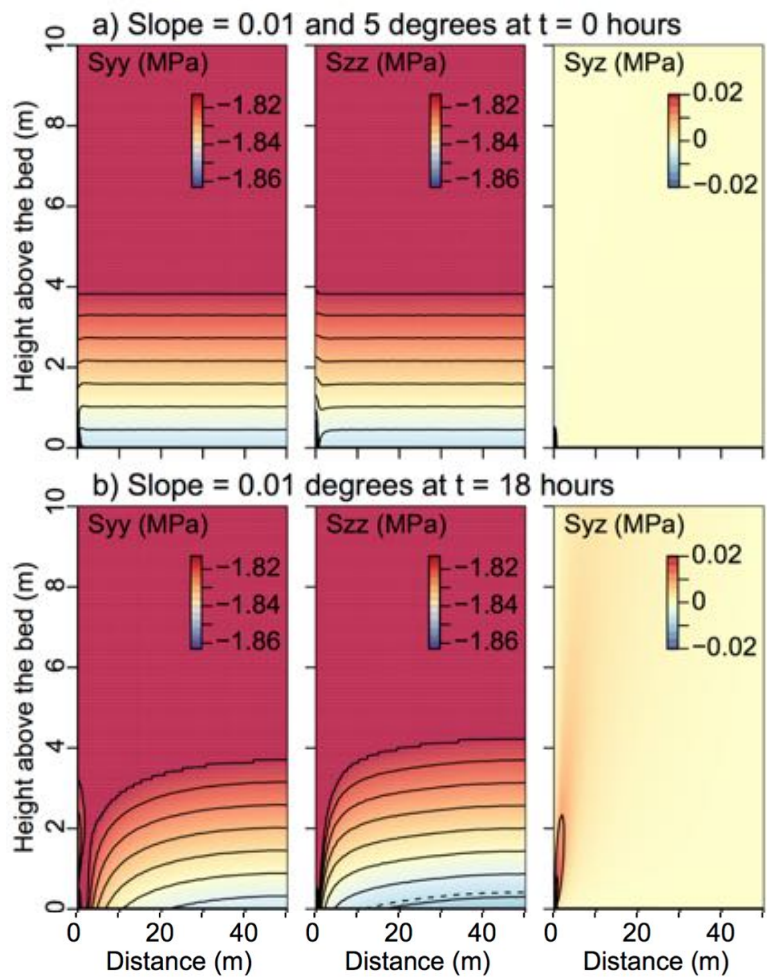
¹ Department of Geosciences, University of Oslo, Oslo, Norway, ² Hydrology Department, Norwegian Water Resources and Energy Directorate, Oslo, Norway, ³ CSC-IT Center for Science Ltd., Espoo, Finland, ⁴ University of Grenoble Alpes, Centre National de la Recherche Scientifique, IRD, IGE, Grenoble, France, ⁵ Energy Management, Statkraft A.S., Oslo, Norway

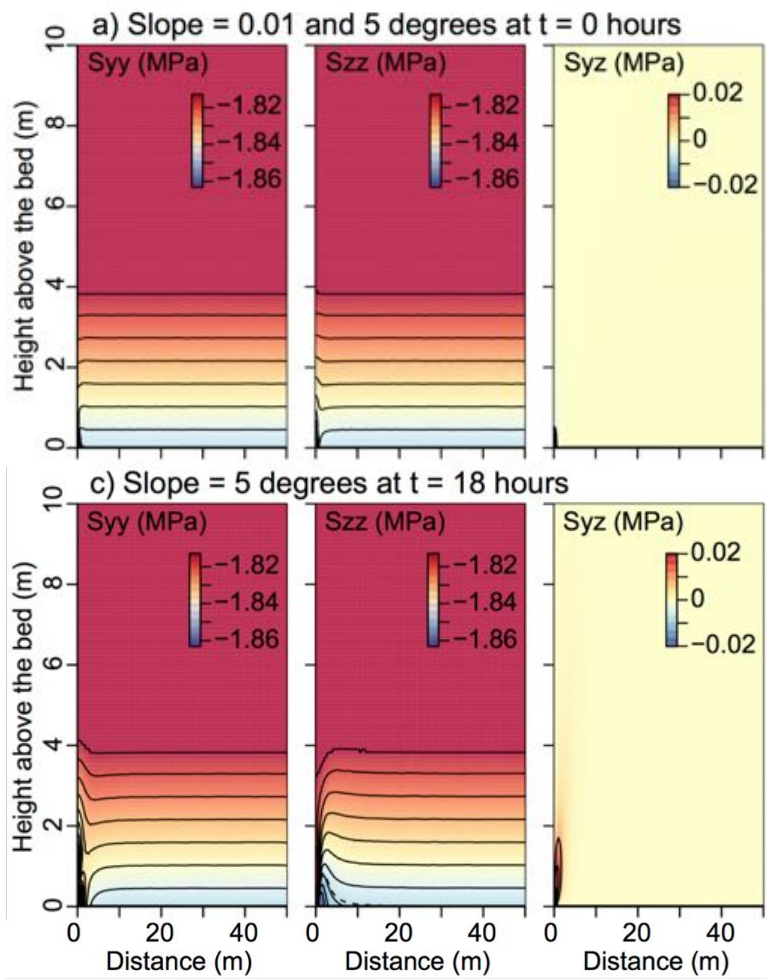


We use ElmerIce to interpret anti-correlated pressure variations at the base of a glacier to demonstrate the importance of stress redistribution in basal ice.









Slope = 5 degrees

