

Supplement of The Cryosphere, 13, 177–195, 2019  
<https://doi.org/10.5194/tc-13-177-2019-supplement>  
© Author(s) 2019. This work is distributed under  
the Creative Commons Attribution 4.0 License.



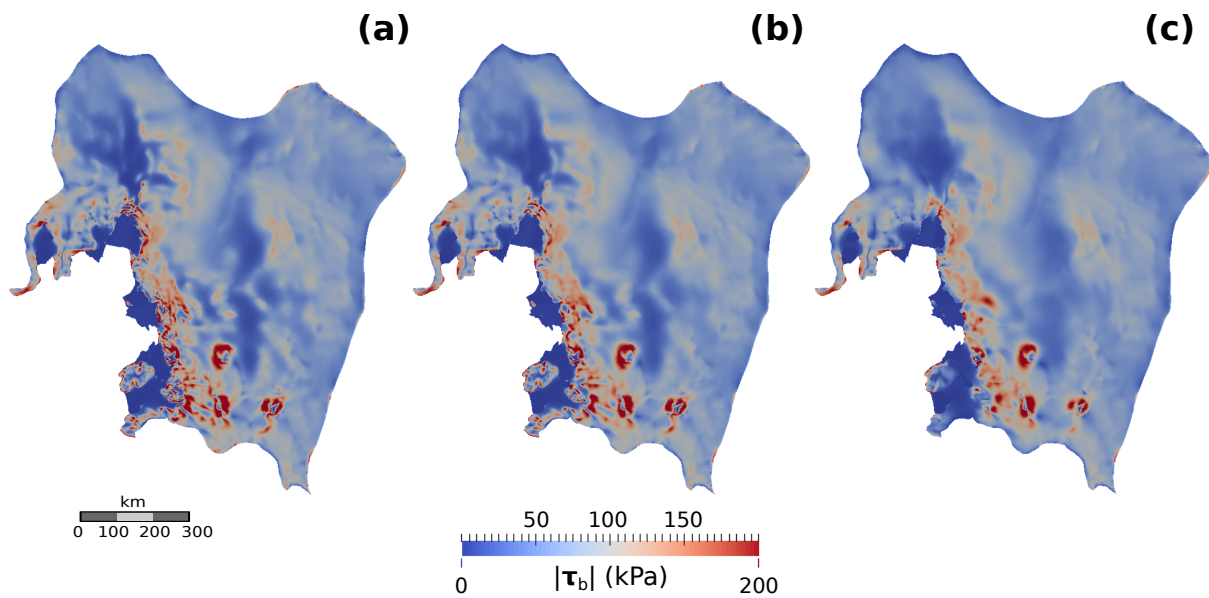
*Supplement of*

## **Sensitivity of centennial mass loss projections of the Amundsen basin to the friction law**

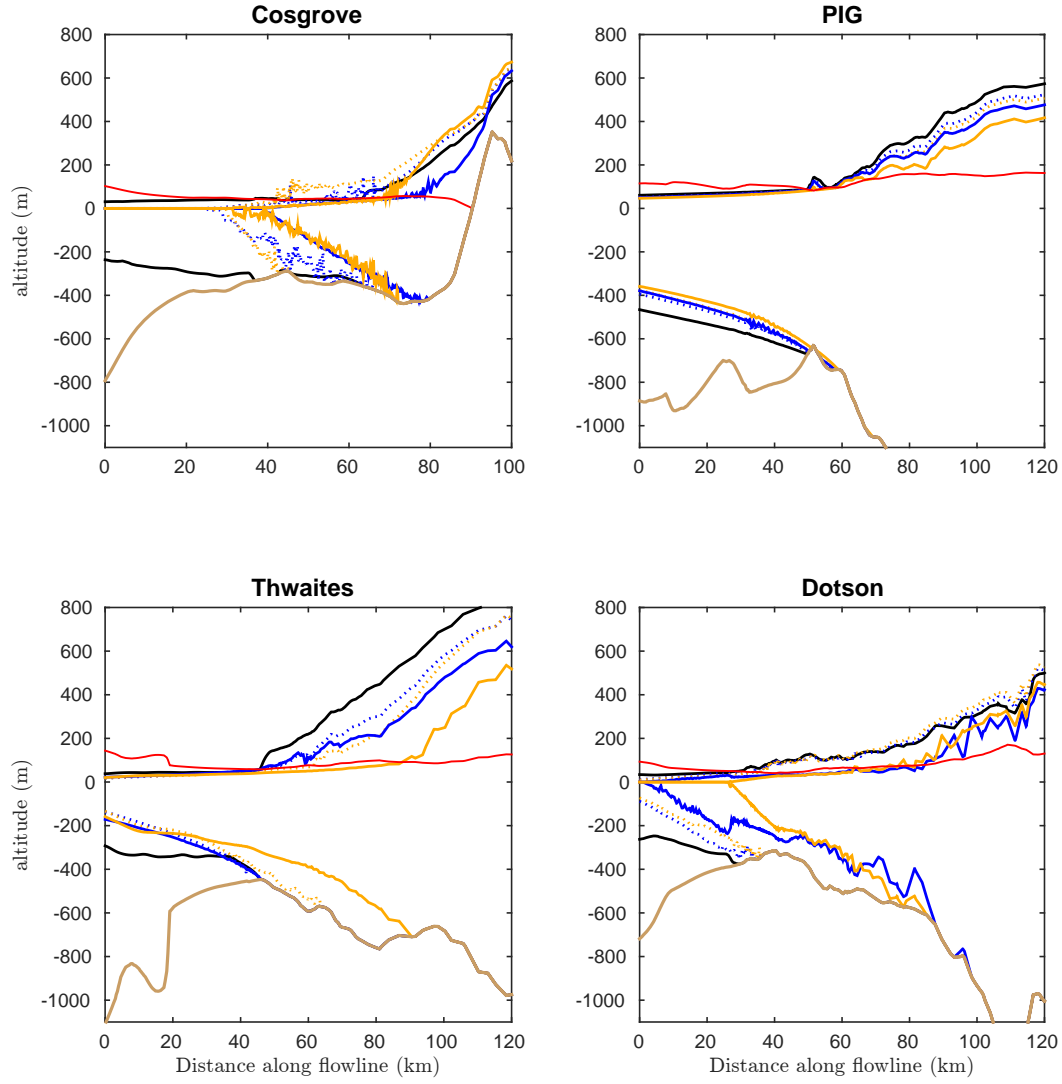
**Julien Brondex et al.**

*Correspondence to:* Julien Brondex ([julien.brondex@gadz.org](mailto:julien.brondex@gadz.org))

The copyright of individual parts of the supplement might differ from the CC BY 4.0 License.



**Figure S1.** Norm of the basal shear stress field  $\tau_b$  after inversion for the inferred states (a)  $I_{R_{\gamma, \infty}}$ , (b)  $I_{R_{\gamma, 100}}$  and (c)  $I_{R_{\gamma, 1}}$ .



**Figure S2.** Ice-sheet profiles obtained for the inferred state  $I_{R_{\gamma,100}}$  at  $t = 0$  a (black solid line),  $t = 55$  a (colored dotted line) and  $t = 105$  a (colored solid line) of EXP\_ABMB with the linear Budd law (orange) and the non-linear Budd law (blue), along the flowlines reported in Fig. 8. The solid light brown line is the bed elevation. The red solid line is the flotation altitude  $z_f$ , given by  $z_f = (1 - \rho_w / \rho_i)b$ .