

For each friction law

Model  
initialisation

Rheology inversion  
(floating ice only)

Basal friction  
inversion

Rheology inversion  
(whole domain)

Model  
relaxation

2-year relaxation

500-year spin-up

5-year perturbation-free

25-year perturbation

70-year evolution

Control

Observations

Basal melt

Calving

Linear

Major

Hybrid

• *Ctrl*

• *C<sub>obs</sub>*  
• *M<sub>Paolo</sub>*  
• *M<sub>Davison</sub>*

• *M<sub>10</sub>*  
• *M<sub>20</sub>*  
• *M<sub>30</sub>*  
• *M<sub>40</sub>*  
• *M<sub>50</sub>*  
• *M<sub>60</sub>*  
• *M<sub>70</sub>*  
• *M<sub>80</sub>*  
• *M<sub>90</sub>*  
• *M<sub>100</sub>*

• *Cl<sub>10</sub>*  
• *Cl<sub>20</sub>*  
• *Cl<sub>30</sub>*  
• *Cl<sub>40</sub>*  
• *Cl<sub>50</sub>*  
• *Cl<sub>60</sub>*  
• *Cl<sub>70</sub>*  
• *Cl<sub>80</sub>*  
• *Cl<sub>90</sub>*  
• *Cl<sub>100</sub>*

• *Cm<sub>10</sub>*  
• *Cm<sub>20</sub>*  
• *Cm<sub>30</sub>*  
• *Cm<sub>40</sub>*  
• *Cm<sub>50</sub>*  
• *Cm<sub>60</sub>*  
• *Cm<sub>70</sub>*  
• *Cm<sub>80</sub>*  
• *Cm<sub>90</sub>*  
• *Cm<sub>100</sub>*

● Initial model fields

● Ice geometry & velocities updated

● Ice geometry & velocities updated. Initial conditions for perturbation experiments

◆ Perturbation experiments