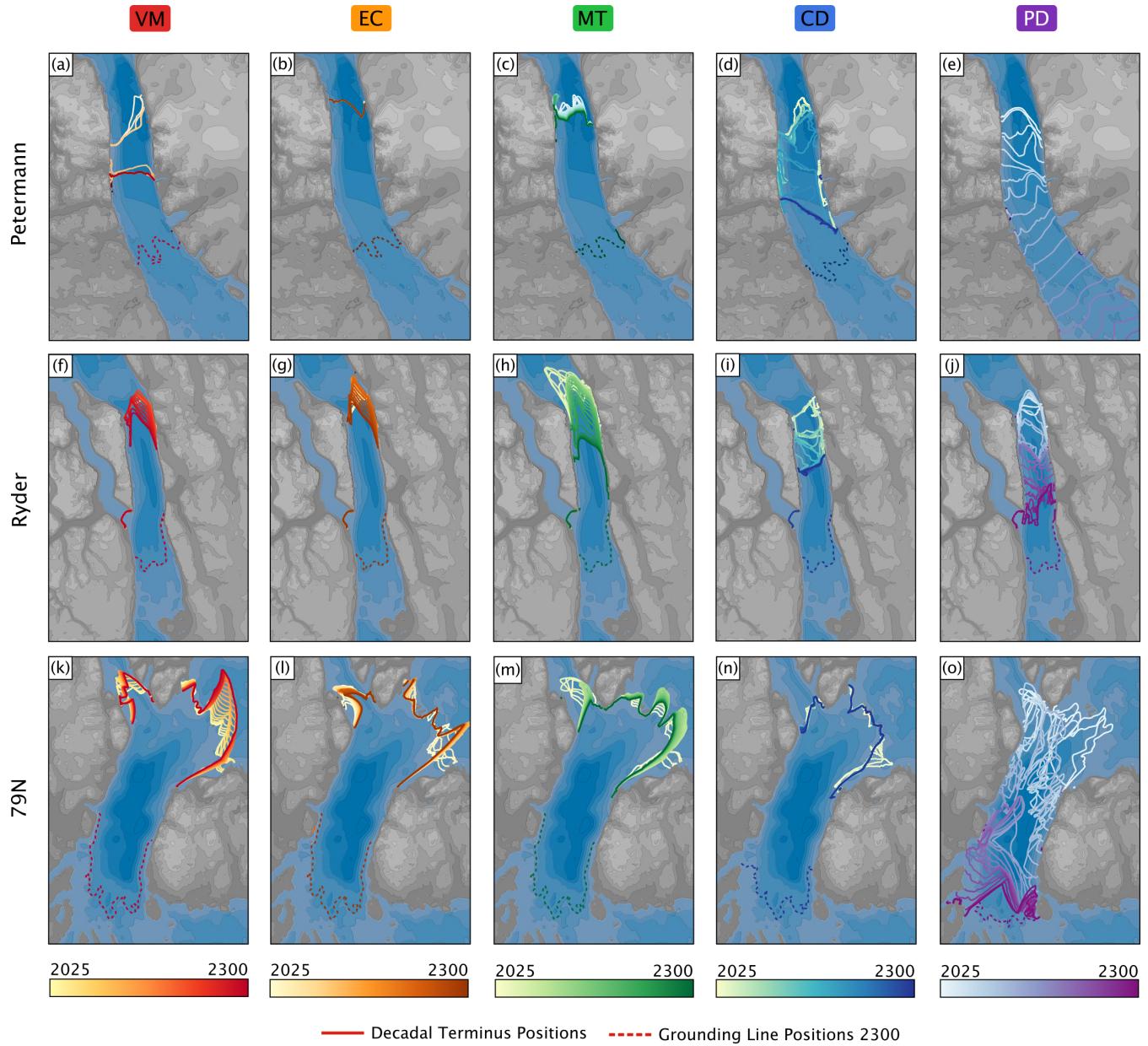
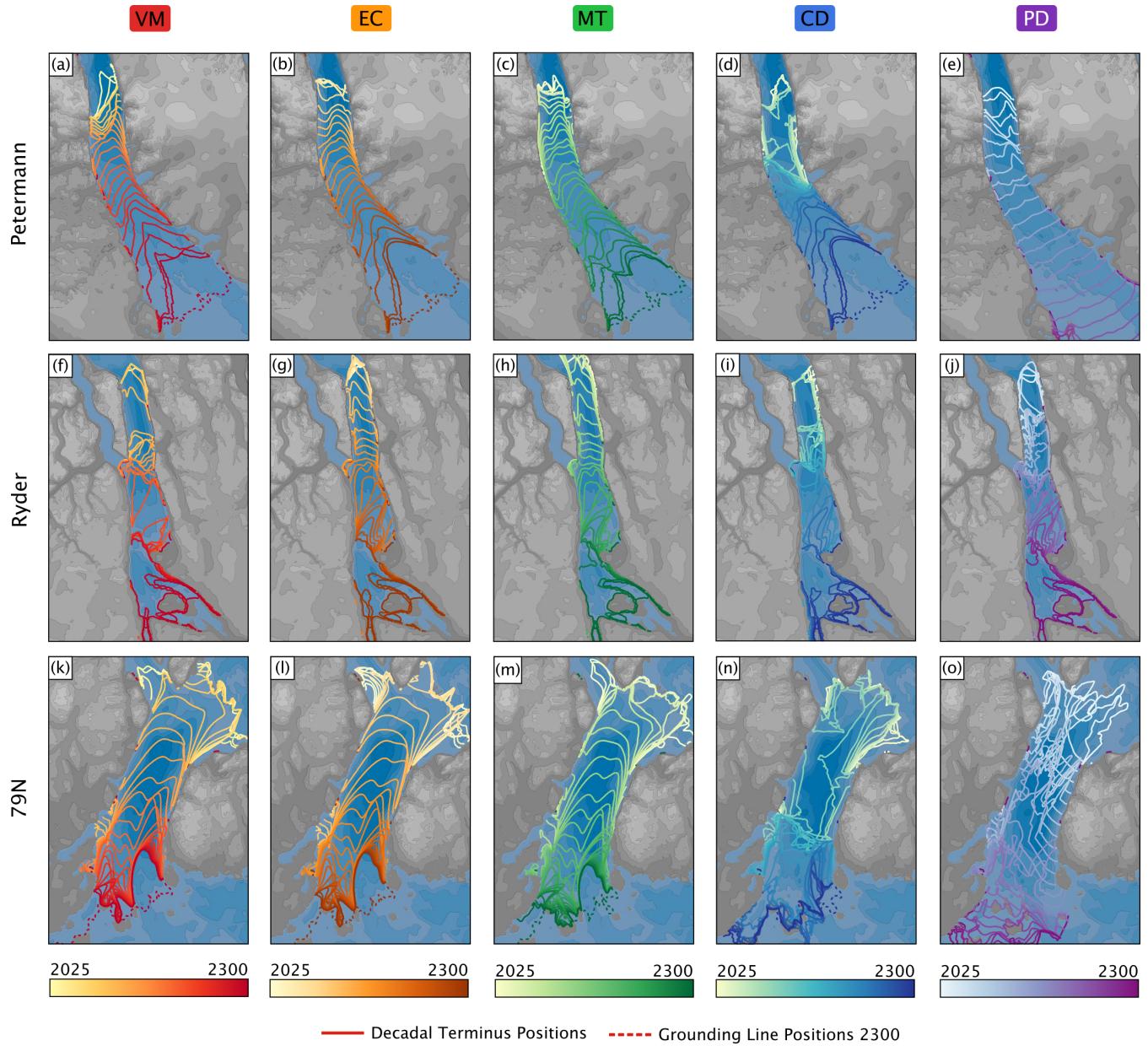


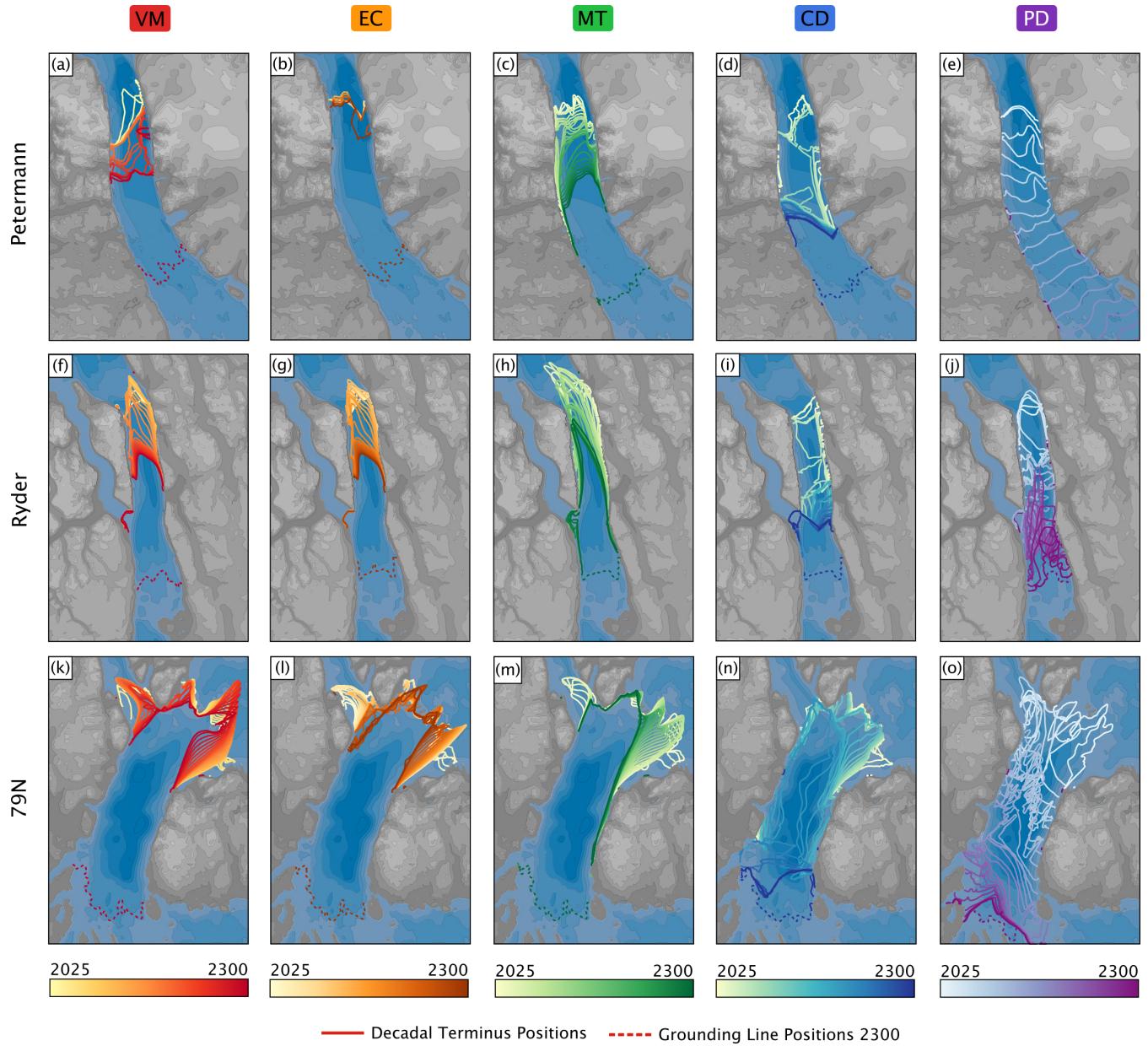
**Figure S1.** Ice shelf location misfits for all values of  $\dot{M}_{max}$  and  $R_c$  tested for the PD at (a) Petermann, (b) Ryder and (c) 79N.



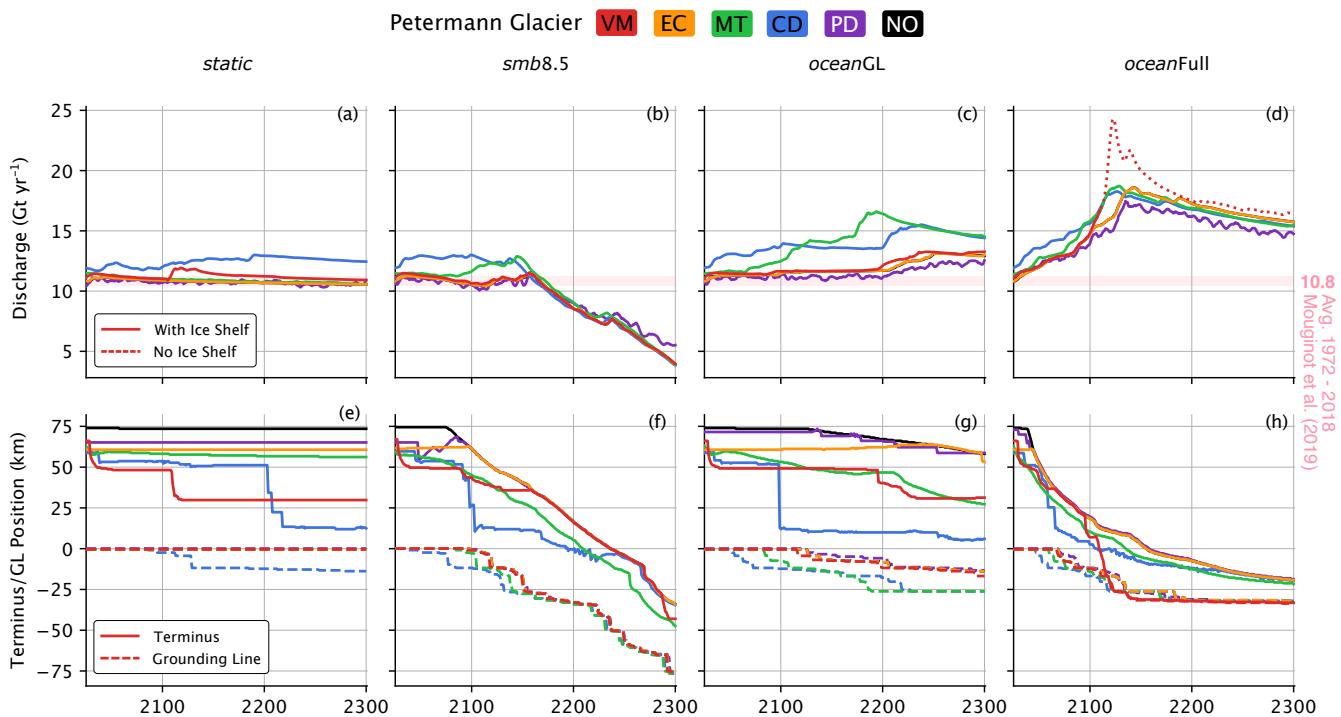
**Figure S2.** Evolution of the three remaining Greenlandic floating ice shelves from 2025 to 2300 under the *control* scenario using the five different calving laws. Terminus positions at the end of every 10 years, and including 2300, are shown with solid lines while the grounding line position in 2300 is shown with a dashed line.



**Figure S3.** Evolution of the three remaining Greenlandic floating ice shelves from 2025 to 2300 under the *smb8.5* scenario using the five different calving laws. Terminus positions at the end of every 10 years, and including 2300, are shown with solid lines while the grounding line position in 2300 is shown with a dashed line.



**Figure S4.** Evolution of the three remaining Greenlandic floating ice shelves from 2025 to 2300 under the *oceanGL* scenario using the five different calving laws. Terminus positions at the end of every 10 years, and including 2300, are shown with solid lines while the grounding line position in 2300 is shown with a dashed line.



**Figure S5.** Same plot as Fig. 7, but the PD law has calibration values of  $r_c = 1$  and  $\dot{M}_{max} = 2$  km/yr, inline with values used at Ryder and 79N glaciers.