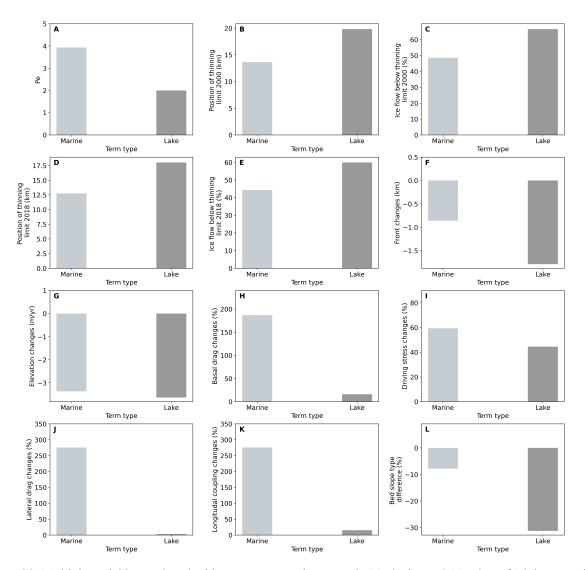
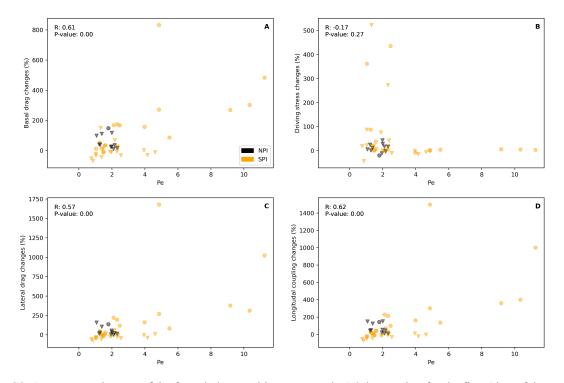


Figure S1. Position of the 2018 thinning limit in PI glaciers. A) NPI. B) SPI. C) Continuation of SPI.

Limit no found



**Figure S2.** Multiple variables analyzed with respect to terminus type in PI glaciers. A) Number of Péclet according to terminus type. B) Position of the thinning limit in 2000 according to terminus type. C) Ice flow under the thinning limit of 2000 according to terminus type. D) The position of the thinning limit in 2018 is according to the terminus type. E) Ice flow under the thinning limit 2018 according to terminus type. F) Front changes by terminus type. G) Elevation changes according to terminus type. H) Basal stress changes according to terminus type. J) Changes of lateral drag according to terminus type. K) Changes of longitudinal coupling according to terminus type. L) The difference in bed slope type according to terminus type.



**Figure S3.** Percentage changes of the force balance with respect to the Péclet number for the first 5 km of the terminus in PI glaciers from 2000 to 2018. Marine-terminating glaciers are represented as a circle, and lake-terminating glaciers as an inverted triangle. A) Percentage changes of basal drag with respect to Péclet number. B) Percentage changes of driving stress with respect to Péclet number. C) Percentage changes of lateral drag with respect to Péclet number. D) Percentage changes of longitudinal coupling with respect to Péclet number.

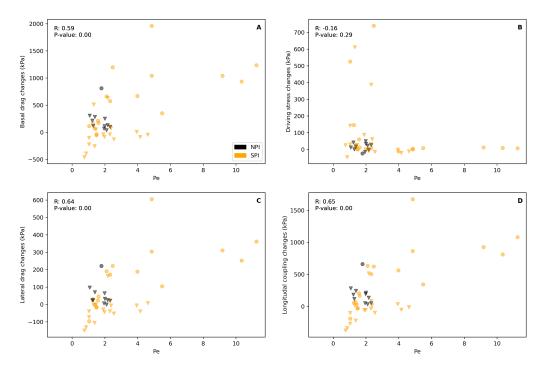
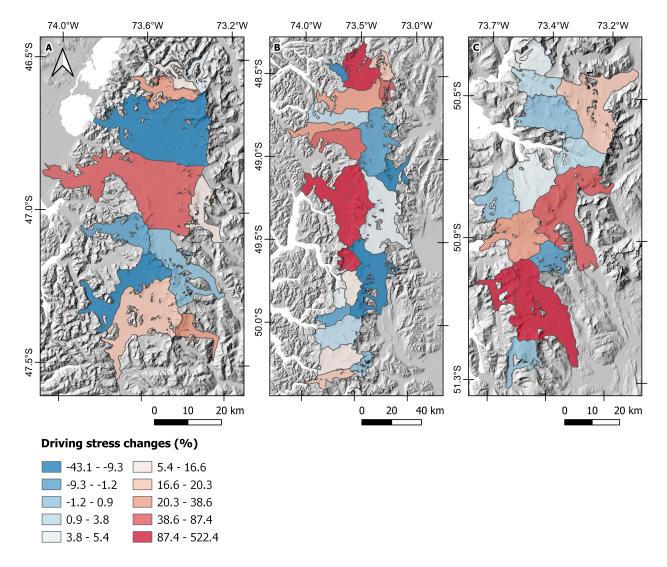
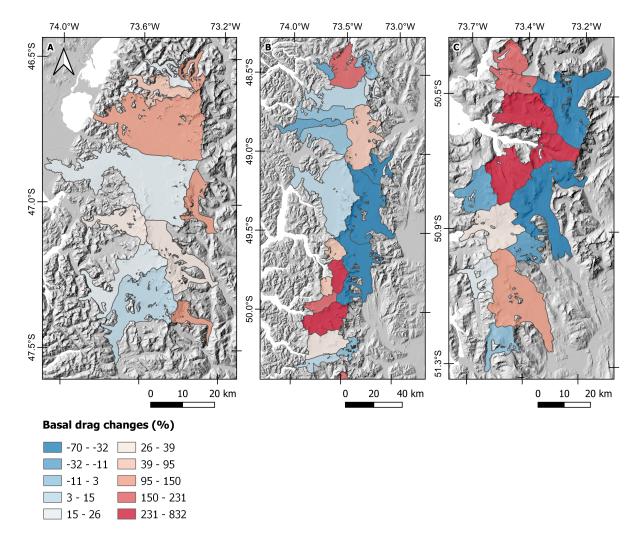


Figure S4. Changes of force balance with respect to Péclet number for the first 5 km of the terminus on PI glaciers during the period 2000-2018. Marine-terminating glaciers are represented as a circle and lake-terminating glaciers as

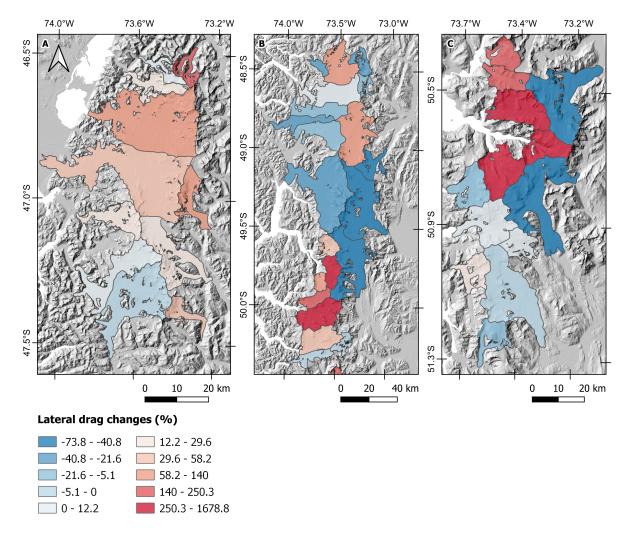
an inverted triangle. A) Changes of basal drag with respect to Péclet number. B) Changes of driving stress with respect to Péclet number. C) Changes of lateral drag with respect to Péclet number. D) Changes of longitudinal coupling concerning Péclet number.



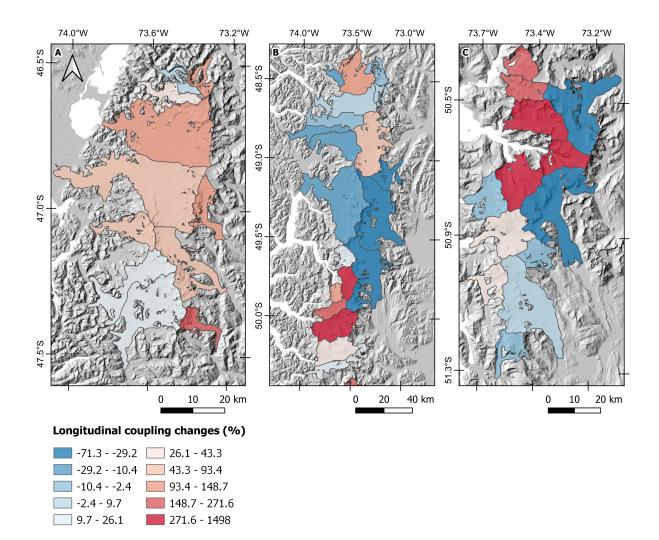
**Figure S5.** Percent changes in driving stress for the first 5 km of the terminus at PI glaciers during 2000-2018. A) NPI. B) SPI. C) Continuation of SPI.



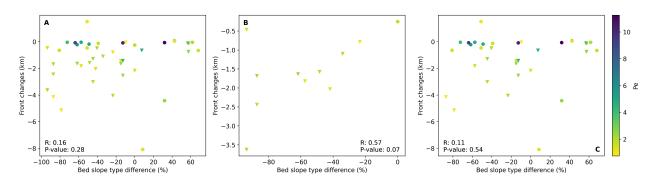
**Figure S6.** Percent changes in basal drag for the first 5 km of the terminus at PI glaciers during 2000-2018. A) NPI. B) SPI. C) Continuation of SPI.



**Figure S7.** Percent changes in lateral drag for the first 5 km of the terminus on PI glaciers during 2000-2018. A) NPI. B) SPI. C) Continuation of SPI.



**Figure S8.** Percent changes in longitudinal coupling for the first 5 km of the terminus at PI glaciers during 2000-2018. A) NPI. B) SPI. C) Continuation of SPI.



**Figure S9.** A) Front changes concerning the difference in bed slope type in PI glaciers. B) Front changes concerning the difference in bed slope type in NPI glaciers. C) Front changes concerning the difference in bed slope type in SPI glaciers. Marine-terminating glaciers are represented as circles and lake-terminating glaciers as inverted triangles.