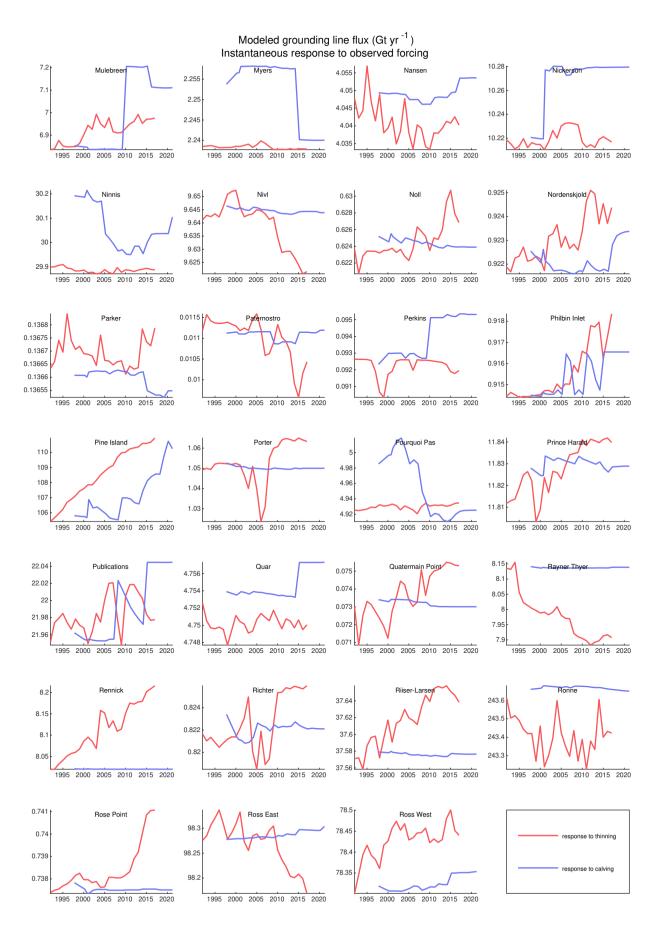


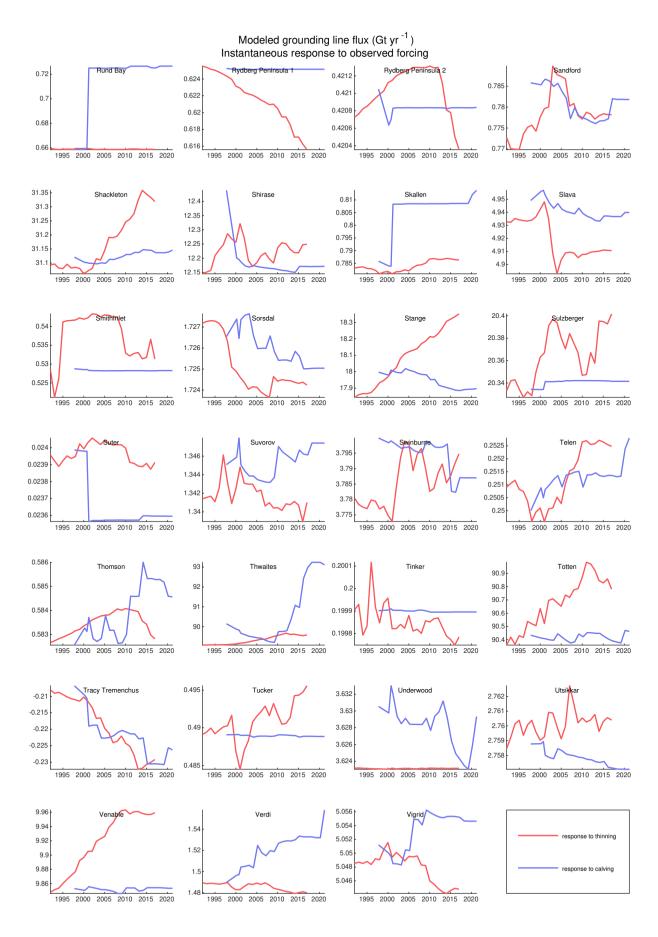
Modeled grounding line flux (Gt yr -1) Instantaneous response to observed forcing Larcon® 10.22 0.098 1.02 10.2 0.097 0.096 10 18 4.05 0.095 0.98 10 16 0.094 0.96 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 Larsen C Larsen D Larsen D Larsen E 32.2 31.72 0.1445 6.49 31.7 6.485 32.15 0.144 31 6.48 31 69 6.475 0.1435 32.1 31.68 6.47 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 Lauritzen 1.796 1 882 7.485 1.794 1 88 2.99 1.792 1.878 7 48 1.876 2.98 1.79 7 475 1.874 1.788 2.97 1.872 7.4 1.786 2.96 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 0.334 1.0875 5.4 Lillie Lintard Mandible Cirque 0.0325 Manhaul 5.35 0.333 1.087 0.032 5.3 0.332 1.0865 0.0315 5.25 1.086 0.031 5.2 1.0855 5.15 0.0305 0.329 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1.265 Marin Matusevitch Mariner 0.8705 0.0288 7.04 1.26 0.87 7.02 0.0287 1.255 0.8695 1.25 0.869 0.0286 1.245 0.8685 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 McLeod 14.42 0.08 2.44 5.22 0.0799 2 43 14.4 5.21 0.0798 2.42 14.38 0.0797 5.2 0.0796 14.36 5.19 0.0795 14.34 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 1995 2000 2005 2010 2015 2020 Morse Moscow University Moubray 0.946 0.974 52.25 0.944 response to thinning 0.972 52.2 0.942 0.97 52.15 0.94 response to calving 0.968 52. 0.938 0.966

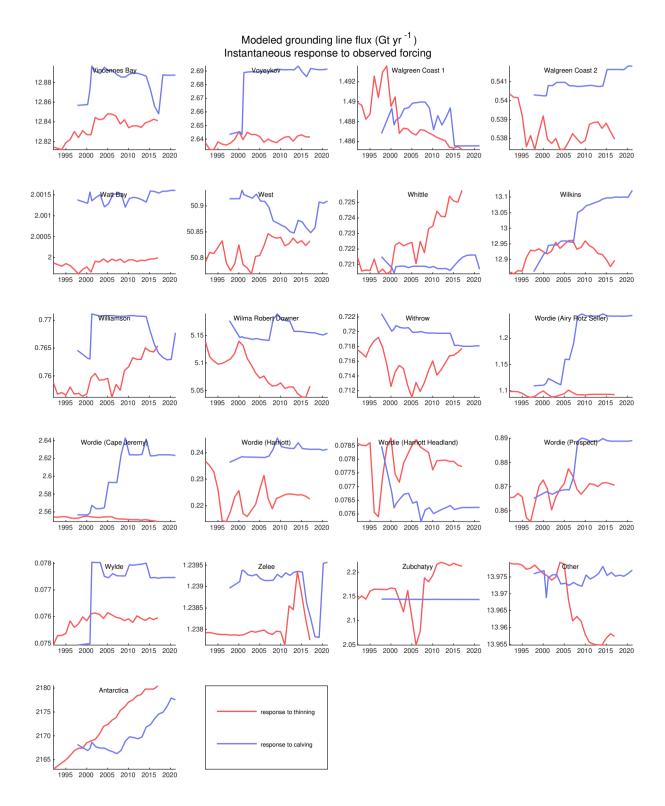
1995 2000 2005 2010 2015 2020

1995 2000 2005 2010 2015 2020

1995 2000 2005 2010 2015 2020







Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss Abbot 1 Abbot Abbot 2 Abbot 3 55 1.8 1.7 50 1.5 1.6 1.45 1.8 45 1.5 100 40 100 80 100 100 40 60 0 80 0 40 40 60 1.6 Abbot 4 Abbot 5 Abbot 6 Ainsworth 0.88 0.68 3.8 0.86 0.67 1.5 0.84 3.6 0.66 0.82 1.4 0.65 3.4 0.8 0.64 3.2 0.78 1.3 0.63 0.76 80 100 80 100 20 80 100 20 40 60 40 60 40 60 100 20 40 60 80 0.02 1.3 Amery 300 0.019 1.25 4.5 250 0.018 1.2 0.017 200 3.5 0.016 1.15 150 0.015 100 80 100 60 100 100 60 20 40 60 20 40 80 20 40 60 80 20 2.9 Bach Astrolabe Atka Aviator 10.5 2.7 10 9.5 2.6 100 60 100 40 60 80 0 20 40 100 20 40 60 40 80 2.2 Barber Baudouin Borchgrevink Brahms 0.22 2.1 38 0.215 36 1.9 0.21 40 34 1.8 0.205 35 32 0.2 20 40 60 100 80 100 20 40 60 0.85 40 Brunt Stancomb Campbell Cape Washington 0.6 0.84 39 0.18 38 0.83 0.55 37 0.17 0.5 36 0.81 0.16 20 40 100 80 100 20 40 80 100 0.15 Cheetham Chugunov Cirque Fjord 0.34 0.39 0.145 0.32 response to thinning 0.38 0.37 0.14 0.3 0.36 response to calving 0.135 0.28 80 100 40 80 100 40 80 100

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss Clarke Bay Commandant Charcot Conger Gle Cook 0.106 30.5 2.2 0.104 2.1 2.1 30 0.102 2.05 29.5 0.1 19 0.098 29 1.95 0.096 28.5 100 100 20 100 40 0 40 80 40 80 12 Dalk Cosgrove Crosson 0.6 Dawson Lambton 30 11 28 0.58 26 10 0.56 24 22 0.54 20 80 60 80 100 40 60 100 20 40 60 80 100 0 20 40 60 80 100 20 40 Deakin 0.9 1.9 Dennistoun Dibble Dotson 30 40 0.85 1.8 35 25 0.8 1.7 30 20 1.6 0.75 80 100 80 60 0 20 40 60 100 20 40 60 80 100 60 80 Drygalski Drury Edward VIII Ekstrom 0.42 16 16 14 0.4 12 0.38 10 12 0.36 80 100 100 80 100 100 0 40 60 40 80 20 40 60 20 ×10<sup>-3</sup> Eltanin Bay Erebus Ferrigno 10.5 0.42 -0.029 0.4 -0.03 9.5 0.38 4.6 -0.031 0.36 8.5 40 60 100 20 40 60 80 20 40 60 400 Filchner Fimbul Fisher Fitzgerald 48 0.43 350 46 0.95 300 0.425 44 0.9 250 42 0.42 200 40 0.415 0.85 38 40 80 100 40 80 100 20 40 80 100 20 Flatnes Fox Glacier Fox Ice Stream 2.8 10 2.7 response to thinning 1.55 2.6 1.5 response to calving 2.5 1.45 2.4

80 100

20 40 60 80 100

20 40 60 80 100

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss Français Gannutz Garfield 0.23 22.5 0.35 44 0.22 22 4.2 0.21 0.3 21.5 0.2 21 0.25 0.19 20.5 0.18 100 80 100 80 100 100 40 40 0 20 40 95 GeikieInlet George VI Getz 1 Getz 1.2 150 90 3.2 140 1.1 85 130 80 2.8 120 75 2.6 110 0.9 70 2.4 100 80 100 60 20 20 40 60 20 40 80 100 40 60 80 100 20 40 60 100 Gillet Hamilton Piedmont Getz 2 2.1 0.72 1.9 0.3 0.7 1.8 0.28 1.7 1.9 0.68 1.6 0.26 1.8 20 100 80 100 20 40 100 40 80 20 40 60 80 20 60 2.8 0.6 Hayes Coats Coast Hannan Harbord Glacier Harmon Bay 0.85 0.58 0.55 2.6 0.56 0.8 0.54 0.54 2.4 0.75 0.52 0.7 0.53 2.2 0.5 100 20 80 100 80 100 20 60 100 0 40 60 80 0 40 20 40 60 0 40 30 Helen Holt Horn Bluff Holmes 27 28 0.9 26 26 0.85 25 24 0.8 0.8 24 22 0.6 0.75 23 20 0.4 0.7 22 40 80 100 40 60 80 2.2 Hoseason Hull Hummer Point 0.53 1.75 16 0.52 1.8 0.51 1.65 0.5 12 1.2 10 20 40 100 20 40 60 80 100 20 40 80 100 Ironside 1.05 Jackson 35 Jelbart 0.1 response to thinning 30 0.095 0.09 0.95 25 response to calving 0.085 40 80 100 80 40 60 80 100

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss 0.1 F Kirkby Land Larsen B 16 4.6 0.095 14 4.2 0.09 12 0.9 0.085 3.8 100 100 100 20 40 0 40 80 0 20 40 80 44 Larsen D 1 Larsen E 50 Larsen C Larsen D 10 0.14 42 45 40 0.135 38 40 0.13 36 0.125 34 35 32 0.12 100 100 80 100 20 40 60 80 20 40 60 80 20 40 60 20 40 60 100 3.6 Larsen F Larsen G Lauritzen 2.4 8.5 2.1 2.3 2.2 32 2.1 1.9 100 100 100 20 40 40 80 20 80 1.1 Mandible Cirque Lillie Liotard 0.034 Manhaul 0.45 0.0335 1.08 0.033 0.4 0.0325 1.06 0.032 0.35 0.0315 1.04 100 40 80 100 100 40 20 20 40 80 20 Marin Marret Mariner Matusevitch. 1.5 0.85 0.028 1.45 0.8 1.4 0.026 0.75 1.35 0.024 1.3 0.7 1.25 40 60 100 40 20 40 60 40 60 0.082 May Glacier Mendelssohn Mertz 22 5.3 3.2 0.08 5.25 20 5.2 0.078 5.15 2.8 0.076 5.1 2.6 5.05 0.074 80 100 20 40 80 100 80 100 Morse Moubray Moscow University 180 0.95 160 1.05 response to thinning 140 120 0.9 100 response to calving 80 0.85 0.95

40

80 100

20

80 100

20 40 60 80 100

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss Mulebreen Nickerson 3.2 12.5 2.8 11.5 2.6 2.4 10.5 Ninnis Nivl Nordenskiold Noll 0.68 1.05 0.66 0.64 n gr <10<sup>-3</sup> 0.096 0.14 Parker Philbin Inlet 1.3 0.095 0.135 0.094 0.093 1.1 0.13 0.092 0.091 Pine Island 1.1 Porter Prince Harald Pourquoi Pas 6.5 1.05 13.5 0.95 12.5 5.5 0.9 0.85 Publications Quatermain Point Quar Rayner Thyer 0.078 6.5 0.076 0.074 0.072 5.5 0.07 0.068 0.066 Richter Ronne 10.5 0.95 9.5 0.85 8.5 0.8 0.9 Rose Point Ross East Ross West response to thinning 0.85 0.8 response to calving 0.75 

80 100

20 40 60 80 100

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss Rydberg Peninsula 1 1.1 Rund Bay Rydberg Peninsula 2 Sandford 0.78 0.76 0.6 0.74 0.41 0.58 0.9 0.72 0.4 0.7 0.8 0.54 0.68 0.39 0.7 0.66 100 60 80 80 100 40 80 20 40 100 20 40 60 20 40 Shackleton Shirase Skallen Slava 17 45 0.9 16 0.88 40 0.86 15 0.84 14 0.82 35 13 60 80 100 80 100 20 60 20 40 0 20 40 60 40 60 80 100 20 40 100 SmithInlet Sorsdal Stange Sulzberger 0.6 35 1.74 24 1.72 0.58 30 1.7 22 0.56 1.68 25 20 1.66 0.54 18 1.64 \_\_ 100 100 20 40 80 20 40 60 40 80 100 60 80 Telen 0.024 Suter 1.44 Suvorov Swinburne 0.25 1.42 0.023 0.24 1.4 0.022 0.23 1.38 1.36 0.22 0.021 80 100 100 20 100 60 100 0 20 40 60 40 60 80 40 80 20 40 0.7 105 0.204 Totten Thomson Thwaites Tinker 200 0.202 100 0.65 150 95 0.198 0.6 0.196 90 100 40 40 60 80 100 20 40 80 100 20 40 Tracy Tremenchus Tucker Utsikkar -0.1 0.5 3.4 -0.15 3.2 0.45 -0.2 4.5 -0.25 2.8 100 20 40 60 80 20 40 80 100 60 80 12.5 Venable Verdi Vigrid 1.7 12 response to thinning 11.5 1.6 11 1.5 response to calving 10.5 5.5

1.4

20 40

80 100

0

80 100

80 100

10

Modeled grounding line flux (Gt yr -1) Instantaneous response to hypothetical percent mass loss 14 Vincennes Bay Walgreen Coast 1 Walgreen Coast 2 0.55 2.6 13.5 2.5 2.4 0.5 13 2.3 2.2 0.45 100 0 80 100 100 40 20 40 60 0 20 40 Watt Bay West Whittle Wilkins 80 2.4 0.7 16 2.3 0.65 70 15 2.2 0.6 60 2.1 0.55 14 13 100 20 20 60 80 100 20 40 60 80 0 40 80 40 40 60 100 Williamson Wilma Robert Downer Withrow Wordie (Airy Rotz Seller) 0.9 1.3 10 0.85 0.75 1.25 0.8 8 0.7 0.75 1.15 0.7 0.65 0.65 80 100 80 100 40 20 40 60 20 40 60 20 80 20 0.95 Wordie (Harriott) Wordie (Harriott Headland) Wordie (Prospect) Wordie (Cape Jeremy) 0.24 0.08 0.22 3.5 0.85 0.075 0.8 0.2 0.07 0.75 80 100 40 60 100 40 100 100 80 0 20 60 40 Zele 0.08 13 0.075 12 1.3 11 0.07 1.2 10 0.065 1.1 40 20 60 20 40 4500 Antarctica 4000 response to thinning 3500 3000

40 60 80 100