

Experiment	EF	Bed topography used	Initial temperature in surface relaxation of Cycle 1	Initial temperature in first inversion of Cycle 1	SL	Ice front position	RMSD ( $\text{m yr}^{-1}$ )
CTRL	1.0	bed_bm	Linear temperature	Linear temperature	15 m	GL1996	75.12
TEMP1	1.0	bed_bm	$-20\text{ }^{\circ}\text{C}$	$-20\text{ }^{\circ}\text{C}$	15 m	GL1996	80.65
TEMP2	1.0	bed_bm	$-5\text{ }^{\circ}\text{C}$	$-5\text{ }^{\circ}\text{C}$	15 m	GL1996	78.07
TEMP3	1.0	bed_bm	$-20\text{ }^{\circ}\text{C}$	Linear temperature	15 m	GL1996	78.48
EF1	0.5	bed_bm	Linear temperature	Linear temperature	15 m	GL1996	86.35
EF2	2.0	bed_bm	Linear temperature	Linear temperature	15 m	GL1996	89.38
EF3	4.0	bed_bm	Linear temperature	Linear temperature	15 m	GL1996	993.20
BEDZC	1.0	bed_zc	Linear temperature	Linear temperature	15 m	GL1996	62.60
BEDMC	1.0	bed_mc	Linear temperature	Linear temperature	15 m	GL1996	61.78
IFP1	1.0	bed_bm	Linear temperature	Linear temperature	15 m	IF1	72.10
IFP2	1.0	bed_bm	Linear temperature	Linear temperature	15 m	IF2	75.12
IFBC1	1.0	bed_bm	Linear temperature	Linear temperature	5 m	GL1996	79.38
IFBC2	1.0	bed_bm	Linear temperature	Linear temperature	25 m	GL1996	72.68
IFBC3	1.0	bed_bm	Linear temperature	Linear temperature	n/a	GL1996	249.64