

Stake	Elevation 10-metre		Mean	Firn	Percen-	Percen-	Change of	Mass	Refrozen melt-water		
	temp.	annual	air temp. (°C)	warming	tage ice	tage ice	ice-per-	balance	(m ice/y)		
	(m)	(°C)		(K)	June 23	August 16	centage	(m ice/y)	Observed	Modelled	
HT940451	506	−18.5	−17.0	−1.5						s=3 K	s= 4.5 K
HT940061	574	−17.5	−17.6	+0.1							
HT940075	776	−14.5	−19.2	+4.7	10	53	43	0.60	0.26	0.26	0.35
HT940085	883	−19.6	−20.0	+0.4	0	100	100	0.16	0.16	0.15	0.15
HT940105	1035	−18.3	−21.3	+3.0	47	72	25	0.36	0.09	0.13	0.22
HT940013	1318	−21.0	−23.5	+2.5	0	13	13	0.42	0.055	0.055	0.14

tween observed and modelled values, whereas the modelling with $s = 4.5\text{K}$ overestimates the amount of refrozen melt water. In Fig. 8, the amount of refrozen melt water that remains after the summer melt season (expressed as a

of the Hans Tausen Iskappe requires generalisations of the parameterisations derived for the Hare glacier drainage basin.

Table 2. Observed firn/ice 10-metre temperature, model-calculated mean annual air temperature, and observed and model-calculated amounts of refrozen melt water.