

Table 1. Sensor characteristics, set-up, and period of operation for air, englacial, soil surface, and rock wall temperature measurements on Mt Orles.

Measured variable		Sensor	Radiation shield	Period of operation		Initial height (m)	Unit	Interval	Integration method and interval	Accuracy	
				From	To						
Air temperature data (AWS)											
Air temperature		Vaisala HMP155A	R. M. Young 43502 fan-aspirated radiation shield	Sep 2011	Jun 2015	+4	°C	15 min	avg 1 h	$\pm(0.226 - 0.0028 \cdot T)$ °C from -80 to 20 °C, $\pm(0.055 + 0.0057 \cdot T)$ °C from 20 to 60 °C	
Air temperature		Vaisala HMP155A	Campbell Scientific MET 21 radiation shield with natural ventilation	Sep 2012	Jun 2015	+4	°C	15 min	avg 1 h	$\pm(0.226 - 0.0028 \cdot T)$ °C from -80 to 20 °C, $\pm(0.055 + 0.0057 \cdot T)$ °C from 20 to 60 °C	
Air temperature and comparison)	Temperature (backup comparison)	Gemini TGP-4020	R. M. Young 43502 fan-aspirated radiation shield	Sep 2011	Jun 2015	+4	°C	1 h	avg 1 h	$\pm(0.2 - 0.005 \cdot T)$ °C from -40 to 0 °C, ± 0.2 °C from 0 to 40 °C	
Air temperature and comparison)	Temperature (backup comparison)	Gemini TGP-4020	R. M. Young 41303-5 radiation shield with natural ventilation	Sep 2011	Jun 2015	+4	°C	1 h	avg 1 h	$\pm(0.2 - 0.005 \cdot T)$ °C from -40 to 0 °C, ± 0.2 °C from 0 to 40 °C	
Air temperature and comparison)	Temperature (backup comparison)	Onset HOBO H8 Pro Temp	Davis 7714 radiation shield with natural ventilation	Sep 2012	Sep 2016	+4	°C	1 h	avg 1 h	$\pm(0.63 - 0.022 \cdot T)$ °C from -40 to 0 °C, ± 0.63 °C from 0 to 40 °C	
Englacial temperature data											
Snow and firn temperature at the AWS site		Geoprecision thermistor string (15 sensors)		Jun 2012	Sep 2016	-0.6/-1.6/-2.6/-3.6/-4.6/-5.6/-6.6/-7.6/-8.6/-9.6/-10.6/-11.6/-12.6/-13.6/-14.6	°C	2 h	instant 2 h	± 0.5 °C from -10 to +85 °C	
Englacial temperature at the borehole drilling site (short string)		Sommer thermistor string (11 sensors)		Nov 2011	Aug 2015	0/-1/-2/-3/-4/-6/-8/-10/-15/-20/-25	°C	1 h	instant 1 h	± 0.1 °C from 0 to 70 °C	
Englacial temperature at the borehole drilling site (long string)		Sommer thermistor string (4 sensors)		Nov 2011	Apr 2013	-15/-35/-55/-75	°C	1 h	instant 1 h	± 0.1 °C from 0 to 70 °C	
Englacial temperature at Hintergrat Glacier		Sommer thermistor string (5 sensors)		Nov 2011	Aug 2016	-1.5/-3.5/-5.5/-7.5/-9.5	°C	1 h	instant 1 h	± 0.1 °C from 0 to 70 °C	