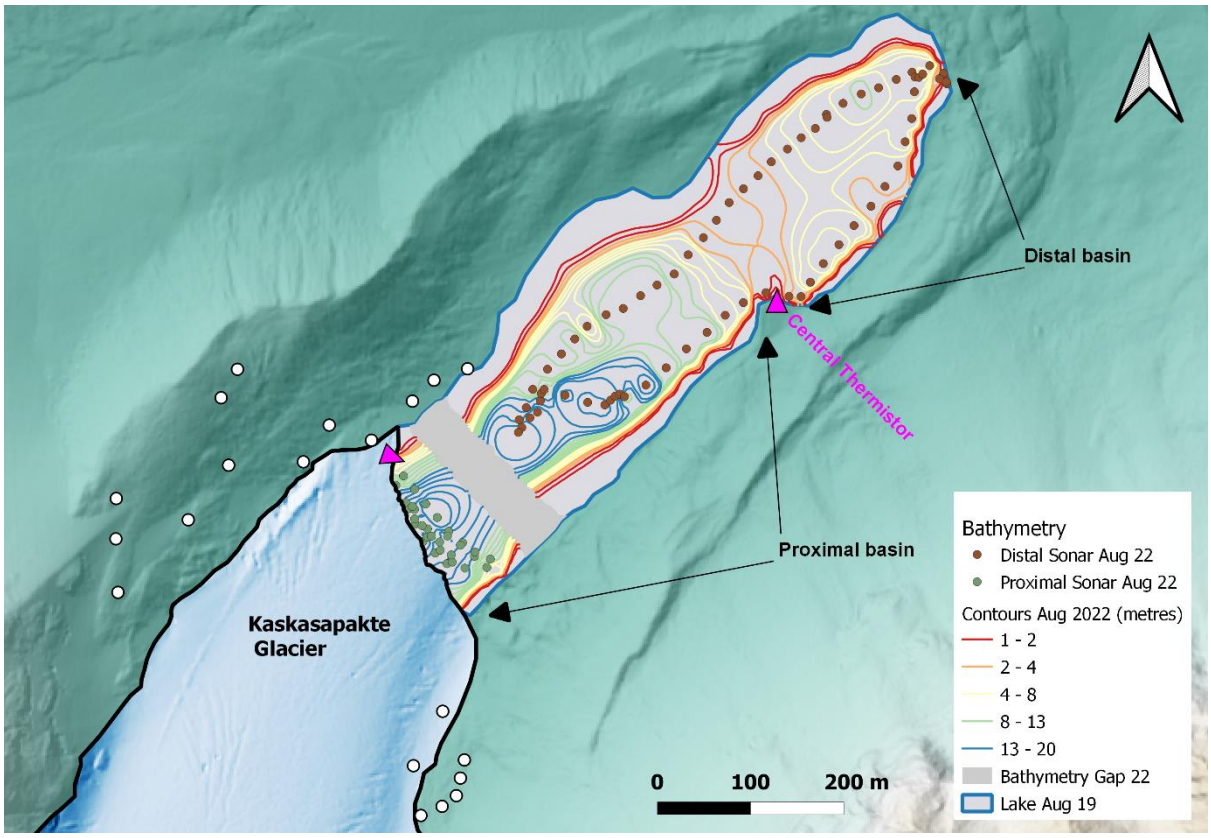
Supplementary



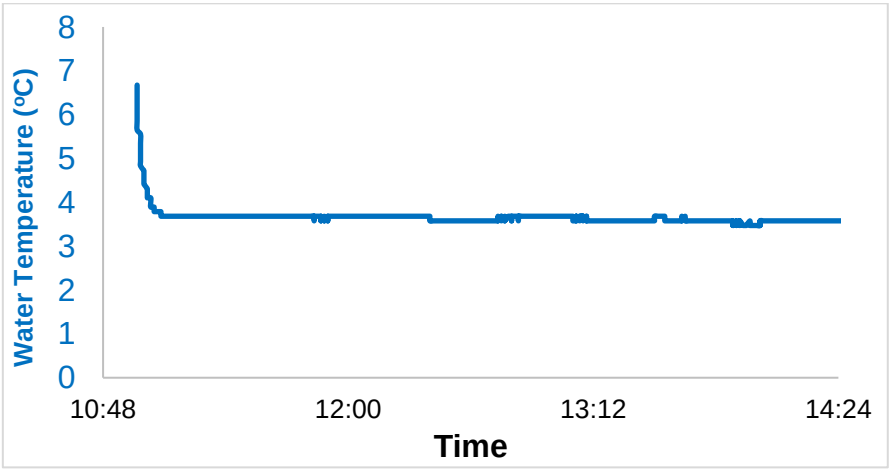
S1 - Digital Elevation model with outline of Kaskasapakte Glacier from 3rd August 2019 and bathymetry from sonar surveys (sampled at 30 seconds) in August 2022. Ground control points (19/8/2019) used for SfM model are shown as white dots. Thermistor positions shown as pink triangles.

Table 1– Calving classification from July 2017 (observations from 17:43 on 24th July until 14:21 on 28th July). 1 = ice fall; 2 = sheet collapse; 3 = stack topple; 4 = waterline; 5 = subaqueous; 6 = roof/arch collapse; and 7 = unknown

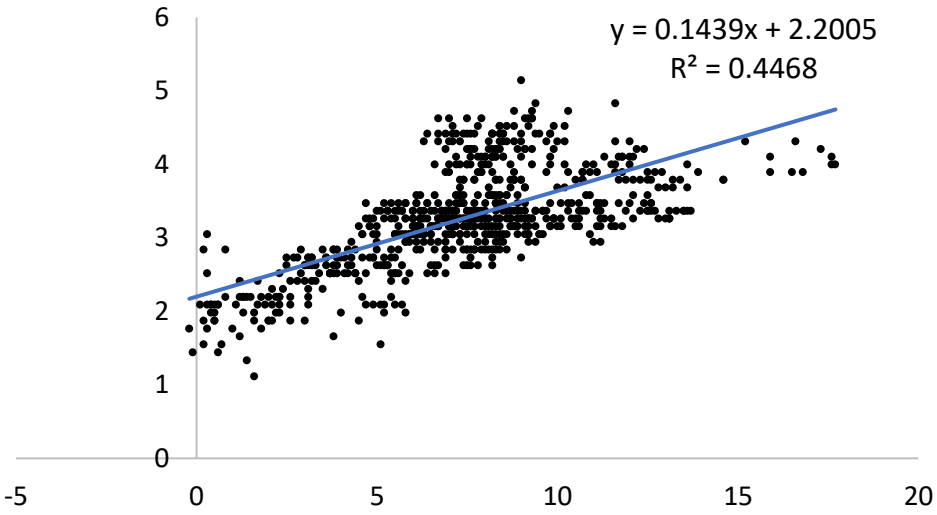
Date	Time	Calving Class	Notes
24/07/2017	20:50	7	Berg from englacial conduit
24/07/2017	20:53	7	Berg from englacial conduit
25/07/2017	05:45	4	
25/07/2017	16:21	7	Berg from englacial conduit
25/07/2017	16:31	7	Berg from englacial conduit
25/07/2017	19:27	7	Berg from englacial conduit
26/07/2017	00:03	4	
26/07/2017	02:03	2	
26/07/2017	04:21	2	
26/07/2017	09:42	2	
26/07/2017	09:42	6	
26/07/2017	09:42	4	
26/07/2017	10:57	6	
26/07/2017	18:34	7	Berg from englacial conduit
26/07/2017	19:53	7	Berg from englacial conduit
26/07/2017	20:44	7	Berg from englacial conduit

26/07/2017	21:36	7	Berg from englacial conduit
26/07/2017	23:29	7	Berg from englacial conduit
27/07/2017	16:50	7	Berg from englacial conduit
27/07/2017	20:52	7	Berg from englacial conduit
27/07/2017	23:59	7	Berg from englacial conduit
28/07/2017	11:44	7	Berg from englacial conduit

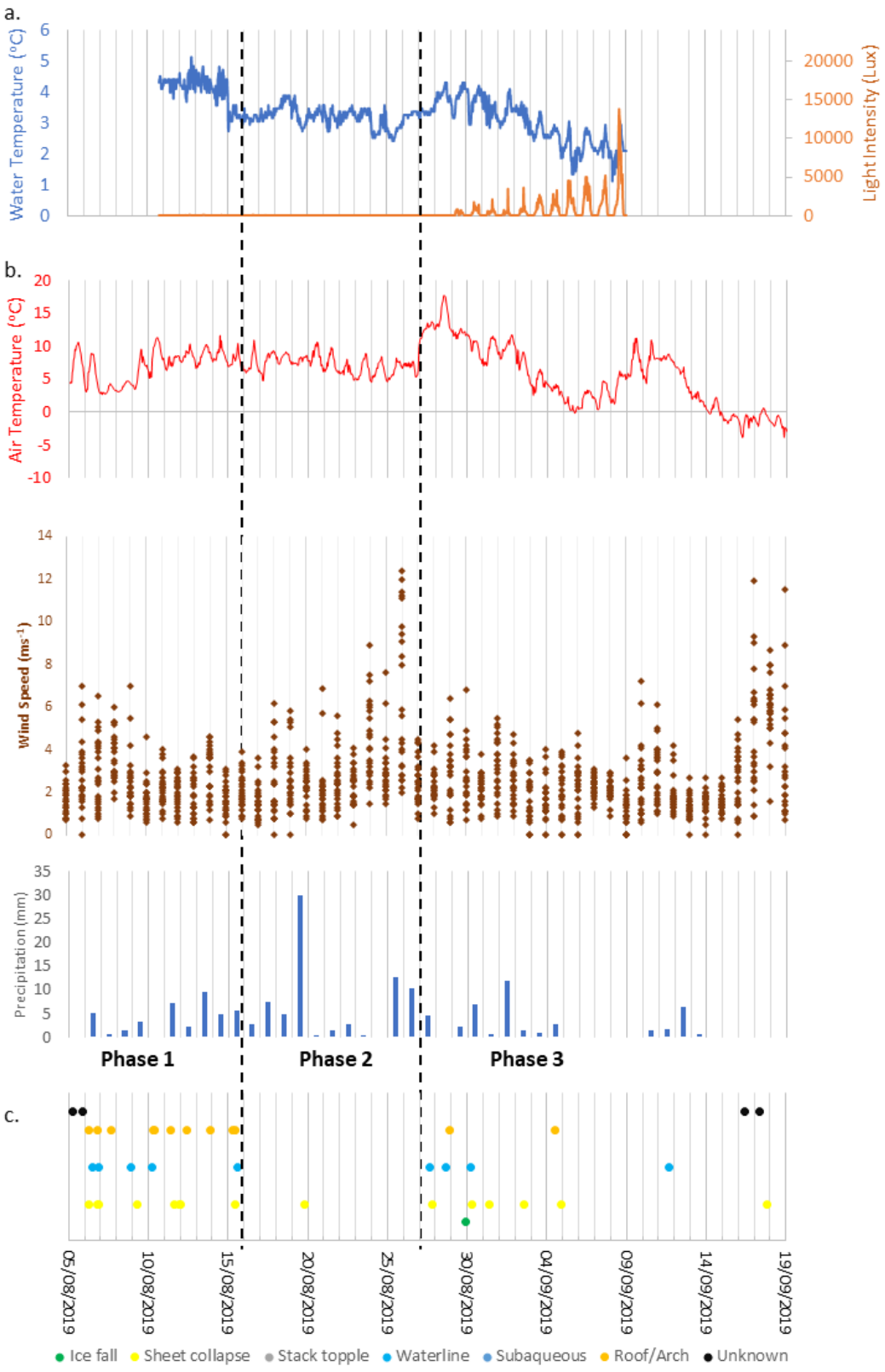
S2 – Image of Kaskasapakte glacier terminus 4th August 2019, taken from western moraine crest on Panasonic Lumix (DMC-TZ57) (focal length 12 mm; exposure time 1/800 sec). Note the water filled crevasse in the lower right of the image (blue circle).



S3 – Water Temperature (+/- 0.5 °C) at 20m depth from temporary cast in front of glacier terminus on 8th August 2019. Note that immersion time was 10:51, with several minutes of sensor settling time afterwards.



S4 – Water temperature from 5m depth at central point in Kaskasapakte lake against 2m air temperature at Tarfala Research Station (SMHI).



S5 – Water temperature (from 5m deep at central part of lake) and hourly air temperature, wind speed and daily precipitation (Tarfala; SMHI) from 5th August to 9th September 2019.