Table S1. Number of ICESat footprints included in the analyses. The applied corrections (c_{tile}, c_{date}, c_{glac}) considerably reduce elevation differences (dh) between ICESat and reference DEM.

	ice	*ice border*	*land*	**total**
All, unfiltered	3'752	1'365	164'510	169'627
Filtered, total	3'272	1'144	120'896	125'312
Filtered, Autumns 03-09	1'268	438	48'854	50'560
(03-08)	(1'233)	(436)	(48'089)	(49'758)
thereof, |dh uncorrected| <10m	1'006	316	46'035	47'357
	(79%)	(72%)	(94%)	(94%)
thereof, |dh c_{tile}, c_{date}, c_{glac}| <10m	1'190	349	46'299	47'838
	(94%)	(80%)	(95%)	(95%)
Filtered, Winters 03-09	1'341	521	55'461	57'323
Filtered, Junes 04-06	663	185	16'581	17'429
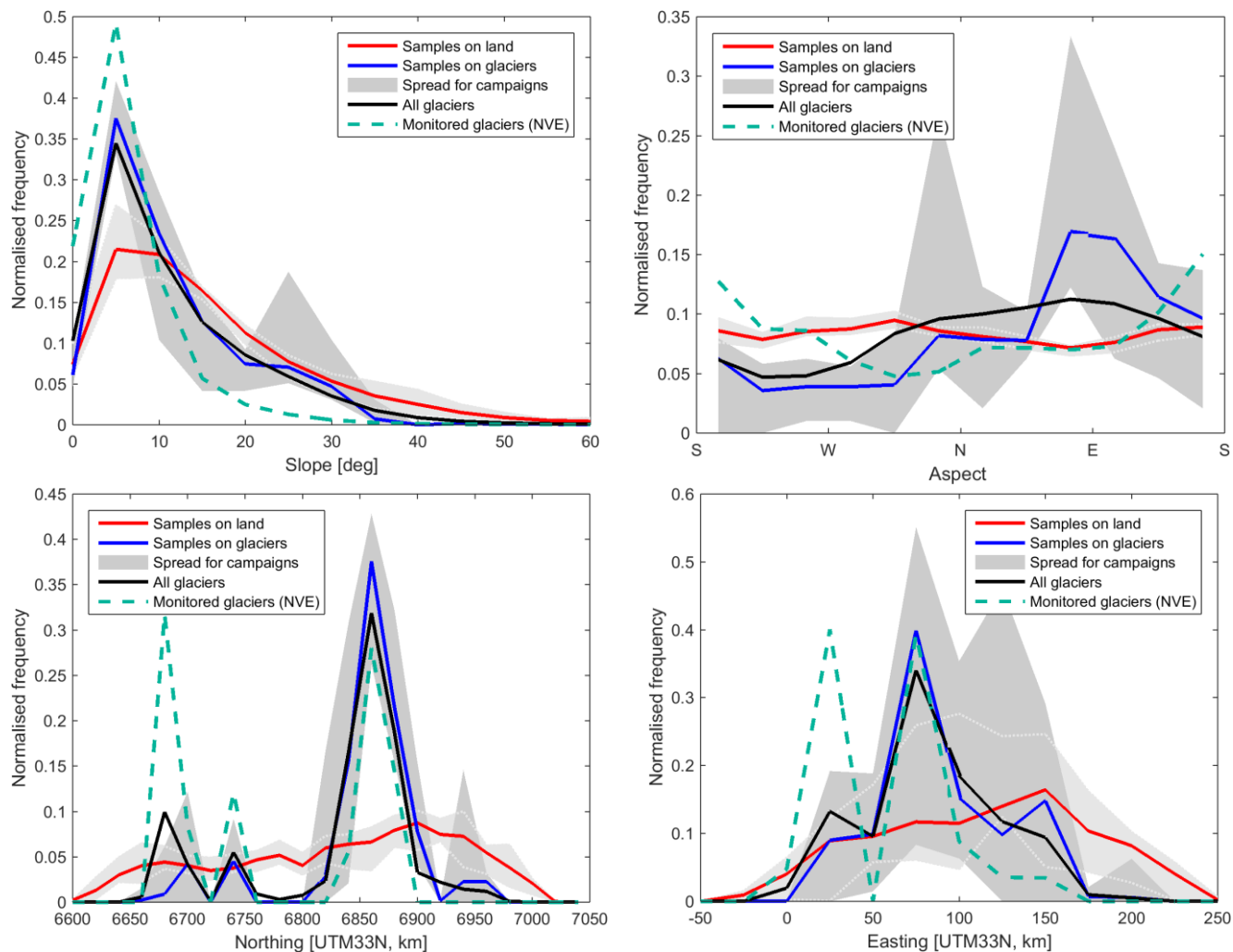
Figure S1. Representativeness of 2003-2008 ICESat autumn campaign samples in terms of footprint slope, aspect, and spatial distribution (easting/northing), compared to the entire glacierised surface in southern Norway, and to monitored glacierised surface (in-situ mass balance program by NVE). The grey spread encompasses the distributions of single ICESat autumn campaigns; where it is wide, the difference between individual campaigns is largest.