Supplementary material

Recent significant decline of strong carbon peat accumulation rates in tropical Andes related to climate change and glacier retreat

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Table S1: Average and standard deviation values of bulk density (g cm^{-3}), organic matter (%), organic carbon (%), carbon stable isotope $\delta^{13}C$ (‰) and carbon accumulation rates (gC m^{-2} yr^{-1}) for the four peat cores.

Peatlands	**APA 1**		**APA 2**	
Cores	**APA1–C1**	**APA1–C5**	**APA2–C3**	**APA2–C4**
Bulk Density (g cm^{-3})	0.088 ± 0.034	0.132 ± 0.055	0.075 ± 0.025	0.078 ± 0.024
Organic Matter (%)	96.5 ± 1.2	96.0 ± 1.3	92.7 ± 2.8	90.8 ± 3.0
Organic Carbon (%)	51.1 ± 0.6	50.9 ± 0.7	49.1 ± 1.5	48.1 ± 1.6
$\delta^{13}C$ (‰)		-25.40 ± 0.69		-25.36 ± 0.69
C Accumulation Rate (gC m^{-2} yr^{-1})	400.1 ± 206.2	546.7 ± 264.5	239.0 ± 100.2	193.6 ± 53.0

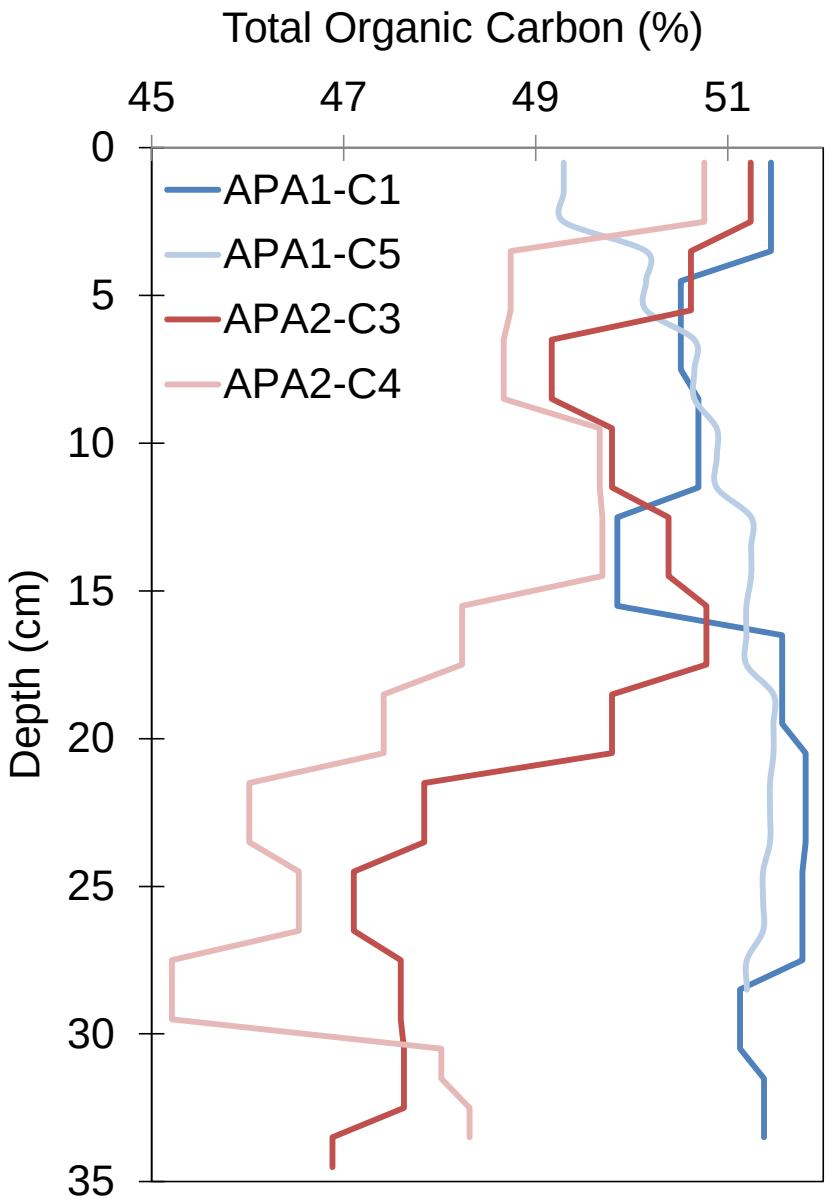

Figure S1: Total organic carbon (TOC, %) contents for the four peat cores: APA1-C5 and APA2-C4 at 4200 m asl, and APA2-C3 and APA2-C4 at 4420 m asl.