A novel multi proxy approach reveals that the millennial old ice cap on Weißseespitze, Eastern Alps, has preserved its chemical and isotopic signatures despite ongoing ice loss

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Supporting materials

Table S1. Villacher Alpe seasonal statistics over the period 1973-2002 and Weißseesptize statistics over the entire record. Results are obtained with statistics over the delta-18O values corrected for altitude (-0.09 ‰/100 m). SPR = AMJ; SUM = JAS; AUT = OND; WIN = JFM.

Villacher Alpe (seasonal statistics 1973-2002)			
SPR mean	**SUM mean**	**AUT mean**	**WIN mean**
-11.25	-9.56	-14.05	-14.61
SPR min	**SUM min**	**AUT min**	**WIN min**
-12.73	-10.77	-15.26	-15.04
SPR max	**SUM max**	**AUT max**	**WIN max**
-10.27	-8.40	-11.95	-14.22
Weißseespitze (statistics over the entire record)			
mean d18O	Std dev	**min**	**max**
-13.98	1.71	**-15.69**	**-12.28**
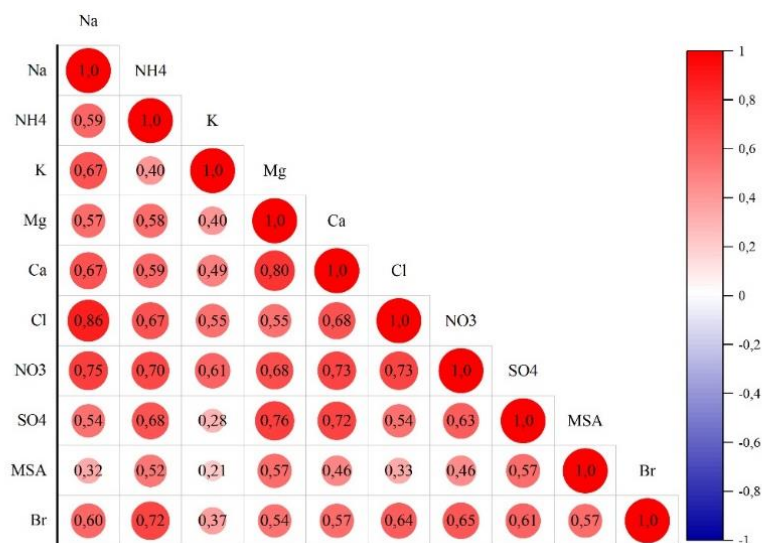
Figure S1. Spearman correlation matrix for major ions within the WSS ice core.
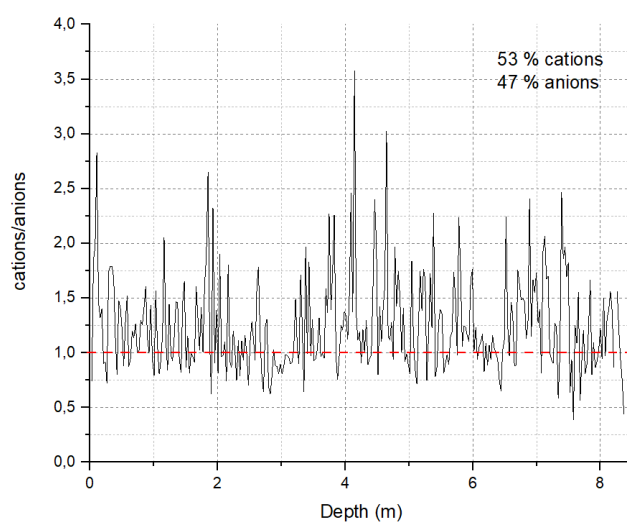
Figure S2. Cations/anions ratio along the WSS core depth, positively accounting for cations within 5 % of the balance.
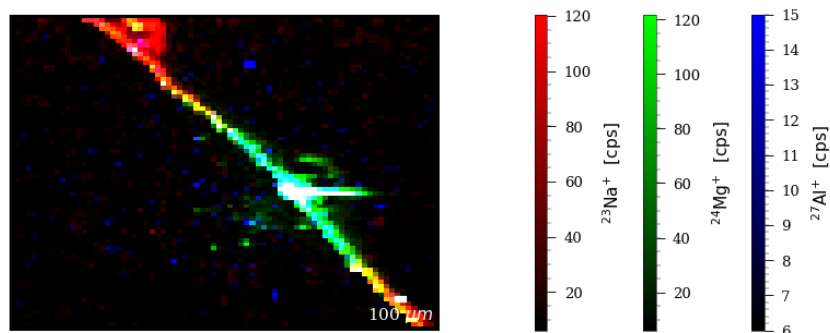
Figure S3. WSS ice core sample from bag 18. LA-ICP-MS image shows Na, Mg, Al in red, green and blue colorscale, respectively for an area of 3 x 4 mm.