Supplemental information for "A software framework for calculating compositionally dependent in situ ^{14}C production rates".

Table S1: Predicted modern *in situ* ^{14}C spallogenic production rates (atoms g^{-1} y^{-1}) at SLHL from neutrons and protons in minerals and rock types considered, both theoretical and normalized to calibrated production in quartz ($P_{CD,GD}$) using the geocentric dipolar R_{CD} record of Lifton (2016).

	Neutron P_{CDpred}	***Proton P_{CDpred}***	***Total P_{CDpred}***	***$P_{CD,GD}$***	***% Diff $P_{CD,GD}$ vs. P_{Qcal}***
Mineral	*at g^{-1} y^{-1}*	*at g^{-1} y^{-1}*	*at g^{-1} y^{-1}*	*at g^{-1} y^{-1}*	
Quartz	15.37	0.47	15.84	13.68	0.1
Albite	15.55	0.48	15.97	13.81	1.2
Albite[1]	14.74	0.48	15.43	13.34	-4.0
Anorthite	13.43	0.42	13.85	11.98	-12.6
Orthoclase	13.35	0.42	13.77	11.91	-13.1
Forsterite	13.66	0.46	14.12	12.21	-10.9
Fayalite	9.07	0.28	9.35	8.08	-41.0
Wollastonite	11.85	0.36	12.21	10.56	-22.9
Augite	13.28	0.42	13.70	11.84	-13.6
Ferrosilite	10.46	0.32	10.78	9.32	-32.0
Enstatite	14.17	0.46	14.64	12.66	-7.6
Calcite	13.55	0.38	13.93	12.05	-12.1
Dolomite	14.96	0.44	15.41	13.32	-2.8
Rock					
Ultramafic	13.11	0.43	13.54	11.69	-14.5
Basalt	13.72	0.43	14.15	12.22	-10.7
Hi-Ca Granite	14.30	0.44	14.75	12.73	-6.9
Low-Ca Granite	14.52	0.45	14.97	12.93	-5.5
Granodiorite	14.27	0.44	14.71	12.70	-7.1

[1] Production calculated using the spliced TENDL-2019 and JENDL/HE-2007 proton and neutron excitation functions (Na_{TJ} in text)