

Ne-21 measurements from 04-AV-PIT4. Complete step-degassing results. Measured in 2008-09.

Sample name	Aliquot	Aliquot weight (g)	Heating temperature (deg C)	Heating time (hr)	Total ²⁰ Ne released ² (10 ⁹ atoms)	Total ²¹ Ne released ³ (10 ⁶ atoms)	²¹ Ne / ²⁰ Ne ⁴ (10 ⁻³)	²² Ne / ²⁰ Ne ⁴ (10 ⁻³)	Cosmogenic ²¹ Ne ⁵ This heating step (10 ⁹ atoms g ⁻¹)	Cosmogenic ²¹ Ne as % of ²¹ Ne released in this heating step	Percent of total cosmogenic ²¹ Ne released in this step	Total cosmogenic ²¹ Ne (10 ⁹ atoms g ⁻¹)
Pit 4												
PIT4-SSS	a	0.15221	400	0.3	2.0605 +/- 0.0239	26.398 +/- 0.881	12.658 +/- 0.203	113.7 +/- 1	131.79 +/- 3.16	76	65	201.4 +/- 4.0
			700	0.3	2.7259 +/- 0.033	17.584 +/- 0.596	6.38 +/- 0.113	102.4 +/- 1	61.49 +/- 2.16	53	31	
			1100	0.3	0.5629 +/- 0.0159	2.91 +/- 0.156	5.135 +/- 0.257	107.7 +/- 4.5	8.08 +/- 0.98	42	4	
PIT4-0-1	a	0.1564	400	0.3	1.6464 +/- 0.0209	15.627 +/- 0.523	9.377 +/- 0.16	112.8 +/- 1.6	67.82 +/- 1.9	68	57	119.6 +/- 3.1
			700	0.3	1.8778 +/- 0.0241	12.987 +/- 0.508	6.839 +/- 0.183	106.2 +/- 1.9	46.76 +/- 2.28	56	39	
			1100	0.3	0.4255 +/- 0.0126	2.05 +/- 0.165	4.784 +/- 0.375	111 +/- 4.9	4.98 +/- 1.03	38	4	
PIT4-20-23	a	0.15688	400	0.3	3.2716 +/- 0.0349	26.778 +/- 0.869	8.084 +/- 0.114	104.6 +/- 0.8	107.26 +/- 2.65	63	38	280.5 +/- 4.6
			700	0.3	4.0855 +/- 0.0621	37.886 +/- 1.263	9.156 +/- 0.105	107.8 +/- 0.8	161.99 +/- 3.68	67	58	
			1100	0.3	0.8197 +/- 0.0155	4.233 +/- 0.195	5.11 +/- 0.181	102.2 +/- 2.6	11.28 +/- 0.98	42	4	
	c	0.14784	400	0.3	2.2888 +/- 0.0287	22.184 +/- 0.887	9.544 +/- 0.158	110.5 +/- 1.2	102.32 +/- 2.77	68	39	262.5 +/- 6.0
			700	0.3	3.7691 +/- 0.0589	33.55 +/- 1.48	8.767 +/- 0.181	106.5 +/- 1	148.62 +/- 5.18	65	57	
			1100	0.2	0.6501 +/- 0.0126	3.688 +/- 0.205	5.575 +/- 0.228	101.8 +/- 2.6	11.55 +/- 1.03	46	4	
PIT4-30-33	a	0.15618	400	0.3	2.9206 +/- 0.033	28.93 +/- 0.96	9.783 +/- 0.153	109.5 +/- 1.2	128.09 +/- 3.21	69	50	258.6 +/- 4.7
			700	0.3	3.3802 +/- 0.0536	29.188 +/- 1.005	8.542 +/- 0.118	107.9 +/- 1.1	121.28 +/- 3.2	65	47	
			1100	0.3	0.6421 +/- 0.0147	3.358 +/- 0.176	5.184 +/- 0.249	111.4 +/- 3.9	9.18 +/- 1.05	43	4	
	b	0.14753	400	0.3	2.5133 +/- 0.0346	25.266 +/- 1.048	9.899 +/- 0.204	114.9 +/- 1.7	118.68 +/- 3.86	69	46	257.5 +/- 5.2
			700	0.3	3.1213 +/- 0.0512	28.782 +/- 1.163	9.084 +/- 0.103	105.6 +/- 1	130.06 +/- 3.05	67	51	
			1100	0.3	0.5215 +/- 0.0152	2.882 +/- 0.24	5.433 +/- 0.43	111 +/- 4.1	8.78 +/- 1.55	45	3	
PIT4-40-43	a	0.16593	400	0.3	1.565 +/- 0.0212	38.288 +/- 1.208	24.198 +/- 0.373	127.3 +/- 2	201.06 +/- 4.46	87	87	232.0 +/- 4.7
			700	0.3	1.785 +/- 0.0276	10.196 +/- 0.381	5.651 +/- 0.117	103.3 +/- 1.6	29.07 +/- 1.34	47	13	
			1100	0.3	0.3359 +/- 0.011	1.311 +/- 0.124	3.868 +/- 0.369	101.7 +/- 6.2	1.85 +/- 0.75	23	1	
	b	0.13727	400	0.3	1.2963 +/- 0.0274	29.852 +/- 1.146	22.677 +/- 0.488	129.9 +/- 2.9	186.9 +/- 6.08	86	80	234.3 +/- 6.5
			700	0.3	1.4826 +/- 0.0227	10.431 +/- 0.471	6.926 +/- 0.195	109.1 +/- 2	43 +/- 2.21	57	18	
			1100	0.3	0.2719 +/- 0.013	1.437 +/- 0.124	5.193 +/- 0.472	115.7 +/- 8.3	4.44 +/- 0.96	42	2	
PIT4-50-53	a	0.15441	400	0.3	1.1244 +/- 0.0184	30.835 +/- 0.96	27.077 +/- 0.447	131.7 +/- 2.4	176.28 +/- 4.36	88	86	205.4 +/- 4.7
			700	0.3	1.6134 +/- 0.0273	9.083 +/- 0.35	5.571 +/- 0.125	105.9 +/- 1.4	27.4 +/- 1.39	47	13	
			1100	0.3	0.2457 +/- 0.0113	1.002 +/- 0.128	4.043 +/- 0.534	114.7 +/- 8	1.73 +/- 0.86	27	1	
	b	0.1368	400	0.3	1.3299 +/- 0.0197	26.977 +/- 1.112	19.978 +/- 0.429	124.5 +/- 2.6	166.07 +/- 4.85	84	84	197.1 +/- 5.2
			700	0.3	1.369 +/- 0.0196	8.053 +/- 0.357	5.791 +/- 0.152	111.1 +/- 2.2	28.45 +/- 1.58	48	14	
			1100	0.3	0.2624 +/- 0.0163	1.142 +/- 0.113	4.285 +/- 0.471	115.4 +/- 10	2.55 +/- 0.92	31	1	
PIT4-60-63	a	0.138	400	0.3	1.6322 +/- 0.0253	25.427 +/- 0.837	15.379 +/- 0.286	119.1 +/- 1.9	147.45 +/- 4.1	80	85	173.3 +/- 4.6
			700	0.3	1.6234 +/- 0.0222	7.933 +/- 0.325	4.831 +/- 0.144	102.5 +/- 1.5	22.11 +/- 1.72	38	13	
			1100	0.3	0.404 +/- 0.0228	1.718 +/- 0.128	4.225 +/- 0.367	114.7 +/- 7.4	3.72 +/- 1.1	30	2	
	b	0.16538	400	0.3	1.7394 +/- 0.0263	29.622 +/- 1.197	16.765 +/- 0.303	119.6 +/- 1.7	145.75 +/- 3.88	81	89	164.0 +/- 4.2
			700	0.3	1.6479 +/- 0.0255	7.39 +/- 0.361	4.395 +/- 0.133	102.5 +/- 1.3	14.36 +/- 1.35	32	9	
			1100	0.3	0.4346 +/- 0.0177	1.973 +/- 0.14	4.447 +/- 0.321	115.6 +/- 5.7	3.93 +/- 0.86	33	2	

Notes:

² Computed by comparison to ²⁰Ne signal in air pipettes. 1-sigma uncertainty includes measurement uncertainty of ²¹Ne signal in this analysis and the reproducibility of the air pipette signal

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⁴ Isotope ratio measured internally during each analysis; does not involve normalization to the Ne isotope signals in the air pipettes.

⁵ Analyses where cosmogenic ²¹Ne was not distinguishable from zero at 1 sigma are not shown. Cosmogenic ²¹Ne concentrations were calculated by normalization to either the ²⁰Ne or ²¹Ne signal in the air pipettes, depending on which method yielded better precision.