

Supplementary

New ⁴⁰Ar/³⁹Ar dating of the Mien and Hummeln impact structures, Sweden

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Table S1. Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Mien samples

Lab ID	$^{40}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{38}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{37}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{36}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{40}\text{Ar}^*/^{39}\text{Ar}_k$	$\pm 1\sigma$	$^{40}\text{Ar}^*$ [%]	Age [Ma]	$\pm 1\sigma$	Ca/K	$\pm 1\sigma$
MIE 15-03 J-1 $J \text{ value} = 1.009 \times 10^{-2} \pm 3.9 \times 10^{-6}$															
10081-01 A	8.4707701	0.0107532	0.0164560	0.0000548	0.2210771	0.0091505	0.0184157	0.0000455	2.9902611	0.0125085	35.3	54.40	0.22	0.433	0.018
10081-01 B	6.8934542	0.0012709	0.0118855	0.0000258	0.2185670	0.0009986	0.0013213	0.0000016	6.5167277	0.0016184	94.5	116.54	0.03	0.428	0.002
10081-01 C	6.7340150	0.0017230	0.0121028	0.0000281	0.3119081	0.0022949	0.0007791	0.0000025	6.5271585	0.0020840	96.9	116.72	0.04	0.611	0.004
10081-01 D	6.7627061	0.0020980	0.0120258	0.0000289	0.2093981	0.0027979	0.0005665	0.0000032	6.6106098	0.0024695	97.7	118.16	0.04	0.410	0.005
10081-01 E	7.0182394	0.0040780	0.0120833	0.0000341	0.1833129	0.0038568	0.0006813	0.0000049	6.8296796	0.0043514	97.3	121.95	0.08	0.359	0.008
10081-01 F	7.6547521	0.0084567	0.0121153	0.0000388	0.2403345	0.0066031	0.0010679	0.0000087	7.3557137	0.0086137	96.1	131.02	0.15	0.471	0.013
10081-01 G	9.1845617	0.0174211	0.0122384	0.0000676	0.2495514	0.0122274	0.0016146	0.0000162	8.7233476	0.0173099	95.0	154.37	0.29	0.489	0.024
10081-01 H	11.2750545	0.0162805	0.0123484	0.0000612	0.2770276	0.0090950	0.0020316	0.0000170	10.6920901	0.0163022	94.8	187.48	0.27	0.543	0.018
10081-01 I	13.2468499	0.0409494	0.0128201	0.0000700	0.4219343	0.0192802	0.0044507	0.0000356	11.9547804	0.0383460	90.2	208.41	0.63	0.827	0.038
10081-01 J	13.3290717	0.0717190	0.0135375	0.0001046	0.5540329	0.0347003	0.0063301	0.0000609	11.4875179	0.0638677	86.2	200.69	1.06	1.086	0.068
10081-01 K	17.0343209	0.1128287	0.0146164	0.0001333	0.7165088	0.0450552	0.0118305	0.0001081	13.5660084	0.0929327	79.6	234.77	1.51	1.404	0.088
10081-01 L	28.4012329	0.2973249	0.0170140	0.0002106	0.7568047	0.0612685	0.0229071	0.0002652	21.6338295	0.2294137	76.1	361.32	3.48	1.483	0.120
MIE 15-03 J-2 $J \text{ value} = 1.009 \times 10^{-2} \pm 2.8 \times 10^{-6}$															
10083-01 A	8.7515221	0.0245146	0.0152655	0.0000684	0.2025285	0.0132811	0.0161526	0.0000821	3.9451460	0.0237141	45.1	71.45	0.42	0.397	0.026
10083-01 B	7.1660820	0.0018173	0.0142049	0.0000323	0.2162615	0.0022305	0.0086730	0.0000153	4.5941175	0.0047728	64.1	82.94	0.09	0.424	0.004
10083-01 C	6.3444548	0.0005446	0.0120132	0.0000260	0.2096790	0.0009985	0.0007076	0.0000022	6.1501812	0.0012613	96.9	110.20	0.04	0.411	0.002
10083-01 D	6.8560776	0.0003483	0.0116057	0.0000249	0.2127026	0.0006939	0.0001236	0.0000006	6.8364731	0.0010080	99.7	122.09	0.04	0.417	0.001
10083-01 E	6.7669983	0.0005696	0.0118045	0.0000256	0.2233699	0.0010547	0.0002754	0.0000014	6.7029940	0.0011679	99.0	119.79	0.04	0.438	0.002
10083-01 F	6.8246062	0.0008958	0.0118933	0.0000262	0.2056404	0.0014590	0.0005426	0.0000021	6.6793120	0.0014295	97.9	119.38	0.04	0.403	0.003

Table S1 (continued). Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Mien samples

Lab ID	⁴⁰ Ar/ ³⁹ Ar	±1σ	³⁸ Ar/ ³⁹ Ar	±1σ	³⁷ Ar/ ³⁹ Ar	±1σ	³⁶ Ar/ ³⁹ Ar	±1σ	⁴⁰ Ar*/ ³⁹ Ar _K	±1σ	⁴⁰ Ar [%]	Age [Ma]	±1σ	Ca/K	±1σ
MIE 15-03 J-2 J value = 1.009x10 ⁻² ±2.8x10 ⁻⁶															
10083-01 G	6.8626264	0.0012053	0.0119799	0.0000270	0.1993273	0.0017299	0.0007184	0.0000040	6.6643013	0.0019174	97.1	119.12	0.05	0.391	0.003
10083-01 H	6.8876292	0.0013620	0.0119814	0.0000274	0.1907165	0.0015788	0.0008259	0.0000042	6.6564941	0.0020425	96.6	118.98	0.05	0.374	0.003
10083-01 I	6.8726169	0.0017865	0.0119618	0.0000277	0.1665929	0.0017422	0.0007628	0.0000049	6.6582410	0.0024641	96.9	119.01	0.05	0.327	0.003
10083-01 J	6.8972981	0.0021144	0.0119522	0.0000284	0.1801138	0.0021621	0.0007370	0.0000041	6.6918038	0.0025740	97.0	119.59	0.05	0.353	0.004
10083-01 K	6.9264770	0.0020225	0.0119285	0.0000286	0.1803390	0.0022140	0.0007463	0.0000046	6.7182151	0.0025763	97.0	120.05	0.05	0.353	0.004
10083-01 L	7.0984774	0.0007376	0.0119401	0.0000260	0.1934054	0.0011337	0.0008896	0.0000027	6.8485679	0.0014330	96.5	122.30	0.04	0.379	0.002
MIE 15-03 J-3 J value = 1.009x10 ⁻² ±2.8x10 ⁻⁶															
10082-01 A	-29.4568519	50.9222606	-0.0168358	0.0296417	-6.5951314	12.9179207	-0.0680613	0.1178193	-9.6279152	16.8262264	32.8	-187.05	344.19	-12.926	25.319
10082-01 B	11.4125065	0.3575884	0.0163489	0.0005445	0.2241891	0.1117250	0.0192768	0.0006435	5.6755282	0.1936087	49.7	101.92	3.38	0.439	0.219
10082-01 C	10.1678208	0.6285300	0.0162934	0.0010495	0.2046232	0.2196864	0.0209365	0.0013389	3.9333417	0.2775922	38.7	71.24	4.93	0.401	0.431
10082-01 D	9.1090855	0.1033880	0.0152024	0.0002022	0.2895926	0.0456185	0.0160625	0.0002080	4.3369414	0.0595521	47.6	78.39	1.05	0.568	0.089
10082-01 E	10.0076120	0.1209959	0.0153638	0.0002122	0.2920514	0.0470455	0.0171553	0.0470455	4.9095194	0.0705179	49.1	88.50	1.24	0.572	0.092
10082-01 F	10.5961869	0.0699330	0.0158520	0.0001274	0.2862039	0.0271736	0.0183799	0.0001469	5.1320516	0.0429797	48.4	92.41	0.76	0.561	0.053
10082-01 G	11.1394352	0.0487648	0.0157434	0.0000988	0.2479438	0.0181513	0.0185298	0.0001048	5.6274116	0.0321712	50.5	101.08	0.56	0.486	0.036
10082-01 H	9.9826126	0.0300680	0.0155732	0.0000758	0.2492431	0.0129948	0.0168980	0.0000732	4.9577741	0.0220493	49.7	89.34	0.39	0.489	0.025
10082-01 I	9.0412841	0.0190765	0.0150684	0.0000604	0.2666563	0.0098408	0.0139562	0.0000493	4.8962103	0.0159904	54.1	88.26	0.28	0.523	0.019
10082-01 J	7.8006071	0.0110497	0.0144196	0.000046.81	0.2643151	0.0070916	0.0101731	0.0000284	4.7848205	0.0101794	61.3	86.30	0.18	0.518	0.014
10082-01 K	6.9058560	0.0078092	0.0136621	0.0000444	0.2618543	0.0058813	0.0066567	0.0000213	4.9397434	0.0083162	71.5	89.03	0.15	0.513	0.012
10082-01 M	6.3353976	0.0058475	0.0130005	0.0000408	0.2691967	0.0050970	0.0038566	0.0000153	5.2059086	0.0066878	82.2	93.70	0.12	0.528	0.010

Table S1 (continued). Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Mien samples

Lab ID	$^{40}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{38}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{37}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{36}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{40}\text{Ar}^*/^{39}\text{Ar}_K$	$\pm 1\sigma$	^{40}Ar [%]	Age [Ma]	$\pm 1\sigma$	Ca/K	$\pm 1\sigma$
MIE 15-03 J-3 J value = $1.009 \times 10^{-2} \pm 2.8 \times 10^{-6}$															
10082-01 N	6.0320970	0.0035075	0.0123908	0.0000329	0.2606170	0.0037903	0.0017118	0.0000078	5.522488	0.0041043	91.9	99.60	0.08	0.511	0.007
10082-01 O	6.0290433	0.0020925	0.0120218	0.0000292	0.2654199	0.0028009	0.0005552	0.0000030	5.8849738	0.0024371	97.6	105.58	0.05	0.520	0.005
10082-01 P	6.3795567	0.0014973	0.0118139	0.0000272	0.2755136	0.0020267	0.0002212	0.0000017	6.3361124	0.0018415	99.3	113.43	0.04	0.540	0.004
10082-01 Q	6.6865217	0.0014311	0.0117723	0.0000268	0.2862990	0.0018556	0.0001477	0.0000011	6.6660085	0.0017468	99.7	119.15	0.04	0.561	0.004
MIE 15-03 J-4 J value = $1.009 \times 10^{-2} \pm 2.8 \times 10^{-6}$															
10082-02 A	16.1821291	0.0471994	0.195996	0.0000845	0.2175234	0.0119149	0.0379169	0.0001561	4.8792291	0.0362386	30.1	87.96	0.64	0.426	0.023
10082-02 B	7.4960891	0.0008089	0.0126232	0.0000278	0.2007263	0.0011125	0.0044430	0.0000058	6.1857853	0.0020727	82.5	110.82	0.05	0.393	0.002
10082-02 C	7.0100618	0.0009083	0.0119849	0.0000264	0.2219462	0.0014372	0.0012517	0.0000037	6.6544312	0.2044897	94.9	118.94	0.04	0.435	0.003
10082-02 D	6.8971476	0.0012766	0.0119537	0.0000270	0.1796978	0.0016817	0.0007925	0.0000041	6.6750417	0.0019875	96.8	119.30	0.05	0.352	0.003
10082-02 E	6.7730608	0.0012399	0.0119304	0.0000272	0.1659268	0.0012292	0.0005337	0.0000029	6.6270471	0.0017550	97.8	118.47	0.04	0.325	0.002
10082-02 F	6.8643544	0.0012705	0.0119514	0.0000273	0.1661951	0.0014980	0.0005274	0.0000032	6.7202421	0.0018298	97.9	120.08	0.05	0.326	0.003
10082-02 G	6.8618854	0.0015675	0.0119492	0.0000275	0.1897734	0.0021680	0.0005934	0.0000039	6.7000900	0.0021378	97.6	119.73	0.05	0.372	0.004
10082-02 H	6.8694583	0.0014173	0.0119691	0.0000273	0.1887916	0.0016590	0.0006674	0.0000038	6.6854711	0.0020281	97.3	119.48	0.05	0.370	0.003
10082-02 I	6.8760231	0.0014481	0.0119850	0.0000270	0.1879734	0.0016845	0.0006629	0.0000037	6.6933264	0.0020233	97.3	119.62	0.05	0.368	0.003
10082-02 J	6.9559179	0.0022618	0.0119866	0.0000294	0.1631416	0.0023184	0.0007880	0.0000056	6.7337439	0.0029217	96.8	120.32	0.06	0.320	0.005
10082-02 K	7.3313256	0.0031690	0.0120000	0.0000302	0.1811668	0.0032311	0.0008437	0.0000075	7.0941074	0.0039303	96.8	126.54	0.08	0.355	0.006
10082-02 L	7.3525431	0.0030027	0.0121548	0.0000308	0.1852820	0.0029394	0.0013947	0.0000084	6.9511718	0.0039171	94.5	124.07	0.08	0.363	0.006

In bold font, steps are included in the age spectra.

Table S2. Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Hummeln samples

Lab ID	⁴⁰ Ar/ ³⁹ Ar	±1σ	³⁸ Ar/ ³⁹ Ar	±1σ	³⁷ Ar/ ³⁹ Ar	±1σ	³⁶ Ar/ ³⁹ Ar	±1σ	⁴⁰ Ar*/ ³⁹ Ar _k	±1σ	⁴⁰ Ar [%]	Age [Ma]	±1σ	Ca/K	±1σ
HUM 15-01 J															
J value = 1.009x10 ⁻² ±3.9x10 ⁻⁶															
10079-01 A	20.2395112	0.1156831	0.0169895	0.0001339	0.0962445	0.0312848	0.0146456	0.0001046	15.8754081	0.0928831	78.4	271.8	1.5	0.189	0.061
10079-01 B	42.3635839	0.0133959	0.0121249	0.0000293	0.0531327	0.0017245	0.0015949	0.0000044	41.8924000	0.0133726	98.9	645.1	0.2	0.104	0.003
10079-01 C	68.0393733	0.0201855	0.0121654	0.0000294	0.0706359	0.0015860	0.0007427	0.0000032	67.8258720	0.0201795	99.7	954.0	0.2	0.138	0.003
10079-01 D	75.2791359	0.0245340	0.0123526	0.0000298	0.0918597	0.0023062	0.0005998	0.0000031	75.1115001	0.0245269	99.8	1032.2	0.3	0.180	0.005
10079-01 E	83.2350282	0.0631877	0.0126001	0.0000375	0.1262503	0.0051131	0.0006184	0.0000061	83.0671724	0.0631087	99.8	1113.9	0.6	0.247	0.010
10079-01 F	82.3443456	0.1309856	0.0126195	0.0000466	0.1236383	0.0107172	0.0006749	0.0000103	82.1591680	0.1307575	99.8	1104.7	1.3	0.242	0.021
10079-01 G	85.3021299	0.2885959	0.0125994	0.0000733	0.1628612	0.0194986	0.0006922	0.0000186	85.1175298	0.2880830	99.8	1134.4	2.9	0.319	0.038
10079-01 H	84.0077613	0.5254897	0.0125959	0.0001129	0.2429301	0.0327657	0.0008189	0.0000300	83.7962879	0.5243714	99.7	1121.2	5.3	0.476	0.064
10079-01 I	84.0927282	0.9664258	0.0124301	0.0001734	0.1170409	0.0628061	0.0008567	0.0000477	83.8524507	0.9639221	99.7	1121.7	9.6	0.229	0.123
10079-01 J	90.6470881	1.3325452	0.0133964	0.0002304	0.2142986	0.0793834	0.0009168	0.0000619	90.4035652	1.3293835	99.7	1186.1	12.8	0.420	0.156
10079-01 K	93.6028755	0.2923090	0.0129280	0.0000700	0.1660614	0.0196011	0.0008713	0.0000200	93.3662469	0.2916907	99.7	1214.5	2.8	0.325	0.038
10079-01 L	133.3012981	8.0689681	0.0152557	0.0009859	0.4796718	0.3372438	0.0037179	0.0003372	132.2737680	8.0102055	99.2	1551.4	63.4	0.940	0.661
HUM 15-02-1															
J value = 1.009x10 ⁻² ±3.9x10 ⁻⁶															
10080-01 A	-1.8967859	0.7135003	0.0009845	0.0011026	-1.1374500	1.0680735	-0.0051440	0.0022022	-0.4550771	0.5896551	24.0	-8.4	10.9	-2.229	2.093
10080-01 B	106.4356730	79.0586142	0.0770024	0.0572842	-4.8196227	4.4853540	0.2562716	0.1904049	29.4384859	21.8635220	27.8	475.9	311.2	-9.446	8.791
10080-01 C	37.6916784	1.7632637	0.0273369	0.0013162	0.5454121	0.1716366	0.0673894	0.0031817	17.6222835	0.8370618	46.7	299.4	13.1	1.069	0.336
10080-01 D	34.7337181	0.7863819	0.0212941	0.0005152	0.3885891	0.0842813	0.0404156	0.0009417	22.7042409	0.5190439	65.4	377.4	7.8	0.762	0.165
10080-01 E	35.1650800	0.5078841	0.0195998	0.0003153	0.5831002	0.0541734	0.0323261	0.0004913	25.5706720	0.3726294	72.7	420.0	5.5	1.143	0.106
10080-01 F	32.6239365	0.4596018	0.0188980	0.0002970	0.6446239	0.0573694	0.0269274	0.0004137	24.6470535	0.3511630	75.5	406.4	5.2	1.263	0.112

Table S2 (continued). Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Hummelin samples

Lab ID	$^{40}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{38}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{37}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{36}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{40}\text{Ar}^*/^{39}\text{Ar}_k$	$\pm 1\sigma$	^{40}Ar [%]	Age [Ma]	$\pm 1\sigma$	Ca/K	$\pm 1\sigma$
HUM 15-02-1 J value = $1.009 \times 10^{-2} \pm 3.9 \times 10^{-6}$															
10080-01 G	32.7592750	0.3139141	0.0182177	0.0002070	0.8385003	0.0382401	0.0234810	0.0002513	25.8310078	0.2501023	78.8	423.8	3.7	1.643	0.075
10080-01 H	33.2437297	0.2372312	0.0175721	0.0001617	1.0188002	0.0334334	0.0190754	0.0001633	27.6498690	0.1994258	83.1	450.2	2.9	1.997	0.066
10080-01 I	33.5390624	0.1796952	0.0163498	0.0001154	1.1291060	0.0239228	0.0160607	0.0001092	28.8571246	0.1561146	86.0	467.6	2.2	2.213	0.047
10080-01 J	35.2063253	0.1529246	0.0154430	0.0000951	1.4391624	0.0267626	0.0130688	0.0000823	31.4513954	0.1379866	89.2	504.3	1.9	2.821	0.052
10080-01 K	38.3419543	0.1616293	0.0154792	0.0000962	1.7853249	0.0290298	0.0116623	0.0000707	35.0469236	0.1487825	91.3	554.0	2.0	3.499	0.057
10080-01 L	39.7592156	0.1522570	0.0148313	0.0000847	2.2489445	0.0285134	0.0098545	0.0000621	37.0556896	0.1429664	93.1	581.2	1.9	4.408	0.056
10080-01 M	41.3628423	0.1684804	0.0149835	0.0000921	2.7686814	0.0339953	0.0092859	0.0000606	38.8879176	0.1594221	93.8	605.7	2.1	5.427	0.067
10080-01 N	42.2484890	0.1323218	0.0149917	0.0000784	3.2902300	0.0316249	0.0086633	0.0000490	40.0182186	0.1263080	94.5	620.6	1.7	6.449	0.062
10080-01 O	43.5113872	0.1239052	0.0150198	0.0000721	3.7105646	0.0368897	0.0085005	0.0000456	41.3788144	0.1188233	94.9	638.4	1.6	7.273	0.072
HUM 15-02-2 J value = $1.009 \times 10^{-2} \pm 3.9 \times 10^{-6}$															
10080-02 A	40.4557030	0.2496069	0.0222465	0.0001713	0.8715852	0.0286658	0.0486856	0.0003266	26.0055761	0.1652945	64.2	426.3	2.4	1.708	0.056
10080-02 B	38.5385290	0.0877513	0.0191319	0.0000797	0.9923646	0.0142459	0.0303654	0.0000914	29.5725161	0.0698400	76.7	477.8	1.0	1.945	0.028
10080-02 C	38.5612923	0.0683798	0.0165551	0.0000605	1.2298947	0.0145807	0.0186925	0.0000546	33.1073075	0.0602867	85.8	527.4	0.8	2.411	0.029
10080-02 D	41.0504841	0.0858002	0.0150305	0.0000633	1.6411211	0.0195973	0.0121373	0.0000458	37.6013106	0.0795851	91.5	588.5	1.1	3.217	0.038
10080-02 E	45.6030951	0.1044142	0.0147115	0.0000455	2.1102358	0.0198556	0.0112235	0.0000455	42.4839686	0.0981336	93.0	652.7	1.3	4.136	0.039
10080-02 F	48.6050501	0.0966904	0.0145766	0.0000591	2.5003437	0.0217059	0.0103731	0.0000402	45.7885422	0.0919188	94.0	694.9	1.2	4.901	0.043
10080-02 G	50.7377140	0.1059016	0.0143952	0.0000623	2.7457163	0.0239659	0.0097381	0.0000424	48.1428347	0.1013820	94.7	724.4	1.3	5.382	0.047
10080-02 H	53.0475240	0.1020364	0.0144571	0.0000601	3.1875501	0.0235721	0.0092716	0.0000364	50.6479089	0.0981975	95.3	755.3	1.2	6.248	0.046
10080-02 I	54.6995987	0.0991644	0.0144290	0.0000561	3.3688192	0.0244687	0.0088439	0.0000304	52.4529309	0.0957365	95.7	777.2	1.2	6.603	0.048

Table S2 (continued). Ar isotopic ratios, J-values, apparent ages, and Ca/K ratios of the Hummeln samples

Lab ID	$^{40}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{38}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{37}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{36}\text{Ar}/^{39}\text{Ar}$	$\pm 1\sigma$	$^{40}\text{Ar}^*/^{39}\text{Ar}_k$	$\pm 1\sigma$	^{40}Ar [%]	Age [Ma]	$\pm 1\sigma$	Ca/K	$\pm 1\sigma$
HUM 15-02-2															
J value = $1.009 \times 10^{-2} \pm 3.9 \times 10^{-6}$															
10080-02 J	56.3656562	0.089235	0.0143943	0.0000537	3.5157092	0.0214241	0.0083598	0.0000293	54.2851801	0.0872835	96.1	799.2	1.0	6.891	0.042
10080-02 K	58.852138	0.0500619	0.0146002	0.0000400	3.5368171	0.0174872	0.0082877	0.0000217	56.8050024	0.0490059	96.3	829.0	0.6	6.932	0.034
10080-02 L	40.3921631	0.0030090	0.0130010	0.0000284	2.5818147	0.0064046	0.0037142	0.0000032	39.5616443	0.0037653	97.8	614.6	0.1	5.060	0.013
HUM 15-02-3															
J value = $1.009 \times 10^{-2} \pm 3.9 \times 10^{-6}$															
10080-03 A	24.3753358	0.6293063	0.0176656	0.0004914	1.2121634	0.1755383	0.0245405	0.0006643	17.1601337	0.4486375	70.3	292.2	7.1	2.376	0.344
10080-03 B	27.3522898	0.0831379	0.0161570	0.0000767	1.1920410	0.0246183	0.0167701	0.0000720	22.4595326	0.0701243	82.0	373.7	1.1	2.336	0.048
10080-03 C	35.7393769	0.1307294	0.0155323	0.0000855	2.3692831	0.0379918	0.0125623	0.0000698	32.2323092	0.1192557	90.0	515.2	1.7	4.644	0.075
10080-03 D	49.5539410	0.1730792	0.0155451	0.0000817	4.3961567	0.0476153	0.0122428	0.0000647	46.3943649	0.1633384	93.3	702.6	2.1	8.616	0.093
10080-03 E	54.6526549	0.1581475	0.0154255	0.0000761	5.2229409	0.0442899	0.0100909	0.0000486	52.2501802	0.1523600	95.3	774.8	1.8	10.237	0.087
10080-03 F	59.7760120	0.1353002	0.0149392	0.0000659	4.5971397	0.0424660	0.0077635	0.0000361	58.0163649	0.1322583	96.7	843.2	1.5	9.010	0.083
10080-03 G	71.9513701	0.0961425	0.0139504	0.0000463	3.8521614	0.0234304	0.0049143	0.0000195	70.9841728	0.0954067	98.4	988.3	1.0	7.550	0.046
10080-03 H	86.8349967	0.0725470	0.0133911	0.0000393	3.0443013	0.0158272	0.0035000	0.0000120	86.2172329	0.0723995	99.1	1145.2	0.7	5.967	0.031
10080-03 I	103.5465574	0.0485711	0.0129545	0.0000337	1.8527436	0.0102822	0.0021115	0.0000076	103.1977110	0.0486147	99.5	1305.7	0.4	3.631	0.020
10080-03 J	116.7936917	0.0444831	0.0126303	0.0000313	1.2641001	0.0070859	0.0014418	0.0000056	116.5668042	0.0445303	99.7	1422.8	0.4	2.478	0.014
10080-03 K	119.3052430	0.0553326	0.0127652	0.0000339	1.4131443	0.0083509	0.0014540	0.0000056	119.1013187	0.0553771	99.7	1444.1	0.5	2.770	0.016
10080-03 L	115.1467113	0.1107661	0.0128556	0.0000394	1.4492804	0.0134341	0.0015486	0.0000093	114.9162643	0.1107373	99.7	1408.7	1.0	2.841	0.026

In bold font, steps are included in the age spectra.