

Sample Information

sample field number DU-9
 project description FWF P22-728
 number of measurement 096072
 number of irradiation 25-148
 value of irradiation 0.007944
 duration of irradiation [h] 16.0
 year of irradiation 2008
 julian day of irradiation 346

material: Polyhalt
 grain size: 200-250 µm
 number: 5
 notes: Bad Dürrenberg mine
 (+/- 1sigma)

conversion from [V] to [cps] by: 6E+07
 composition of atmospheric argon: (40Ar/36Ar)atm. = 295.5
 half-life of 37Ar [a]: = 35.1
 decay constant of 37Ar [dE-01]: = 1.975E-02
 decay constant of 39Ar [dE-1]: = 7.084E-06
 decay constant of 40K [dE-01]: = 5.543E-10
 correction for Ca-derived Ar: (36Ar/37Ar)Ca = Measured
 correction for K-derived Ar: (39Ar/37Ar)Ca = Measured
 correction for K-derived Ar: (40Ar/39Ar)K = Measured
 correction for K-derived Ar: (38Ar/39Ar)K = Measured

±1sigma
 (Steiger & Jäger 1977)
 (Steininger et al. 1985)
 (Steiger & Jäger 1977)
 Measured
 Measured
 Measured

sample	36Ar	37Ar	38Ar	39Ar	40Ar	date of measurement	days elapsed	post-irrad. 37Ar decay factor	number of steps	mean of dec. 37Ar corr. factor				
096071a	8.09248E-07	4.0370	1.34063E-06	5.0565	1.36999E-06	2.7357	3.78995E-06	2.1206	1.05749E-04	0.6205	2009	176	9	4.745E+01
a 3.4%	1.80297E-06	3.1028	1.76105E-05	0.7337	2.37020E-05	0.6031	1.59110E-03	0.1024	2.42245E-02	0.0846	2009	176	195	4.734E+01
b 3.5%	1.27513E-06	2.8449	1.31824E-05	0.9966	1.38866E-05	1.2327	1.18876E-03	0.0745	1.88694E-02	0.0830	2009	176	195	4.734E+01
c 3.6%	1.78005E-06	3.3389	1.03027E-06	13.2274	1.39900E-06	3.0582	2.72428E-06	4.5384	1.24228E-04	0.3801	2009	176	195	4.734E+01
d 4.2%	1.57553E-06	3.0588	2.21871E-05	0.7286	2.47703E-05	0.6805	2.0048E-03	0.0932	3.46434E-02	0.1582	2009	176	195	4.734E+01
e 3.9%	2.42541E-06	1.5342	2.72718E-05	0.5116	3.47528E-05	0.6105	2.61548E-03	0.0725	3.98157E-02	0.0835	2009	176	195	4.734E+01
f 4.0%	1.57553E-06	3.0588	2.21871E-05	0.7286	2.47703E-05	0.6805	2.0048E-03	0.0932	3.46434E-02	0.1582	2009	176	195	4.734E+01
g 4.2%	1.57553E-06	3.0588	2.21871E-05	0.7286	2.47703E-05	0.6805	2.0048E-03	0.0932	3.46434E-02	0.1582	2009	176	195	4.734E+01
h 4.6%	1.64531E-06	3.7546	1.35494E-06	7.2015	2.75831E-06	2.6995	9.98480E-06	0.2027	1.64424E-04	0.6348	2009	176	195	4.734E+01
i 4.9%	1.94298E-06	2.1424	7.00378E-06	1.2403	7.45524E-06	2.3003	4.02811E-04	0.2164	5.86402E-03	0.0742	2009	176	195	4.734E+01
j 5.3%	1.00303E-06	6.0223	1.67061E-06	3.3028	1.84822E-06	2.8354	5.38601E-06	1.6705	1.63437E-04	0.4699	2009	177	196	4.820E+01
k 5.3%	2.2827E-06	2.2955	3.38000E-05	0.9024	3.72268E-05	0.5435	3.09719E-03	0.0528	4.82194E-02	0.0205	2009	177	196	4.820E+01

blank and background-corrected intensities and absolute errors (1-sigma abs.)	36Ar	37Ar	38Ar	39Ar	40Ar	36Ar/38Ar	37Ar/38Ar	39Ar/38Ar	40Ar/38Ar	36Ar/39Ar	37Ar/39Ar	40Ar/39Ar	36Ar/40Ar	37Ar/40Ar	39Ar/40Ar	age	±1sigma	±1sigma														
a 3.4%	6.20114E+01	4.04E+00	1.01506E+03	9.11E+00	1.39448E+03	9.23E+00	9.90787E+04	1.02E+02	1.50551E+06	1.28E+03	11.31	11.31	98.99	0.0002588	4.0815E-05	0.010250	9.2593E-05	0.014074	9.42469E-05	15.195087	0.00206507	0.485272837	0.004380501	99049.13358	101.822807	1.48775E+06	1751.163406	15.020288	0.023473	203.4	0.5	6.343E-01
b 3.5%	2.90813E+01	3.05E+00	7.39249E+02	9.23E+00	7.87548E+02	1.10E+01	7.39625E+04	5.59E+01	1.17126E+06	9.78E+02	8.44	19.75	99.46	0.0003393	4.12023E-05	0.000995	0.000125	0.010648	0.000149123	15.839508	0.017783463	0.472176776	0.005917718	73941.06156	55.506184	1163030.646	1330.099525	15.729158	0.021519	212.4	0.5	6.439E-01
c 3.6%	5.50708E+01	4.20E+00	1.25157E+03	1.70E+01	1.34789E+03	1.20E+01	1.25523E+05	8.70E+01	2.17871E+06	3.52E+03	14.33	34.08	99.42	0.000445	3.34485E-05	0.000971	0.000185248	0.010738	9.56242E-05	17.341051	0.036683035	0.472037478	0.00402085	125487.0728	87.949404	2160789.405	3798.887384	17.219219	0.032125	231.3	0.6	7.512E-01
d 3.9%	9.61920E+01	2.97E+00	1.63805E+03	1.22E+01	2.08201E+03	1.35E+01	1.63084E+05	1.19E+02	2.46514E+06	2.07E+03	99.05	52.70	99.05	0.000590	1.81865E-05	0.010044	7.50013E-05	0.012786	8.33568E-05	15.114816	0.016788063	0.475481032	0.003550779	163046.3755	118.618302	2437529.658	2243.615018	14.949916	0.017540	202.5	0.5	5.999E-01
e 4.0%	2.20293E+01	4.02E+00	1.03090E+02	1.09E+01	1.81554E+02	6.42E+00	8.43070E+03	1.54E+01	1.51148E+05	9.07E+01	0.96	53.86	95.28	0.002990	0.000477126	0.012228	0.001295078	0.021535	0.000762523	17.528173	0.0344798	0.578887311	0.061311302	8427.759953	15.407373	143799.0275	1192.633049	17.062544	0.144898	229.3	1.9	1.933E+00
f 4.2%	4.31413E+01	3.53E+00	1.32065E+03	1.32E+01	1.48888E+03	1.05E+01	1.24704E+05	1.17E+02	2.15470E+06	3.45E+03	14.24	67.80	99.60	0.000346	2.82935E-05	0.010590	0.000106286	0.011699	8.77361E-05	17.278975	0.018141098	0.50136315	0.000323235	12485.4642	118.638750	2142941.391	3876.791213	17.188791	0.032891	231.9	0.6	7.556E-01
g 4.6%	3.18034E+01	5.02E+00	7.57894E+02	7.66E+00	8.84051E+02	1.28E+01	6.37204E+04	1.26E+02	9.19048E+05	6.69E+02	7.27	75.17	99.24	0.000499	7.87907E-05	0.011884	0.000122479	0.013874	0.000204765	14.423139	0.0304369	0.563085384	0.005798382	63688.39413	126.225641	910341.8651	1627.349141	14.291441	0.038141	194.0	0.6	7.251E-01
h 4.9%	1.85818E+01	4.65E+00	3.52612E+02	8.15E+00	2.83210E+02	1.17E+01	2.45145E+04	5.59E+01	3.55796E+05	2.79E+02	2.80	77.37	98.77	0.000758	0.000189886	0.014384	0.000334265	0.011861	0.000478558	14.521463	0.034861981	0.680186882	0.015824688	24504.2447	55.833741	350733.8586	1402.376252	14.313177	0.066570	194.3	0.9	1.002E+00
i 5.3%	7.64818E+01	4.94E+00	2.08014E+03	1.94E+01	2.20834E+03	1.30E+01	1.92298E+05	1.02E+02	2.99765E+06	8.19E+02	22.03	100.00	99.46	0.000396	2.56532E-05	0.010395	0.00011043	0.011462	6.78731E-05	15.543068	0.008359944	0.501919922	0.004649358	192236.4023	102.236239	2978456.036	1587.080460	15.437502	0.011601	208.7	0.5	5.916E-01
total	4.38410E+02	1.23E+01	9.18489E+03	3.74E+01	1.06379E+04	3.41E+01	8.76024E+05	2.80E+02	1.38991E+07	5.65E+03	100.00	99.06792197	0.00050455	1.40708E-05	0.010485	4.27957E-05	0.012143	15.866097	0.008206491	0.497465	0.002030513	8.75756E+05	280.354591	13775212.2	6721.371176	15.729501	0.009179	212.4	0.5	5.843E-01		

