

5.2425E-06 1.8727E-11

sample field number B0G-02
 project description FWF P22-728
 number of measurement 090018
 number of irradiation 25-145
 value of irradiation 0.007917 0.000018
 duration of irradiation [h] 16.0
 year of irradiation 2008
 julian day of irradiation 346

material: Polyhallt
 grain size: 200-250 µm
 number: 1
 notes: Berchtesgarden mine
 (+/- 1sigma)

conversion from [V] to [cps] by: 6E+07
 composition of atmospheric argon: (40Ar/36Ar)atm. = 295.5 +/- 1sigma
 half-life of 37Ar [d] = 35.1 (Steiger & Jäger 1977)
 decay constant of 37Ar [dE-01] = 1.975E-02 (Stoerner et al. 1965)
 decay constant of 39Ar [dE-01] = 7.264E-06 (Stoerner et al. 1965)
 decay constant of 40K [dE-01] = 5.543E-10 (Steiger & Jäger 1977)
 correction for Ca-derived Ar: (36Ar/37Ar)Ca = 2.250E-04 Measured
 correction for Ca-derived Ar: (39Ar/37Ar)Ca = 6.140E-04 Measured
 correction for K-derived Ar: (40Ar/39Ar)K = 2.660E-02 Measured
 correction for K-derived Ar: (38Ar/39Ar)K = 1.170E-02 Measured

step	36Ar	37Ar	38Ar	39Ar	40Ar	date of measurement						
0900017b	1.03525E-06	5.5934	1.11737E-06	2.8412	9.71900E-07	5.0968	2.35447E-06	6.8639	1.20142E-04	0.3455	2009	148
a 3.6%	1.1393E-06	4.1291	1.2206E-06	4.1071	2.02348E-06	2.9439	3.43812E-05	0.5607	4.36966E-04	0.2510	2009	148
b 3.7%	1.03525E-06	5.5934	1.11737E-06	2.8412	9.71900E-07	5.0968	2.35447E-06	6.8639	1.20142E-04	0.3455	2009	148
c 3.8%	1.06295E-06	2.0779	3.2614E-06	2.2668	7.01715E-06	1.6382	8.50918E-05	0.2859	1.00633E-03	0.1351	2009	148
d 3.9%	1.18794E-06	2.6081	1.2509E-05	0.7042	1.01867E-05	1.5932	4.86137E-04	0.1399	4.77554E-03	0.0625	2009	148
e 4.1%	1.02201E-06	3.9155	1.0451E-06	4.7589	1.05524E-06	6.0746	2.32642E-06	4.3037	1.19959E-04	0.5573	2009	148
f 4.3%	8.41973E-07	3.9155	1.0451E-06	4.7589	1.05524E-06	6.0746	2.32642E-06	4.3037	1.19959E-04	0.5573	2009	148
g 4.6%	9.63186E-07	7.1315	1.71350E-05	0.6327	1.32410E-05	1.3193	7.89420E-04	0.1517	7.71773E-03	0.0724	2009	153
h 4.9%	1.12748E-06	4.4038	9.70551E-06	0.5956	3.99478E-06	1.5919	6.84616E-05	0.2318	1.36275E-03	0.1024	2009	153
i 5.2%	8.32665E-07	3.0695	9.49038E-07	6.3056	8.40107E-07	4.5915	3.17062E-06	1.9897	1.11427E-04	0.6850	2009	153
j 5.3%	1.21044E-06	2.1125	5.2201E-05	0.5709	7.67091E-06	1.9406	9.88648E-05	0.2359	1.43153E-03	0.0863	2009	153
k 6.3%	2.60323E-06	2.6729	1.55975E-04	0.3585	1.75200E-05	1.1711	4.72818E-05	0.5934	9.26670E-04	0.1700	2009	154
l 6.3%	1.17850E-05	1.0368	6.25003E-04	0.1900	4.16305E-05	0.6793	1.91645E-04	0.4635	4.59962E-03	0.2356	2009	154

blank- and background-corrected intensities and absolute errors (1-sigma abs.)	36Ar	37Ar	38Ar	39Ar	40Ar	%39Ar	cum%39Ar	%40Ar	36Ar/39Ar	37Ar/39Ar	38Ar/39Ar	40Ar/39Ar	36Ar/39Ar	37Ar/39Ar	38Ar/39Ar	40Ar/39Ar	36Ar/39Ar	37Ar/39Ar	38Ar/39Ar	40Ar/39Ar	36Ar/39Ar	37Ar/39Ar	38Ar/39Ar	40Ar/39Ar	36Ar/39Ar	37Ar/39Ar	38Ar/39Ar	40Ar/39Ar	age [Ma]	+/- 1sigma [Ma]	+/- 1sigma [Ma]	
a 3.6%	6.52939E+00	4.68E+00	3.82409E+01	4.88E+00	6.58417E+01	4.84E+00	1.98045E+03	1.59E+01	1.97707E+04	7.32E+01	1.55	90.57	0.002926274	0.002351879	0.019309	0.002457616	0.033145	0.002458886	9.982939	0.06997966	0.52686284	0.069229993	1979.809223	15.622417	1.7852E+04	1378.259065	9.020174	0.699788	124.4	9.3	9.306E+00	
b 3.7%	1.7895E+00	3.87E+00	1.37978E+02	6.11E+00	3.72936E+02	6.83E+00	4.61648E+03	1.82E+01	6.53178E+04	8.87E+01	4.05	99.54	0.0003339	0.000749026	0.026696	0.000295249	0.0173066	0.01618993	10.711981	0.041529997	0.22703501	0.027148935	6162.321952	18.219394	54925.63174	1146.599301	10.639715	0.225295	145.9	3.0	2.985E+00	
c 3.8%	9.5312E+00	4.10E+00	7.10770E+02	5.84E+00	5.75331E+02	1.06E+01	3.01987E+04	4.36E+01	2.90599E+05	2.47E+02	23.70	99.47	0.0003316	0.000135727	0.202536	0.000196443	0.019052	0.00035189	9.622915	0.016136818	0.640984958	0.005348872	30186.77467	43.635748	288266.676	1236.217687	9.549436	0.043216	131.5	0.6	6.840E-01	
d 3.9%	2.02741E+00	3.48E+00	2.27871E+01	4.95E+00	1.16811E+01	5.61E+00	7.75916E+02	1.37E+01	8.68988E+03	6.96E+01	0.61	29.31	0.002671	0.004460263	0.025368	0.006403334	0.015016	0.00746598	11.72565	0.212628424	0.798800294	0.174386468	775.535196	13.867757	8077.210725	1025.013190	10.415013	1.334269	142.9	17.6	1.761E+01	
e 4.1%	6.2297E+00	3.35E+00	1.98713E+01	5.05E+00	3.61098E+02	4.99E+00	6.75111E+02	1.04E+01	7.78025E+03	6.95E+01	0.53	30.44	0.002602	0.000746108	0.009348	0.000389551	0.024906	0.007389551	11.524906	0.202333621	0.805633279	0.204008802	674.7771614	10.380114	595.843275	891.193584	8.832322	1.476218	121.9	19.7	1.976E+01	
f 4.3%	1.91992E+01	4.65E+00	3.25984E+02	8.27E+00	2.01461E+02	1.06E+01	1.37116E+04	1.36E+02	1.36457E+05	1.38E+02	10.76	41.20	0.001400	0.000638781	0.023774	0.000604827	0.014693	0.000772788	9.951997	0.022311637	0.714657204	0.018184903	13705.54517	27.540634	131071.0159	1379.425347	9.563357	0.102465	131.7	1.4	1.411E+01	
g 4.6%	2.67655E+01	5.19E+00	1.01346E+03	7.23E+00	7.52048E+02	1.12E+01	4.90883E+04	7.52E+01	4.73948E+05	3.30E+02	38.50	79.70	0.000545	0.000105797	0.020954	0.000150708	0.011526	0.000262688	9.659945	0.016428923	0.62086496	0.004532772	48949.59806	75.161342	466769.6473	1573.362143	9.516076	0.035240	131.0	0.5	5.972E-01	
h 4.9%	3.7021E+01	4.27E+00	5.49700E+02	4.42E+00	1.74875E+02	4.82E+00	5.31301E+03	1.50E+01	7.72577E+04	9.35E+01	4.17	83.87	0.000968	0.000804144	0.103461	0.000808935	0.032914	0.000911534	14.540887	0.044665167	3.11042698	0.026480862	5302.951667	14.999196	67275.52152	1265.635765	12.686429	0.241349	172.7	3.2	3.170E+01	
i 5.3%	2.35665E+01	2.28E+00	3.02024E+03	1.90E+01	4.39251E+02	9.84E+00	6.03579E+03	1.52E+01	8.24034E+04	9.06E+01	4.74	88.61	0.000903	0.000373969	0.530658	0.003418427	0.072774	0.001640723	13.652465	0.037668844	15.95157237	0.102767777	9976.673366	15.227492	81684.95107	673.974450	13.667289	0.118021	185.4	1.8	1.808E+01	
j 5.8%	1.05667E+02	5.64E+00	9.69426E+03	3.51E+01	1.02671E+03	1.31E+01	2.75277E+03	1.88E+01	6.08944E+04	1.03E+02	2.16	77.26	0.003386	0.000262824	0.312911	0.003663275	0.312911	0.003663275	18.488398	0.184491919	107.694797	0.814419169	2570.747938	18.274831	39312.32873	1670.950263	15.282176	0.658669	206.2	8.4	8.412E+00	
k 6.3%	6.78811E+02	8.43E+00	3.89471E+04	7.03E+01	2.53173E+03	2.30E+01	1.17638E+04	5.57E+01	2.80046E+05	6.77E+02	9.23	100.00	0.057703	0.000766901	3.310752	0.016773913	0.215213	0.002205643	23.805731	0.126550622	101.5059162	0.514279387	11000.64094	55.740008	158556.7339	2985.489226	14.374209	0.245374	194.4	3.2	3.193E+01	
total	9.17091E+02	1.59E+01	5.46382E+04	8.25E+01	6.15965E+03	3.65E+01	1.27404E+05	1.14E+02	1.48314E+06	8.44E+02	100.00		81.72917933	0.007196175	0.000124662	0.428737	0.000763227	0.048334	0.000289373	11.637970	0.012363063	12.383755	0.021756428	1.26471E+05	114.353067	1313712.198	4762.907300	10.387450	0.038810	142.6	0.6	6.516E-01

