

Sample: B0G-B4

sample field number B0G-B4
 project description FVIF P22-728
 number of measurement 090662
 number of irradiation 25-146
 J-value of irradiation 0.007930
 duration of irradiation [h] 16.0
 year of irradiation 2008
 julian day of irradiation 346

material: Polyhailt
 grain size: 200-250 µm
 number: 8
 notes: Berchtesgarden mine
 (+/- 1sigma)

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

+/-
 1sigma
 (Steiger & Jäger 1977)
 (Steinmeyer et al. 1965)
 (Steinmeyer et al. 1965)
 (Steiger & Jäger 1977)
 Measured
 Measured
 Measured

step	36Ar		37Ar		38Ar		39Ar		40Ar		date of measurement	
	intensity	+/-[%]	intensity	+/-[%]	intensity	+/-[%]	intensity	+/-[%]	intensity	+/-[%]	year	j-day
090662b	9.32640E-07	5.0190	1.25459E-06	4.7609	1.41729E-06	4.7609	5.67354E-06	2.4733	1.42981E-04	0.4927	2009	169
a 3.5%	1.07238E-06	6.1218	3.98934E-06	1.5654	6.21974E-06	1.9056	2.04097E-04	0.1806	2.87521E-03	0.0729	2009	169
090662b	1.12492E-06	3.2603	9.22000E-07	4.6504	9.59613E-07	6.8352	2.13120E-06	4.5325	1.06199E-04	0.6300	2009	170
d 3.9%	1.15549E-06	2.7913	2.85016E-06	1.9766	9.71591E-06	1.5298	4.87375E-06	0.6842	6.96903E-04	0.2539	2009	170
1.1494E-06	3.2603	9.22000E-07	4.6504	9.59613E-07	6.8352	2.13120E-06	4.5325	1.06199E-04	0.6300	2009	170	
e 4.1%	1.13500E-06	4.9853	1.49052E-06	2.9816	1.33231E-06	5.0660	8.77199E-06	1.7689	1.90024E-04	0.5265	2009	170
090662c	1.12492E-06	3.2603	9.22000E-07	4.6507	1.22579E-06	6.8138	2.97407E-06	4.4901	2.63774E-04	0.1961	2009	170
f 4.5%	1.21772E-06	4.1685	7.00283E-06	1.5899	8.73212E-06	1.6319	6.85076E-06	0.4159	9.74093E-04	0.1292	2009	170
1.12492E-06	3.2603	9.22000E-07	4.6507	1.22579E-06	6.8138	2.97407E-06	4.4901	2.63774E-04	0.1961	2009	170	
g 5.0%	2.17034E-06	2.7025	9.81594E-05	0.3153	1.51167E-05	1.2134	4.70033E-05	0.5841	8.12745E-04	0.1598	2009	170

days elapsed	post-irrad. 37Ar decay factor	number of steps	mean of dec. 37Ar corr. factor
188	4.123E+01	5	4.189E+01
189	4.205E+01		
189	4.205E+01		
189	4.205E+01		

blank- and background-corrected intensities and absolute errors (1-sigma abs.):

	36Ar	37Ar	38Ar	39Ar	40Ar	%39Ar	cum%39Ar	%40Ar	36Ar/38Ar	36Ar/39Ar	37Ar/39Ar	37Ar/38Ar	38Ar/39Ar	38Ar/36Ar	40Ar/38Ar	40Ar/39Ar	37Ar/39Ar	37Ar/38Ar	39ArK	39ArK	40Ar	40Ar	40Ar/39ArK	40Ar/39ArK	age	+/- 1sigma	+/- 19igma					
a 3.5%	8.72288E+00	5.03E+00	1.70453E+02	5.39E+00	2.99778E+02	8.51E+00	1.24422E+04	2.47E+01	1.70551E+05	1.38E+02	55.03	55.03	98.76	0.000701072	0.000404516	0.013700	0.000434162	0.024094	0.000689963	13.707513	0.029401164	0.564829878	0.017900371	12437.84853	24.714825	1.68110E+05	1493.721622	13.515998	0.123061	183.7	1.6	1.669E+00
d 3.9%	1.90824E+00	3.0E+00	1.20673E+02	4.42E+00	2.90014E+03	1.01E+01	2.90014E+03	2.17E+01	3.68723E+04	1.91E+02	12.87	67.89	99.38	0.000666	0.001047896	0.041481	0.001551865	0.167885	0.002758456	12.674613	0.102765773	1.744339773	0.065258985	2906.029055	21.670070	36568.49253	938.680022	12.583664	0.326465	171.6	4.3	4.274E+00
e 4.1%	6.29213E-01	4.21E+00	3.54981E+01	3.85E+00	2.33695E+01	5.97E+00	4.14494E+02	1.14E+01	6.23914E+03	7.51E+01	1.93	69.73	98.34	0.001516	0.010154972	0.068519	0.009993837	0.059127	0.014257613	12.637440	0.39212268	3.600407312	0.403439794	413.5774571	11.400259	5140.429459	1246.100093	12.429180	3.032426	169.6	39.5	3.956E+01
f 4.5%	5.79278E+00	3.91E+00	3.75753E+02	7.48E+00	4.68660E+02	1.03E+01	4.09635E+03	1.97E+01	4.43395E+04	8.49E+01	18.12	87.84	98.51	0.001414	0.000954315	0.091729	0.001877801	0.114385	0.002576172	10.824151	0.055942154	3.857372905	0.078965255	4098.648281	19.664088	43569.62694	1158.448958	10.661457	0.288076	146.4	3.8	3.822E+00
g 5.0%	6.52572E-01	4.32E+00	6.06959E+03	1.95E+01	8.67223E+02	1.26E+01	2.74652E+03	1.91E+01	3.42079E+04	8.73E+01	12.16	100.00	93.21	0.023743	0.001579672	2.206982	0.016970112	0.315524	0.005073801	12.467764	0.050296792	92.80795011	0.709421512	2591.894557	19.064760	31875.31993	1280.749725	12.298077	0.502119	167.9	6.6	6.962E+00
total	8.23102E+01	9.28E+00	6.76926E+03	2.24E+01	2.20641E+03	2.18E+01	2.20107E+04	4.43E+01	2.91269E+05	2.31E+02	100.00	91.64940261	0.009640327	0.000410648	0.269341	0.00114984	0.097539	0.000982117	12.881924	0.027219514	12.339637	0.048163958	2.43662E+04	44.280371	285199.0942	2755.072790	12.711336	0.128330	173.3	1.7	1.698E+00	

