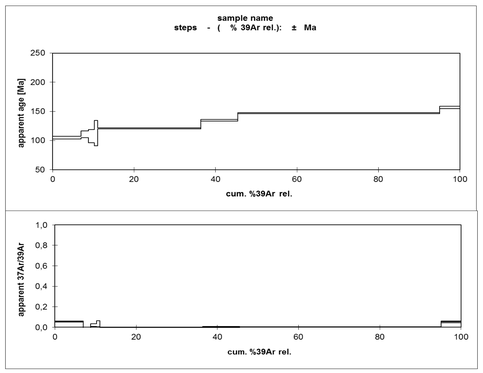
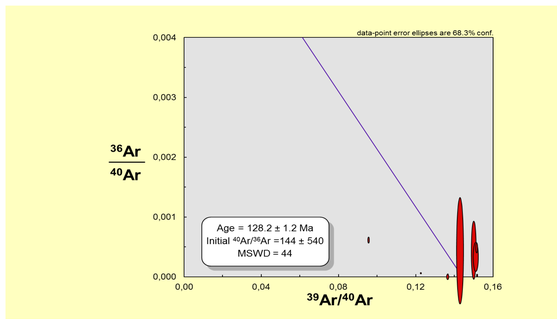
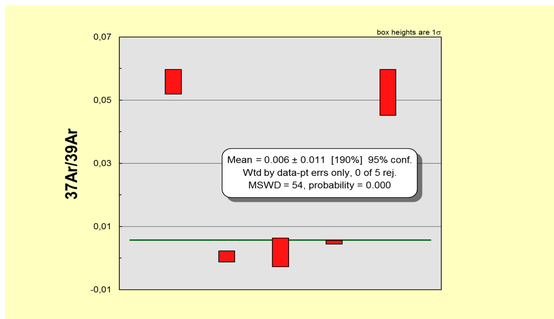
MK0208047 - Mikroskopy / Sedimentu

sample field number	ALT-37B	material:	Polyhalit
project description	FWF P22,728	grain size:	200-250 µm
number of measurement	07s0561	number:	1
number of irradiation	21-92	notes:	Altaussee mine
J-value of irradiation	0,010620 0,000051	(+/- 1sigma)	
duration of irradiation [hr]	16,0		
year of irradiation	2007		
julian day of irradiation	157		

			+/- 1sigma	
conversion from [V] to [cps] by:	6E+07			
composition of atmospheric argon:	(40Ar/36Ar)atm.	=	295,5	(Steiger & Jäger 1977)
half-life of 37Ar [d]		=	35,1	0,1 (Stoenner et al. 1965)
decay constant of 37Ar [dE-01]		=	1,975E-02	(Stoenner et al. 1965)
decay constant of ₊39Ar [dE-1]		=	7,064E-06	(Stoenner et al. 1965)
decay constant of 40K [aE-01]		=	5,543E-10	1,000E-12 (Steiger & Jäger 1977)
correction for Ca-derived Ar:	(36Ar/37Ar)Ca	=	2,2500E-04	Measured
correction for Ca-derived Ar:	(39Ar/37Ar)Ca	=	6,1400E-04	Measured
correction for K-derived Ar:	(40Ar/39Ar)K	=	2,6600E-02	Measured
correction for K-derived Ar:	(38Ar/39Ar)K	=	1,1700E-02	Measured

[mA]; [black-corrected intensities]	36Ar	+/-[%]	37Ar	+/-[%]	38Ar	+/-[%]	39Ar	+/-[%]	40Ar	+/-[%]	date of measurement year	j-day	days elapsed	post-irrad. 37Ar decay factor	number of steps	mean of dec.37Ar corr.factor
07b0560b	2,89682E-06	3,3564	4,97129E-06	1,0578	5,01740E-06	1,9602	1,17024E-05	0,8440	1,78538E-04	0,3696	2007	274			8	1,020E+01
b 3.0%	4,09058E-06	2,4501	7,01285E-06	1,8917	1,08936E-05	1,9682	3,82572E-04	0,1880	2,63231E-03	0,0863	2007	274	117	1,015E+01		
	3,73783E-06	1,9216	6,45173E-06	2,5258	6,71904E-06	2,3076	1,62588E-05	0,9650	1,95318E-04	0,3362	2007	274				
c 3.1%	3,95605E-06	1,9812	5,04871E-06	10,8387	7,72358E-06	1,8004	1,15522E-04	0,4513	8,54497E-04	0,1360	2007	274	117	1,015E+01		
07b0561a	3,73783E-06	1,9216	6,45173E-06	2,5258	6,71904E-06	2,3076	1,62588E-05	0,9650	1,95318E-04	0,3362	2007	274				
d 3.2%	3,96681E-06	3,7575	6,50141E-06	1,7160	7,27858E-06	1,7443	9,34963E-05	0,3184	7,11793E-04	0,1962	2007	274	117	1,015E+01		
	3,73783E-06	1,9216	6,45173E-06	2,5258	6,71904E-06	2,3076	1,62588E-05	0,9650	1,95318E-04	0,3362	2007	274				
e 3.3%	3,87033E-06	4,2281	6,47508E-06	2,9056	6,78538E-06	2,1609	5,97854E-05	0,4666	5,00402E-04	0,1991	2007	274	117	1,015E+01		
	3,73783E-06	1,9216	6,45173E-06	2,5258	6,71904E-06	2,3076	1,62588E-05	0,9650	1,95318E-04	0,3362	2007	274				
f 3.4%	3,95921E-06	2,6073	6,50884E-06	2,6170	2,01285E-05	0,8638	1,37299E-03	0,1150	9,16450E-03	0,0615	2007	274	117	1,015E+01		
07b0561b	3,58691E-06	1,9216	6,45173E-06	2,5258	6,71904E-06	2,3076	1,62588E-05	0,9650	1,95318E-04	0,3362	2007	274				
g 3.5%	3,60127E-06	2,3747	6,53698E-06	2,1729	1,11202E-05	1,2103	5,00547E-04	0,1972	3,75444E-03	0,1188	2007	274	117	1,015E+01		
07b0561c	2,04809E-06	3,2297	3,67190E-06	2,9388	3,01244E-06	2,1447	7,15568E-06	1,2414	1,54979E-04	0,3598	2007	275				
i 3.8%	3,40535E-06	3,2884	4,94119E-06	1,9313	3,36119E-05	0,9396	2,65934E-03	0,1381	2,18448E-02	0,0817	2007	275	118	1,035E+01		
	2,04809E-06	3,2297	3,67190E-06	2,9388	3,01244E-06	2,1447	7,15568E-06	1,2414	1,54979E-04	0,3598	2007	275				
k 5.2%	3,74598E-06	1,8876	5,00659E-06	3,0344	7,88859E-06	1,4881	2,70573E-04	0,2690	2,91230E-03	0,0919	2007	275	118	1,035E+01		

blank- and background-corrected intensities and absolute errors (1-sigma abs.):	36Ar	+/-	37Ar	+/-	38Ar	+/-	39Ar	+/-	40Ar	+/-	%39Ar	cum%39Ar	%40Ar*	36Ar/39Ar meas.	36Ar/39Ar +/- [1-sigma abs.]	37Ar/39Ar meas.	37Ar/39Ar +/- [1-sigma abs.]	38Ar/39Ar meas.	38Ar/39Ar +/- [1-sigma abs.]	40Ar/39Ar meas.	40Ar/39Ar +/- [1-sigma abs.]	37Ar/39Ar corr ect ed	37Ar/39Ar +/- [1-sigma abs.]	39ArK corr ect ed	39ArK +/- [1-sigma abs.]	40Ar* corr ect ed	40Ar* +/- [1-sigma abs.]	40Ar*/39ArK cal cul at ed	40Ar*/39ArK +/- [1-sigma abs.]	age [Ma]	+/- 1sigma [Ma]	+/- 1sigma +σA [Ma]
b 3.0%	7,45169E+01	8,72E+00	1,27438E+02	8,91E+00	3,66804E+02	1,47E+01	2,31504E+04	4,53E+01	1,53169E+05	1,48E+02	6,94	6,94	85,62	0,003218813	0,000376562	0,005505	0,000384939	0,015844	0,000636799	6,616266	0,014436964	0,055850862	0,003905538	231449,6181	45,317469	1,30620E+05	2579,916091	5,642415	0,111991	105,0	2,1	2,092E+00
c 3.1%	1,36217E+01	6,64E+00	-8,75793E+01	3,56E+01	6,27054E+01	1,30E+01	6,19620E+03	3,40E+01	4,11473E+04	8,33E+01	1,86	8,79	90,03	0,002198	0,001071067	-0,014134	-0,005752535	0,010120	0,002098895	6,640719	0,038826619	-0,143405087	-0,058364432	6196,750324	33,986233	36898,12216	1962,893492	5,954431	0,318441	110,6	5,8	5,765E+00
d 3.2%	1,42934E+01	1,03E+01	3,10112E+00	1,23E+01	3,49276E+01	1,25E+01	4,82125E+03	2,10E+01	3,22394E+04	9,63E+01	1,44	10,24	86,85	0,002965	0,002142241	0,000643	0,002556937	0,007245	0,002594782	6,686929	0,035326888	0,006526014	0,025942334	4821,235363	21,005441	27889,54058	3053,485697	5,784729	0,633842	107,6	11,5	1,145E+01
e 3.3%	8,27091E+00	1,12E+01	1,45755E+00	1,55E+01	4,14107E+00	1,33E+01	2,71702E+03	2,00E+01	1,90439E+04	7,45E+01	0,81	11,05	87,12	0,003044	0,004105842	0,000536	0,005718374	0,001524	0,004902733	7,009139	0,05837607	0,005442794	0,058017839	2717,00715	19,978654	16528,6016	3297,300546	6,083385	1,214402	112,9	21,9	2,186E+01
f 3.4%	1,38190E+01	7,85E+00	3,56492E+00	1,47E+01	8,37045E+02	1,45E+01	8,46898E+04	9,90E+01	5,59874E+05	3,54E+02	25,37	36,42	99,27	0,000163	9,26922E-05	0,000042	0,00017375	0,009884	0,000172096	6,610876	0,008790223	0,000427078	0,001762845	84689,81549	99,045905	553540,1807	2346,604908	6,536089	0,028743	121,1	0,8	7,935E-01
g 3.5%	8,96388E-01	6,86E+00	5,25005E+00	1,35E+01	2,74729E+02	1,28E+01	3,02302E+04	6,24E+01	2,22167E+05	2,81E+02	9,06	45,48	99,88	0,000030	0,000226803	0,000174	0,000466345	0,009088	0,000424365	7,349182	0,01779622	0,001765042	0,004528558	30230,19196	62,388972	221101,9601	2045,508510	7,313945	0,069328	135,0	1,4	1,403E+00
i 3.8%	8,47247E+01	8,11E+00	7,92316E+01	8,99E+00	1,91008E+03	2,01E+01	1,65555E+05	2,29E+02	1,35392E+06	1,11E+03	49,60	95,07	98,15	0,000512	4,90217E-05	0,000479	5,43189E-05	0,011537	0,000122591	8,178097	0,013177426	0,004952477	0,000562103	165554,0734	229,314782	1324536,031	2644,356962	8,000625	0,019441	147,1	0,8	8,058E-01
k 5.2%	1,05986E+02	6,04E+00	8,33140E+01	1,16E+01	3,04379E+02	8,36E+00	1,64430E+04	4,58E+01	1,72117E+05	1,71E+02	4,93	100,00	81,79	0,006446	0,000368013	0,005067	0,000707552	0,018511	0,000511282	10,467501	0,030930287	0,052432601	0,007321894	16442,49935	45,770476	140418,61	1794,170833	8,539980	0,111677	156,6	2,1	2,109E+00
total	3,16129E+02	2,37E+01	2,15787E+02	4,86E+01	3,79481E+03	3,96E+01	3,33803E+05	2,69E+02	2,55368E+06	1,23E+03	100,00		96,34190687	0,000947053	7,10327E-05	0,000646	0,000145465	0,011368	0,000119069	7,650271	0,007189176	0,006592	0,001483231	3,33801E+05	269,131554	2451531,33	7113,875374	7,344285	0,022119	135,5	0,7	7,796E-01